



ALABAMA STANDARDS for Early Learning and Development



			·

Acknowledgments

In November of 2018, Alabama early childhood professionals came together to revise and re-design the 2012 Alabama Development Standards for Preschool Children. Though spearheaded by the Alabama Department of Early Childhood Education, members of the *Foundations Committee* were from agencies and organizations across the state. Members worked together to align practices across all early learning programs, thereby promoting collaboration and consistency to create a document of shared expectations for the growth and development of all Alabama's children, ages birth to 5. The Alabama

Coming together
Is a beginning;
Keeping together is
progress; Working
together is success
- HENRY FORD

Department of Early Childhood Education would like to express gratitude to all the committee members for their expertise, time, and dedication to this work. Also, we would like to thank Susan Mitchell, for her role as a consultant, accessing resources and national experts, and editing and designing the document.

Committee

Gennifer Alexander
Henry County Board of Education

Jeannie Allen
Alabama Department of Early Childhood
Education

Melanie Baker Faulkner University First Class Pre-k

Abigail Baxter
University of South Alabama

Misty Blackmon

Alabama Department of Early Childhood

Education

Amy Blakeney
Alabama Department of Rehabilitation
Services/ Early Intervention

Sheila Bolling *Alabama State Department of Education*

Jeanie A. Box Samford University

Amy Bradley Childcare Resources

Amy Brakenhoff

Alabama Department of Early Childhood

Education

Timtonya Bryant-Long Birmingham City Schools

Dr. Cora Causey University of Alabama at Birmingham

Dr. Barbara Cooper Alabama Department of Early Childhood Education

Myra Davis Department of Human Resources

Dr. Carol Donovan *University of Alabama*

Jane Douglas

Mobile County Public Schools

Jan Enstrom *Alabama State Department of Education*

Shirley J. Farrell, PhD *Troy University*

David M. Finn Samford University

Gay Finn

Alabama State Department of Education

Stephanie Frucci

Alabama State Department of Education

Julie Griffith

Montgomery Public Schools

Cassie Harris

Sumpter County Opportunity Head Start

Gidget Haslam

Alabama Department of Early Childhood

Education

Delyne Hicks

James Rushton ELC

Holli Hicks

Pelham City Schools

Tiffany Higginbotham

Brain Pump

Lisa Highfield

Alabama State Department of Education

Dr. Kelly Hill

University of Alabama at Birmingham

Dr. Vanessa Hinton

Auburn University

Dr. Alison Hooper University of Alabama

Dr. William Hooper, IV *University of Montevallo*

Liletta Jenkins

Alabama Department of Early Childhood

Education

Dr. April Kendrick

Child Development Research Center/ University of Alabama

Dr. Cailin Kerch

University of Alabama

Dr. Lvnn Kirkland

University of Alabama at Birmingham

Dr. Cecile Komara *University of Alabama*

Susan Mitchell

Early Childhood Consultant

Dr. Barbie Norvell

Jacksonville State University

Julie Parks

Madison County Board of Education

Andrea Phillip (Berryman)

Chambers County

Nichole Phillips Madison City Schools

Dallas Rabig

Alabama Department of Early Childhood

Education

Michelle Raybon Smart Start Alabama

Erin Reilly

Auburn University

Robbie Roberts

Harris Early Learning Centers

ShunDria Robinson

Department of Human Resources

Jeana Ross

Alabama Department of Early Childhood Education

Nedjra M. Russell

Madison City Schools

Kimberly Sharkins

Montgomery County Public Schools

Anita Shook

Montgomery Public Schools

Cynthia Simpson

Pickens Co. Community Action

Tara Skiles

Alabama Department of Early Childhood Education

Dr. Trellis Smith

Alabama Department of Early Childhood Education

Dr. Suzanne Snow

South Highland Child Development Center

Dr. Tracye Strichik

Alabama Department of Early Childhood Education

Dr. Jennifer Summerlin *University of Alabama*

Sharron Tomlinson

Montgomery Public Schools

Dianna Tullier

Alabama Department of Early Childhood Education

April Tyson

Eufaula City Schools

Laura Wildman

Auburn University of Montgomery

Denise Wilson

Alabama State Department of Education

Joy Winchester

Alabama Department of Early Childhood Education

Patti Wood

Samford University

Focus Groups

During the drafting of the document, six focus groups were conducted across the State of Alabama. A special thank you is extended to the following for hosting these groups. We also want to extend a great deal of gratitude to all the participants that came to the focus group. Your feedback had a direct impact on the final product. Additionally, gratitude is extended to the dedication and leadership of the Alabama First Class Pre-K Region Directors that served as a focus group as well.

Holly Glasgow Shelton State

Delyne Hicks

James Rushton Early Learning Center

Deana Aumalis
Early Learning Center, University of Alabama in Huntsville

Dr. Barbie Norvell Jacksonville State University

Gidget Haslam Dothan

Dr. Leslie Cowell Faulkner University

Special Recognition

Gratitude is extended to the Alabama Department of Early Childhood Education Leadership Team that saw this work from start to completion.

Jeannie Allen

Director of Innovative Projects and Assessments Alabama Department of Early Childhood Education

Publications or audiovisual media must include the following disclaimer: "The Alabama Standards for Early Learning and Development was made possible by grant number 90TP0065-01-00. Its contents are solely the responsibility of the authors and do not necessarily represent the official view of the United States Department of Health and Human Services, Administration for Children and Families." [HHS Grants Policy Statement, page II-31]

Contents

	INTRODUCTION	
	Purpose	4
	Alabama's Standards Reflect How Children Learn	6
	Alabama's Standards Embrace All Children	10
	Alabama's Standards Guide Early Learning Professionals' Practices	12
	Alabama's Standards Use a New Design	15
	Alabama's Standards Provide a Continuum	17
	Alabama's Domains of Learning	20
	Alabama's Standards for Early Learning and Development Summary	27
	Alabama's Guiding Principles for Early Learning and Development	31
1	Relationships and Connections Family and CommunityEngagement (FCE) Social Emotional Development (SED) Social Studies (SST) Exploration and Critical Thinking: Developing STEM Skills	47
	Approaches to Learning (APL)	81
	Science Exploration and Knowledge (SEK)	99
	Mathematical Thinking (MAT)	. 123
3	Communication Language and Literacy (LLT) Creative Arts (CRA)	
4	Physical Development and Health Physical Development and Health (PDH)	. 185

CROSSWALKS

Alabama Standards for Early Learning and Development (ASELDs)	
and Head Start Early Learning Outcomes Framework, Ages Birth to Five19	99
Department of Human Resources Early Learning Guidelines)7
Family and Community Engagement Standards and Frameworks22	23
Alabama's Courses of Study	31
APPENDICES	
Appendix One: The Wonder of Play	59
Appendix Two: Stages of Development and Learning	35
Appendix Three: Inclusion in Early Learning Programs	'0
Appendix Four: Supporting Dual Language Learners in	
Early Learning Programs	33
Appendix Five: Physical Activity: Good Healththrough Movement 29	96
Appendix Six: Technology in Early Learning Programs)2
Appendix Seven: Glossary)9
Appendix Eight: Resources	21
Appendix Nine: Acronyms3	30



INTRODUCTION

Purpose

The Alabama Standards for Early Learning and Development (ASELDs) are a critical component of the state's early childhood system and offer a unified vision for responsive and developmentally appropriate, relationship-based learning experiences for all of the state's young children, birth to age 5.

The Alabama Standards for Early Learning and Development have been revised and re-designed to support the state's many early learning programs: child care, home visiting, Head Start, Alabama First Class, and special education, as well as its early childhood students in high school, career technical schools or higher education programs. They are designed to align practices across these settings, thereby promoting collaboration and consistency.

The ASELDs offer a set of shared expectations for young children's growth and development and provide a continuum of learning for all children, birth to age 5.

The ASELDs offer a set of shared expectations for young children's growth and development and provide a continuum of learning for all children, birth

to age 5. They lay the foundation for what children should be able to know, do and learn at age specific intervals.

The ASELDs are intended to guide professionals' intentional and purposeful practices with children, build connections with K-3

partners, enhance family relationships, support preservice students' learning, and inform the design of professional

development plans for those who are working in the field and for those who attend high school and vocational schools. The Standards reflect the states' quality initiatives and extend the community's understanding of the way in which young children develop and learn.

Alabama Standards ARE:

- A universal language for all professionals who work with young children.
- A framework for the use of age and culturally appropriate practices to provide high quality experiences for children.
- A guide for the selection and use of curricula and assessments.
- A common context of learning to share with families, supporting their understanding of children's development and elements for school and life success.
- The groundwork for training and professional development, beginning at the high school and college levels and continuing with in-service.
- A means to raise public awareness about the early childhood profession.

- A curriculum or assessment.
- An evaluation of professionals' performance.
- A means to exclude children from program participation.
- A tool to label, sort or diagnose children.
- Used in isolation.

"Education is the most powerful weapon which you can use to change the world."

- NELSON MANDELA

Alabama Standards for Early Learning and Development

Reflect How Children Learn

Children are natural learners. They are energetic, curious, and creative as they explore and experiment with their surroundings to build new understandings and practice skills. Children's unique abilities are nurtured through strong relationships with adults and peers and stimulating environments where they can practice and master their newly-discovered skills and information.

Brain Development

A young child's brain grows at an amazing rate! At birth, the baby's brain is about 25% of an adult's and has all the neurons or cells it will ever have. The brain size doubles in the first year and by age 5 a child's brain is about 95% of the size of an adult brain. The brain's cells or neurons communicate with each other and form connections or synapses that are the foundation for learning.

These connections begin before birth and grow faster from birth through age 5 than at any other time. Young children have more than twice the number of synapses (or connections) than adults, enabling them to learn at a faster rate than adults. The opportunities children are given to interact with other people and their world, along with their experiences in safe and stimulating environments, influence children's capacity to grow or strengthen their synapses.

Brain connections begin before birth and grow faster from birth through age 5 than at any other time.

Children begin to prune or lose some of those synapses as they make sense of their world. Dual language learners, for example, hear, use, and maintain sounds and words that may be pruned or lost by those children who only speak English. The more a synapse or connection is used, the more permanent it becomes, while those that aren't used disappear. A child's experiences, then, impact what information is learned by determining what information enters the brain and how the brain processes that information.

There are critical periods, or windows, when children are especially sensitive to learning specific types of information and skills. Research tells us, for example, that the critical period for language development begins to fade by age 5. High quality early childhood programs that take a holistic approach, paying attention to all aspects of children's development and learning and supporting their families' well-being, build on brain research to ensure children are exposed to varied and stimulating experiences that are essential to children's brain development.

Play: The Foundation

Children's play is more than just interacting with toys. It is the way in which children learn about themselves, others, and their world. The importance of play has long been recognized as critical to children's well-being. In fact, the United Nations High Commission for Human Rights identifies play as a right of every child. It adopted the 1959 Declaration of the Rights during the 1989 Convention on the Rights of Children, and that same proclamation has been reviewed and further promoted in 2013.

The International Play Association Declaration of the Child's Right to Play, written in coordination with Article 31, defines play:

- CHILDREN are the foundation of the world's future.
- CHILDREN have played at all times throughout history and in all cultures.
- PLAY, along with the basic needs of nutrition, health, shelter, and education, is vital to develop the potential of all children.
- PLAY is communication and expression, combining thought and action; it gives satisfaction and a feeling of achievement.
- PLAY is instinctive, voluntary, and spontaneous.
- PLAY helps children develop physically, mentally, emotionally, and socially.
- PLAY is a means of learning to live, not a mere passing of time.

High quality early learning settings offer both exploratory (or free play) as well as guided play to promote learning and development. Exploratory play allows children to be creative, to find out about their own interests and abilities and to make decisions. Through play experiences, children learn how to work in groups and get along with others, Adults guide, but do not control, play experiences introducing new experiences as well as expanding familiar play settings and activities. They ask questions to help children plan and make sense of their play, and they capitalize on the teachable moment by using unplanned opportunities that have captured children's interests to facilitate new learning *For more information about the value of play and its stages, see Appendix One: The Wonder of Play.*

Relationships

Relationships are at the heart of children's successful growth and development. The adults and peers with whom they interact help children to construct their own meaning and understanding of the world around them. Children depend on nurturing relationships to help them feel safe, secure, and confident in the way in which they learn about themselves and relate to others.

Holistic Learning

Children's social-emotional, physical, creative, and cognitive learning are intertwined. Every aspect of learning is equally important, and they work together to support children's growth and development. Although the Alabama Standards are divided into four sections, and further into domains, learning occurs across these interconnected domains or holistically. A single activity or experience offers opportunities to master content or acquire skills from multiple domains. Children who are using play dough, for example, can be experiencing multiple learning opportunities:



Mathematical skills grow when children roll or cut dough in different lengths and sizes or create different shapes.

Motor skills strengthen as they roll, knead or shape dough.

Scientific thinking develops when children explore the mixing of colors or experience what happens when play dough dries out.



Social-Emotional skills blossom when they share the dough as children play with others or work with another child to make a creation.

Language development occurs when children talk with each other about what they're doing and making.

Approaches to Play and Learning skills grow when they use the play dough in unique and different ways.

Cultural Context

Children learn in the context of their unique heritage and family culture and values. Children's culture is the lens through which they experience activities and events, develop relationships, and build knowledge. Children often reveal cultural differences in the way they interact with adults and other children, how they use language, demonstrate independence and self-reliance, or express emotions. Alabama's Standards are culturally relevant, respecting children and families' differences.

Resilience

Young children are especially vulnerable to both positive and negative experiences. Positive relationships, settings where children feel safe, and quality experiences influence children's happiness, resilience, and success. On the flip side, when children experience trauma or threatening or dangerous events in their lives, their learning and development may be negatively impacted. They may have difficulty with thinking and learning, memory, and attention. They may have trouble regulating their own emotions, have overwhelming feelings of frustration and exhibit anxiety and fearfulness.

Positive relationships, settings where children feel safe, and quality experiences influence children's happiness, resilience, and success.

Early learning professionals can help children who have experienced trauma by establishing strong, positive relationships with both children and their families. Adults need to maintain consistent routines and use positive guidance strategies. The Standards, and in particular, the domains of Approaches to Play and Learning, Physical Development and Health, and Social Emotional Development offer developmental trajectories and strategies to guide adults' understanding of development-specific strategies to support traumatized children.

"Every child is a different kind of flower, and all together, they make the world a beautiful garden."

- UNKNOWN

Alabama Standards for Early Learning and Development

Embrace All Children

Every child is special. No two children are the same. Every child has unique personality traits, temperament, and even physical appearances. Every child is a competent learner with strengths, abilities, and interests. Every child grows and learns in his/her own way at a self-defined pace; some children may need additional support to guide their learning and development. Early childhood professionals must use their understanding of each child's uniqueness to adapt experiences and environment to best meet their needs and maximize learning.

Children with Disabilities

Alabama's young children with disabilities are best supported in inclusive environments that ensure that all children have equal opportunities to participate in early learning programs. The 2015 Position Statement issued by the U.S. Departments of Education and Health and Human Services defines inclusion, "children with disabilities in early childhood programs, together with their peers without disabilities; holding high expectations and intentionally promoting participation in all learning and social activities, facilitated by individualized accommodations; and using evidence-based services and supports to foster their development (cognitive, language, communication, physical, behavioral, and social-emotional), friendships with peers, and sense of belonging. This applies to all young children with disabilities, from those with the mildest disabilities, to those with the most significant disabilities."

The National Association for the Education of Young Children (NAEYC) and the Division of Exceptional Children (DEC), in their joint position statement, Early Childhood Inclusion (2009) have further described inclusion: "The desired results of inclusive experiences for children with and without disabilities and their families include a sense of belonging and membership, positive social relationships and friendships, and development and learning to reach their full potential. The defining features of inclusion that can be used to identify high quality early childhood programs and services are access, participation, and supports. Access refers to children's opportunities to experience varied learning situations, activities, settings, and environments. Participation involves the individualized accommodations that some children may need to fully engage in early learning activities. Supports reflect the availability of a continuum of responsive services and programs that meet the needs of both children who are identified and those who are at risk for disabilities.

Early screening to identify possible disabilities followed by the development and implementation of individualized treatment plans help professionals set realistic goals and expectations based on their strengths and interests, ultimately supporting all children's growth and progress. For additional information on inclusive practices, see Appendix Three: Inclusion in Early Learning Programs.

Children with Disabilities

Research shows that children who are provided with instruction in their home language experience significant gains in language, reading, and math. They also benefit from a stronger cultural identity and demonstrate good executive function skills and positive social emotional gains in comparison with those children who are not experiencing dual language learning. "DLLs come to early childhood programs with richly varied backgrounds, sets of skills, and cultural ways of knowing: they need teachers who welcome them and recognize their unique abilities, what they know, and what they need to learn. Teachers of young DLLs understand that children communicate their knowledge using the safest method possible, and this may mean the use of their home language, English, or a mixture of both." (Magruder, et al 2013) For more information about supporting young dual language learners, see Appendix Four: Supporting Dual Language Learners in Early Learning Programs.

Children who are Advanced Learners

As early as birth some children may show signs of giftedness. They may be more alert, reach their developmental milestones at a faster pace and demonstrate advanced language skills. They typically are very curious with excellent memories, attention spans and a capacity for abstract thinking. Gifted children may be exceptionally good with mathematical concepts and are good readers. They are creative with good imaginations and enjoy the creative arts. Advanced learners often devise unique solutions to problems and you may find these children are leaders in a group. Research shows that gifted children's development is often uneven, with some areas of learning more advanced than others. This is known as asynchronous development. For example, a child's mastery of language may be advanced while his mastery of emerging reading and writing skills may be in the typical range. In other words, a gifted child may not be gifted in all areas. This may result in social-emotional challenges with peer relationships, selfidentity, and the need for perfection. Professionals who work with gifted children need to assure they are offered child-centered learning opportunities with opportunities to address their curiosity and express their creativity and imagination. View additional supportive practices on the domains' Adaptations and Accommodations pages.

Children's Learning Preferences

Responsive early childhood professionals recognize, acknowledge, and individualize children's learning to accommodate their unique learning styles or preferences. Some children may be visual learners who use their eyes to learn. They may close their eyes to picture something or respond best to pictures or demonstrations. Auditory learners use their ears. They remember what they hear and may use rhymes, songs or discussions to learn best. Tactile or kinesthetic learning occurs through children's engagement in physical activities; they learn by doing, touching, and moving. While children may prefer one learning modality over another, they typically combine them for greater understanding and knowledge acquisition. Professionals offer the strongest and most effective learning experiences when they offer children opportunities to learn using all their senses.



Alabama Standards for Early Learning and Development

Guide Early Learning Professionals' Practices

ALL children are born ready to learn! Their development and skill mastery are dependent on caring adults who nurture and support their growth and provide them with experiences that help them gather and build knowledge about their world. Adults create the opportunities for children's learning by challenging them to acquire new understandings and information, built on prior knowledge. Early childhood professionals best support children when they understand the continuum of learning, the sequence in which skills emerge and are mastered, and develop learning experiences that are based on children's existing understandings, while at the same time, challenge them to acquire new information.

Responsive early childhood professionals recognize, acknowledge, and individualize children's learning to accommodate their unique learning styles.

Alabama's Measures of Quality

Many early learning programs incorporate frameworks and assessments to support their high-quality program delivery. Resources such as the Environment Rating Scale (ERS) or the Classroom Assessment Scoring System (CLASS) provide guidance and evaluation tools that help professionals assess their own, and their programs', learning environments or adult-child interactions. Programs may also seek accreditation through organizations such as NAEYC (National Association for the Education of Young Children), NAAPC (National Accreditation Commission) or the National Early Childhood Program Assessment (NECPA). These processes promote quality through the use of self-study, a set of guidelines or assessment tools and a national certification. Alabama offers quality assessment opportunities through the availability of Alabama Quality Stars, its quality rating and improvement scale (QRIS), and its First Class Pre-K guidelines and standards.

Pre-service students as well as individuals who are working in the field may find additional resources to support their career advancement as defined in Alabama's Pathways. The Child Development Associate (CDA) or NAEYC Professional Standards and Unifying Framework provide guidance and certifications. Two and four year coursework and credentials round out the educational opportunities.

All these documents are linked to ASELDs through the promotion of standards' use to understand all children's growth and development, the prioritization of developmentally appropriate and individualized learning through play, and the importance of family and community engagement.

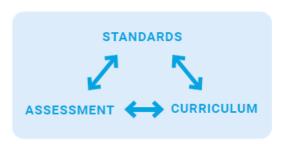
Universal Design for Learning

Universal design for learning, often referred to as UDL, is a framework or approach that ensures all children have equal opportunity to learn

and succeed. All children benefit from adults' use of universal design, especially those children with unique needs. Early childhood professionals who use UDL create flexible and varied opportunities for learning that build on children's strengths. They use the three main principles: 1) representation; 2) expression; and 3) engagement to develop multiple ways for children to access and participate in materials and activities, to acquire and build knowledge as well as demonstrate what they know or have learned, and to motivate children to learn.

Intentional and Purposeful Planning

Professionals facilitate children's development and learning when they are thoughtful and purposeful in their work. They deliberately design the environment, plan the schedule and routines, offer materials and activities, and use play as the means by which children accomplish the goals that have been identified. Professionals facilitate children's learning by observing, assessing, and Intentionally developing experiences that build on



children's current knowledge or developmental level. Intentional professionals interact directly with children; they ask questions to encourage children's thinking and problem solving, and adapt experiences to meet individual children's learning styles, interests, and needs.

The Alabama Standards for Early Learning and Development guide professionals' understanding of what children can know, learn, and do. They help them intentionally create learning experiences that facilitate children's learning, decide the way in which those experiences will be provided, and the way in which they will be shared with other professionals and families.

Higher OrderThinking

Children expand their creative and critical thinking processes when early learning professionals build their higher order thinking skills (HOT). Professionals who ask children probing questions or provide experiences that help them make predictions, investigate an idea or object, form opinions, and even analyze a situation are encouraging young children to become critical thinkers and problem solvers. A young child's emerging HOT skills set the stage for success, not only in school, but in future jobs or adult situations. ASELD's Professional Practices offer examples of ways that HOT can be encouraged and the Children's Observable Actions demonstrate some ways that children exhibit these important skills.

Connections with Curriculum and Assessment

Alabama's Standards for Early Learning and Development standards, curriculum, and assessment go hand-in-hand to promote children's development and learning. In fact, the Standards are the framework from which curriculum and assessments can be designed and used.

The ASELDs include all domains of children's learning, and within the domains, describe the content and expected outcomes for children. Examples of children's actions illustrate the process and sequence of learning and professional practices guide ways in which adults interact with children to support their learning.

Adults use the ASELDs to define the specific learning experiences and content that will be taught to children *or the curriculum*. *Curriculum* is built from feedback from the children themselves, family interests, and professionals' knowledge of child development. Each professional adapts the environment, activities, and interactions to guide children's growth and learning.

Professionals' partnerships with families are critical to facilitating positive learning outcomes.

Assessment informs professionals' practices. When professionals observe children's behaviors, their responses to activities and experiences, and their skill mastery, they are able to design or adapt learning goals to encourage new understandings and development. Professionals use observation, the collection of artifacts or children's work samples, and family input to establish goals and determine children's progress towards meeting those goals. The ASELDs are aligned with Alabama's assessment tools to inform those developmental indicators that can be assessed to indicate children's outcomes.

Partnerships with Families

Professionals' partnerships with families are critical to facilitating positive learning outcomes for young children. Adults in early learning programs and family members must work together to develop desired goals and outcomes to support children's learning. Professionals can use the ASELDs to help families learn about age-appropriate expectations and strategies to encourage learning, and at the same time, families can inform program professionals about children's experiences and interests. Together, families and professionals create a strong alliance that builds children's confidence and successful learning experiences. See the Family and Community Engagement Domain for more information about families' engagement in children's learning.

Technology as a Learning Tool

Technology in an early childhood classroom is broader than computers, laptops, and cell phone. Even the most basic tools such as pencils and crayons are beginning forms of technology; they were made by humans and are used by humans. The newer technology tools have become a part of children's experiences and can be incorporated into early learning classrooms as long as they are used appropriately, to guide children's learning and development.

Assistive technology for children with special needs often supports their access to early learning environments and activities; interactive media has been used to build children's English language learning. A joint position statement of the National Association for the Education of Young Children and the Fred Rogers Center for Early Learning and Children's Media at Saint Vincent College, Technology and Interactive Media as Tools in Early Childhood Programs Serving Children from Birth through Age 8, tells us "when used intentionally and appropriately technology and interactive media are effective tools to support learning and development." Still not recommended for children under two, older toddlers and preschoolers can benefit from interacting with technology tools and interactive media when experiences are "active, hands- on, engaging, and empowering; give the child control; provide adaptive scaffolds to ease the accomplishment of tasks; and are used as one of many options to support children's learning." See Appendix Six: Technology in Early Learning Programs for additional information about the use of technology in early childhood classrooms.

Alabama Standards for Early Learning and Development

Use a New Design

The 2020 edition of the Alabama Standards for Early Learning and Development has been developed to support all professionals who interact with young children, birth to age 5. The Standards have been aligned with both national and state program standards and program requirements so that adults who work directly with children in infant-toddler or preschool classrooms, Head Start and Early Head Start programs, child care facilities, home visiting programs, or special education settings will be able to use the document to guide their interactions and instructional practices. Instructors in higher education, high school and career and technical programs are encouraged to introduce pre-service students to the standards through their coursework. Professional development specialists and technical assistance specialists who reference the standards within their training and coaching empower professionals' understanding and use of the ASELDs to cultivate high quality early learning programs. Professionals who write special education plans can use them to specify children's goals. In short, the ASELDs offer one single set of expectations for Alabama's young children that extend across all program types.

Infants	Young Toddler	Older Toddler	Young Preschooler	Older Preschooler
		Home Visiting		
	Early Head Sta	urt	Heac	l Start
			Alabama	First Class
	Early Intervention, IE	DEA PartC	· ·	tion, IDEA 619 rt B
Child Care: Family and Group				
Technical Assistants, Professional Development Specialists				
Pre-Service Knowledge Mediators: Higher Education, High School, Career and Technical Education				

National and State Standards

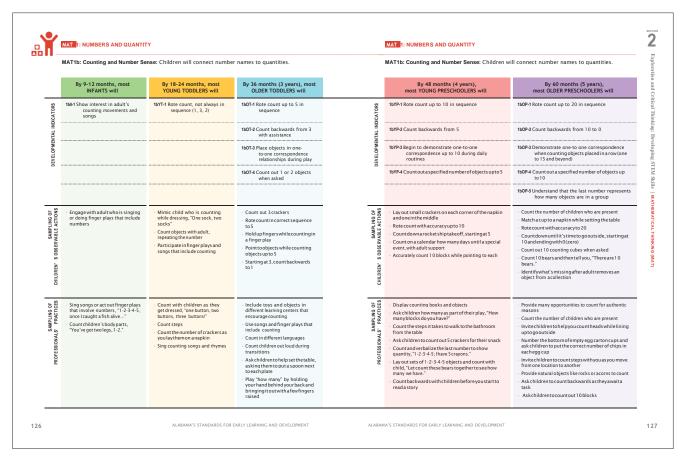
The ASELDs correlate with national and state standards. They build on the research and current practice to reflect Alabama's philosophy, values, and priorities for young children. Programs and professionals who use the ASELDs can feel confident they are meeting their federal requirements while at the same time responding to Alabama's unified vision for early childhood.

Alabama Standards for Early Learning and Development	Head Start Outcomes Framework (See page 199 for Crosswalk)	Special Education Early Learning Outcomes	Teaching Strategies GOLD Dimensions	First Teacher Competencies (Home Visiting)
Section One: Relationships and Connections • Family and Community Engagement • Social Emotional Development • Social Studies	 Social Emotional Development Social Studies Knowledge and Skills 	 Outcome 1: Positive Social Emotional Skills Social Emotional Development Approaches to Learning 	 Social Emotional Social Studies 	 Children's Families and Communities Interactions Diversity and Cultural Awareness
Section Two: STEM Skills: Exploration and Critical Thinking • Scientific Exploration and Knowledge • Mathematical Thinking • Approaches to Play and Learning	 Scientific Knowledge and Skills Mathematics Knowledge and Skills Approaches to Learning 	Outcome 2: Acquisition and Use of Knowledge and Skills Mathematics Science Technology Approaches to Learning	CognitiveMathematicsScience and Technology	Child Growth and Development Learning Activities and Enrichment
Section Three: Communication Language and Literacy Creative Arts	Language Development Literacy Knowledge and Skills Creative Arts Development	Outcome 2: Acquisition and Use of Knowledge and Skills Language and Literacy Creative Arts	Language Literacy The Arts	
Section Four: Physical Development and Health	Physical Development and Health	Outcome 3: Use of Appropriate Behavior to Meet Their Needs Physical Development Physical and Health	Physical	Health, Safety, and Nutrition

Alabama Standards for Early Learning and Development

Provide a Continuum

The ASELDs follow a unique format that includes learning progressions or indicators for children's learning, birth to age 5. Each double page provides a sequence of development for specific strands within the ASELDs' domains.



The left side of each page depicts the Infant-Toddler Standards; the right side of each page shows the Preschool Standards. Professionals can utilize the age grouping that best represents the children with whom they work, and at the same time, review the age groupings before and above to more fully understand the learning trajectory for each skill. Adults can more accurately identify and select the kinds of tasks or support each individual child that will best benefit each child.

Programs, such as family childcare, that have mixed-aged groupings will be able to adapt learning opportunities for different ages of children by using the full page spread.



Infant-Toddler Standards

Illustrated on the left side of each double page, the Infant-Toddler Standards define learning expectations for children birth to age 3. They are divided into three age groupings that explain the approximate age at which **most** children will master the indicators for each strand and developmental indicator. They are defined in a range of months: infants: **by** 9-12 months and young toddlers: **by** 18-24 months. The older toddlers' age of mastery is defined in years (**by** 36 months or 3 years) to reflect the programmatic transitions that some children experience as they move from Early Head Start to Head Start or from Early Intervention to Special Education 619.

These arbitrary age groupings are used as a means for organizing content; the range that is presented for each age level allows for the variations of growth that may occur, even within a single domain. Mastery of skills will typically occur by the end of the defined age. In other words, Infant indicators indicate learned skills by the time a typically-developing child is about 9 months to 1 year old.

The continuum from birth to age three allows professionals to look across each level to identify where a child is currently performing and to design experiences that build on that stage or scaffold learning to reach the next level.



Preschool Standards

The Preschool Standards, on the right side of each double page, are divided into two age groupings: young preschooler and older preschooler. The young preschoolers grouping reflects the skills and expectations for children as they reach 4 years old or 48 months. The older preschoolers' column represents skills mastered by children as they leave preschool and enter kindergarten, by 60 months or 5 years. Another way to think about the preschool standards is that young preschoolers are typically in their first year of preschool. Older preschoolers are most likely in their second year or the year prior to kindergarten.

The indicators within each domain describe expectations for skill mastery by the end of the designated year, and just like the Infant-Toddler Standards, the age range allows for children's uneven development within or across domains. Professionals may go back and forth across the age levels to define a preschool child's abilities.

Learning Trajectory

The birth through preschool learning trajectories are defined within each double-page spread. When professionals use the two pages together, to "look forward or backward," they can understand each child's learning path and more accurately design activities and experiences that scaffold or take him/ her to the next level. Learning is often uneven and a child may demonstrate skill mastery in different places across the trajectory for different types of skills. For example, an older toddler may have achieved preschool-level language skills, and at the same time, demonstrate motor skill development at a toddler level. The toddler level. The Standards enable professionals to look across the learning sequence, at the indicators before and after the child's identified skill level to determine strategies that will expand their knowledge and capabilities.

Learning is
often uneven and a
child may
demonstrate skill
mastery in different
places across the
trajectory for
different
types ofskills.

The trajectories are extended when professionals further investigate the sequence of skills as children move into kindergarten, first and second grade. The Crosswalks to Alabama's Courses of Studies (see Section on Crosswalks) further professionals' understanding of the way in which children, even as early as infancy, begin to grow the skills and competencies that pave the way for more complex learning as they mature.

The 2015 Transforming the Workforce for Children Birth Through Age 8: A Unifying Foundation report from the National Academies Press tells us that professionals' ability to use learning trajectories or progressions is an important workforce practice. The report defines three components of learning trajectories: the subject matter content; the developmental progressions children go through as they learn the content; and the sequenced activities educators can use to help students learn the content. Alabama's Standards for Early Learning and Development include all those components.

"The more that you read, the more things you will know. The more that you learn, the more places you'll go."

- DR. SEUSS

Alabama's Domains of Learning

SECTION

1

Relationships and Connections

This section designates those skills and expectations that are built from children's relationships with peers and adults, their own self-knowledge and their connections to family and the communities in which they live. This section highlights the impact of relationships for young children's success.

FAMILY AND COMMUNITY ENGAGEMENT (FCE) Relationships to Help Me Succeed

Describes a unique set of standards and practices that highlight the importance of families', communities', and professionals' partnership in supporting children's learning.

SOCIAL EMOTIONAL DEVELOPMENT (SED) Myself, My Feelings, My Relationships

Describes those skills needed to understand, express, and manage feelings as well as the ability to establish positive relationships with others.

SOCIAL STUDIES (SST) Learning about Myself, My Family, and My Community

Labels the knowledge children acquire about their family, their community, and their place within the world.

SECTION

2

Exploration and Critical Thinking: Developing STEM Skills

Section 2 represents the skills and strategies children use to learn through exploration and problem solving. STEM (or Science, Technology, Engineering and Mathematics) are the areas of learning that prepare children for future success by encouraging creativity, innovation, and invention.

APPROACHES TO PLAY AND LEARNING (APL) Developing Skills and Attitudes for Success

Identifies the skills and behaviors that children use for learning. Play skills, along with children's persistence, flexibility, creativity promote successful learning and interactions with others.

SCIENCE EXPLORATION AND KNOWLEDGE (SEK) Exploring the World Around Me

Provides foundational information about science, engineering, and technology concepts as well as the critical thinking skills that children use to learn and understand new ideas.

MATHEMATICAL THINKING (MAT) Exploring, Processing, and Logical Reasoning

Introduces basic mathematics skills and language that help children learn about numbers, shapes, patterns, measurement, and data analysis.

SECTION

Communication

This section describes children's language and literacy development as well as the way they communicate through the arts such as music, movement, dramatic play, and visual arts.

LANGUAGE AND LITERACY (LLT)

Understanding and Expressing by Speaking, Listening, Reading, and Writing

Shows children's emergent skills in the areas of speaking, listening, reading and writing. Children use language skills to communicate with others while they develop literacy skills to read and write.

CREATIVE ARTS (CRA) Expressing Feelings and Ideas through Art, Music, Movement and Drama

Offers the ways in which children use creative arts to express themselves. Moving beyond talking and listening, children may use different media such as drawing or acting to express their feelings and thoughts.

SECTION

4

Physical Development and Health

PHYSICAL DEVELOPMENT AND HEALTH (PDH) Growing Strong, Healthy and Resilient

Describes the way in which children develop coordination, strength, and control of their bodies and develop the knowledge about how to stay healthy.



The Alabama Standards for Early
Learning and Development are
organized into 4 sections with 8
domains of learning for children and a
9th domain that describes the ways in
which professionals and families work
together to support children's learning.
The eight children's domains portray
a comprehensive view of children's
learning and are further supplemented
through the additional domain of
Family and Community Engagement.

Learning Domain Sections:

Each of the eight learning domain segments in the ASELDs has 4 key parts: 1) a domain introductory page; 2) the learning progressions, birth to 5 years or 60 months;

3) recommendations for adaptations and accommodations to support children with unique needs; and 4) foundational practices for professionals. These pages work together to guide all professionals, regardless of the early learning setting, in the design and use of age, culturally, and linguistically appropriate learning standards for all young children, birth to age 5.

PART 1 Introduction:

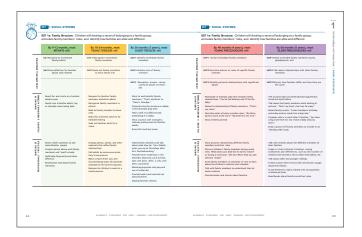
This page offers a brief description of the domain and explains its importance for children's development and professionals' instructional strategies. The page spotlights a significant idea about a domain-related theme. A table of contents for the section can also be foundhere.



PART 2 Learning Progressions:

The content-specific learning progressions for children are detailed in this part and provide the information about what most children should be able to know, learn and do at specific ages and stages.

Within a domain, the learning progressions follow a pattern of sub-domain, strand, and developmental indicators. These describe developmental skills, first as a broad idea in the sub-domain, and then are further defined through the strands and developmental indicators. (see example on page 24)



Children's Observable Actions and Professional Practices complete the learning progressions pages. The children's observable actions offer examples of the way in which children demonstrate the skills to help professionals identify the child's progress towards mastery. Professional Practices specify strategies or ideas for professionals to use to intentionally design experiences or interact with children to help them learn. Both Children's Observable Actions and Professional Practices offer examples; they are not a comprehensive list. Professionals and family members may identify other ways in which children are demonstrating mastery of specific skills.

PART 3 Adaptations and Accommodations for Learning:

Children learn in different ways and often have unique learning needs. Professionals may need to adapt or modify activities and materials so that every child can successfully and confidently learn. This key page offers a sampling of strategies for individualizing or differentiating learning to accommodate unique needs and learning styles to assure ALL children's best possible learning outcomes.



PART 4 Foundational Practices:

Professionals can maximize children's experiences when they consider schedules, the learning environment, and their methods for facilitating children's knowledge acquisition. This page within each domain provides examples and additional resources to guide professionals' intentional and purposeful curriculum development and assessment strategies.



"You see a child play, and it is so close to seeing an artist paint, for in play a child says things without uttering a word. You can see how he solves his problems. You can also see what's wrong. Young children, especially, have enormous creativity, and whatever is in them rises to the surface in play."

- ERIK ERIKSON



SUBDOMAIN: Further organizes the domain into specific content areas

		domain into specific content areas				
		MAT1b: Counting and Number Sense	e: Children will connect	STRAND: Specific goals or knowledge related to the subdomain		
AGE LEVELS	\mapsto	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERSwill	By 36 months (3 years), most OLDER TODDLERSwill		
	DEVELOPMENTAL INDICATORS		o show progression of skil NDICATORS: Specify the wledge most children know	sequence 1bOT-2 Count backwards from 3 with assistance 1bOT-3 Place objects in one-to-one correspondence relationships during play		
	SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	Engage with adult who is singing or doing finger plays that include numbers CHILDREN'S OBSER Examples of the way demonstrate this ski	s in which may	 Count out 3 crackers Rotecountincorrectsequence to 5 Hold up fingers while counting in a finger play Point to objects while counting objectsupto5 Starting at 3, count backwards to 1 		
	SAMPLING OF PROFESSIONALS' PRACTICES	PROFESSIONAL PR	gies or experiences	Include toys and objects in different learning centers that encouragecounting Usesongsandfingerplaysthat include counting Count in different languages Countchildren out loud during transitions Askchildrentohelpsetthetable, asking themto put a spoonnext to each plate Play "how many" by holding your hand behind your back and bringing itoutwithafewfingers raised		

MAT 1: NUMBERS AND QUANTITY

→	MAT1b: Counting and Number Sense: Children will c	onnect number names to quantities.
	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
ICATORS	1bYP-1 Rote count up to 10 in sequence	1bOP-1 Rote count up to 20 in sequence
NTAL IND	1bYP-2 Count backwards from 5	1bOP-2 Count backwards from 10 to 0
DEVELOPMENTAL INDICATORS	1bYP-3 Begin to demonstrate one-to-one correspondence up to 10 during daily routines	1bOP-3 Demonstrate one-to one correspondence when counting objects placed in a row (one to 15 and beyond)
_	1bYP-4 Count out a specified number of objects up to 5	1bOP-4 Count out a specified number of objects up to 10
		1bOP-5 Understand that the last number represents how many objects are in a group
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Lay out small crackers on each corner of the napkin and one in the middle Rote count with accuracy up to 10 Count down a rocket ship takeoff, starting at 5 Count on a calendar how many days until a special event, with adult support Accurately count 10 blocks while pointing to each 	 Count the number of children who are present Match a cup to a napkin while setting the table Rote count with accuracy to 20 Count down until it's time to go outside, starting at 10 and ending with 0 (zero) Count out 10 counting cubes when asked Count 10 bears and then tellyou, "There are 10 bears." Identify what's missing after adult removes an object from a collection
SAMPLING OF PROFESSIONALS' PRACTICES	 Lay out sets of 1-2-3-4-5 objects and count with child, "Let count these bears together to see how many we have." 	Provide many opportunities to count for authentic reasons Count the number of children who are present Invite children to help you count heads while lining up to go outside Number the bottom of empty egg carton cups and ask children to put the correct number of chips in each egg cup Invite children to count steps with you as you move from one location to another Provide natural objects like rocks or acorns to count
	 Count backwards with children before you start to readastory 	Ask children to count backwards as they await a taskAsk children to count out 10 blocks



ALABAMA STANDARDS FOR EARLY LEARNING AND DEVELOPMENT SUMMARY



Relationships and Connections

FCE1a	Child development and Parenting	Early learning programs support families' understanding of child development and parenting techniques.		
FCE1b	Communication	Early learning programs promote respectful and reciprocal communication strategies with families.		
FCE1c	Home-School Connection	Early learning programs connect in-home and out-of-home experiences to optimize children's learning.		
FCE1d	Family Participation	Early learning programs promote families' participation in their children's program experiences.		
FCE1e	Decision-Making and Leadership	Early learning programs provide families with opportunities to contribute to their children's program operation.		
FCE2	Program Climate and Environment	Early learning programs are welcoming to all children and		
FCE3	Community Partnerships	Early learning programs collaborate with community agencies to support children's and families.		
SOCIA	L EMOTIONAL DEV	ELOPMENT (SED) Myself, My Feelings, My Relationships		
SED 1a	Self-Awareness	Children will demonstrate an emerging personal identity through awareness of one's own personal characteristics, skills, and abilities.		
SED1b	Self-Esteem	Children will demonstrate emerging confidence in their own abilities.		
SED2a	Manage Feelings	Children will identify, manage, and express their feelings.		
SED2b	Self-Regulation	Children will begin to self-regulate.		
SED3a	Relationships with Adults	Children will form relationships and interact positively with adults who consistently respond to their needs.		
SED3b	Relationships with Peers	Children will develop ways to interact and build relationships with peers.		
SOCIA	L STUDIES (SST) L	earning about Myself, My Family, and My Community		
SST1a	Family Structure	Children will develop a sense of belonging to a family group, articulate family members' roles, and identify how families are alike and different.		
SST1b	Community Belonging	Children will build a sense of belonging to a group and follow its rules.		
SST1c	Diversity and Culture	Children will show understanding of how people and customs are alike and different		
SST2a	Economics	Children will understand about supply and demand, why people work, money, and community helpers.		
SST2b	Geography	Children will identify basic concepts of location and features in the community.		
SST2c	History	Children will demonstrate an understanding of events and people from the past and present.		



Exploration and Critical Thinking: Developing STEM Skills

APL1a	Imaginative Play	Children will use their imaginations to learn about the world around them.
APL1b	Collaborative Play	Children will learn to work and play together to achieve a common goal.
APL2a	Persistence, Engagement, & Attention	Children will develop the ability to focus their attention and concentrate to complete tasks.
APL2b	Task Analysis	Children will identify the steps needed to achieve a goal.
APL2c	Reasoning and Problem Solving	Children will identify and develop strategies for solving simple problems.
APL3a	Curiosity, Invention, and Initiative	Children will show eagerness, imagination, and creativity as they try new tasks.
APL3b	Risk-Taking and Flexibility	Children will demonstrate a willingness to take risks and try new things.
SCIEN	ICE EXPLORATION	AND KNOWLEDGE (SEK) Exploring the World Around Me
SEK1a	Scientific Inquiry	Children will gain knowledge through exploration and discovery.
SEK1b	Biological Science	Children will differentiate between living and non-living things and their characteristics.
SEK1c	Physical Science	Children will demonstrate emerging understanding of matter and energy.
SEK1d	Earth and Space Science	Children will demonstrate emerging understanding of the earth and atmosphere.
SEK1e	Environment & Ecology	Children will demonstrate understanding of their impact on taking care of the world.
SEK2a	Use of Tools	Children will use simple and more complex tools to accomplish a task.
SEK2b	Media Literacy	Children will demonstrate understanding of the types of information they are receiving through media.
SEK2c	Digital Citizenship	Children will demonstrate safe use of technology.
SEK2d	Computational Thinking	Children will use technological skills, concepts, and behaviors to solve problems or complete projects.
SEK3	Engineering Processes	Children will use beginning design processes for problem solving.
MATH	IEMATICAL THINKI	NG (MAT) Exploring, Processing, and Logical Reasoning
MAT1a	Number Relationships	Children will understand the concept of numbers, and the relationships between numbers and quantities.
MAT1b	Counting and Number Sense	Children will connect number names to quantities.
MAT2a	Operations	Children will develop understanding of putting together or adding to and taking apart and taking from.
MAT2b	Sets	Children will classify and organize objects according to properties and attributes.
MAT2c	Patterns	Children will recognize simple patterns in daily life and play experiences.
МАТ3а	Spatial Reasoning	Children will explore and describe the spatial relationships between objects, their environment, and themselves.
MAT3b	Shapes	Children will explore, visualize, and analyze shapes and shape attributes.
MAT4a	Measurement and Time	Children will explore and communicate about distance, weight, length, height, and time.
MAT4b	Logical Thinking, Reasoning, and Data Analysis	Children will use logical thinking and reasoning to solve meaningful problems and inform decisions.



Communication

LANGUAGE AND LITERACY (LLT) Understanding and Expressing by Speaking, Listening, Reading, and Writing				
LLT1a	Receptive Language	Children will gain information by understanding the meaning of words and gestures.		
LLT1b	Expressive Language	Children will use words and gestures to express their thoughts, feelings and needs to others.		
LLT1c	Social Rules of Language	Children will use, adapt and follow the rules of language.		
LLT2a	Comprehension	Children will demonstrate understanding of both the written and spoken word.		
LLT2b	Phonological Awareness	Children will begin to recognize and associate word with sounds in spoken language.		
LLT2c	Alphabet Knowledge	Children will demonstrate an emerging understanding that letters and letter sounds represent the sounds of spoken language.		
LLT2d	Print Awareness and Book Handling	Children will construct meaning and appreciation of print.		
LLT3	Emergent Writing	Children will demonstrate beginning understanding of the idea that marks on paper convey a message.		
CREA	TIVE ARTS (CRA)	Expressing Feelings and Ideas through Art, Music, Movement and Drama		
CRA1	Visual Arts	Children will demonstrate an increasing understanding and enjoyment of the visual arts through exploration.		
CRA2	Music	Children will demonstrate an increasing understanding and appreciation of music as a form of self-expression.		
CRA3	Movement and Dance	Children will demonstrate growing interest and control in rhythmic movements.		
CRA4	Drama & Acting	Children will demonstrate an increasing understanding of drama through the exploration of actions and language.		

SECTION



Physical Development and Health

PHYSI	PHYSICAL DEVELOPMENT AND HEALTH (PDH) Growing Strong, Healthy and Resilient			
PDH1a	Gross Motor Development	Children will demonstrate increasing body awareness and control, strength and coordination of large muscles.		
PDH1b	Fine Motor Development	Children will demonstrate increasing strength, control, and coordination of their small muscles.		
PDH2a	Healthy Habits	Children will show increasing independence in performing self-care tasks.		
PDH2b	Safety	Children will demonstrate increasing awareness of safe habits, safety rules and personal safety.		



ALABAMA'S GUIDING PRINCIPLES FOR EARLY LEARNING AND DEVELOPMENT



* All children are unique, capable, and competent learners.

- Children progress at different rates, have individual learning styles and demonstrate diverse abilities.
- Children's learning is maximized through individualized learning experiences that recognize their unique gifts and characteristics.

* Children are active learners.

- Children are naturally curious and learn through firsthand actions and explorations with objects and people in their world.
- Children construct knowledge through physical, social, and mental activity.
- Children learn in the context of relationships and interactions with adults and peers.
- Play is the mechanism by which young children learn.

* Learning is multi-dimensional and inter-related.

- Learning happens simultaneously across the domains of child development: social, emotional, physical, language, and cognitive.
- No one domain is more important than another. The domains are inter-related and influenced by the growth and learning in the other domains.

* Successful early childhood programs establish partnerships with families.

- Parents are children's first and primary educators.
- Parents' engagement in their children's learning at home and school creates a solid foundation for life-long learning.
- Home-program connections are critical for successful learning. Continuity of learning occurs when children's experiences build and extend across programs and home experiences.

- * Children's development and learning must occur in the context of their culture and home experiences.
 - Development and learning are rooted in culture.
 - Traditions, language, culture, values, and beliefs are part of children's identity and influence their thinking and learning.
- * Children learn best in early childhood programs where adults build relationships and construct learning through positive and informed practices.
 - Early childhood professionals support children's development and learning when they have an understanding of child development and age-appropriate practice.
 - Early childhood professionals facilitate development and learning when they are intentional in the way they design and provide experiences that are built on children's interests and motivation.
 - Early childhood professionals maximize children's learning when they utilize a cycle of observation, assessment and action through standards, curriculum, and assessment tools.
 - Early childhood professionals must be life-long learners who engage in ongoing, research-based training.
- * Early childhood program environments facilitate learning experiences.
 - Children learn best in environments where they feel safe and have a sense of belonging.
 - Early learning environments offer opportunities for children to explore materials, interact with peers and adults, and engage in meaningful experiences.
- * Children develop and learn in the context of their community.
 - Early childhood programs are an extension of children's communities.
 - Collaborations and partnerships with agencies, businesses and residents within the families' communities offer rich opportunities for learning.
 - Early childhood programs support children and their families' health and wellbeing with knowledge of the resources within the community.



SECTION

1

Relationships and Connections

îtiti	Family and Community Engagement	37
	Social Emotional	47
	Social Studies	63



FAMILY AND COMMUNITY ENGAGEMENT (FCE) WWW.

Connections to Help Me Succeed

Family engagement invites parents and family members to actively participate in their children's learning experience. There is a reciprocal process of information sharing and interaction that values both partners' roles and contributions, focuses on connections, and is respectful and responsive to families' needs. Families are invited to participate in programmatic decision-making and leadership opportunities and to become part of their children's learning through aligned home-program experiences. Family engagement is strength-based, building on families' values, culture and identified contributions.

When early learning programs create connections within their communities, both children and families benefit. Knowledge of available services enable program staff to identify and refer families for additional help as needed, and help to coordinate those services. Community service providers can learn more about families' needs and interests and develop or enhance their services to ensure their responsiveness. Programs can promote community events and pool their resources to offer fun, educational and responsive opportunities that help children and their adults become active members of their community.

Did you know?

Children's attendance in early learning programs can impact their school readiness and school success.

Children who are chronically absent, or who miss 10% of the school year, are less likely to read on grade level by third grade and are more likely to be chronically absent in later grades. Family engagement can make an impact! When families understand the importance of regular attendance, and when professionals track and follow up with families when children are absent, attendance improves and so do children's opportunities to

FCE 1 Family Partnerships

FCE1a: Child Development and Parenting FCE1b: Communication FCE1c: Home-School Connection

FCE1d: Family Participation

FCE1e: Decision-Making and Leadership

FCE 2 Program Culture and Environment

FCE 3 Community Partnerships



FCE1a: Child development and Parenting: Early learning programs support families' understanding of child development and parenting techniques.

Program Policies

- Programs provide family-centered and strength-based services aimed at helping families support and care for theirchildren.
- Programs identify family adults as the experts on their children and the team leaders.
- Programs support families' access to additional program or community services as needed.
- Programs include family education and child development, offer participatory
 opportunities and experiences that strengthen existing parenting knowledge and
 skills, and promote the development of adults' new abilities to enhance the growth
 and development of their child.

Policies in Practice

- · Programs offer parenting education classes.
- Programs are regularly provided with information about their children's growth and learning progress.
- Programs conduct health and mental health screenings, share results, and help families access additional support as needed.
- Family input is sought when developing children's goals and focus areas for learning.
- Information about child development and parenting is shared through newsletters, bulletin boards, social media, and other communication strategies.
- Programs dedicate a family space or library with books and other information on child development and parenting.
- Families are provided with information about the program's philosophy on learning and instruction, the daily schedule, and available resources.
- Enrollment and registration forms include information about children's routines, Interests, culture, home life.
- · Program staff model positive interaction and communication techniques with children.
- Information about child development and parenting is shared through newsletters, bulletin boards, social media, and other communication strategies.

- Families are informed about typical developmental milestones and learning.
- Families are engaged in children's learning and are informed about the program's curriculum and daily events.
- · Family adults identify and build on children's strengths to help them learn and develop.
- Families are equipped to use daily routines and everyday occurrences as learning opportunities.
- Families are an essential part of the child's team.
- Families seek out advice and information about child development, learning, and parenting from early learning professionals.
- Families are competent and confident in their parenting roles.



FCE1b: Communication: Early learning programs promote respectful and reciprocal communication strategies with families.

Program **Policies**

- Programs ensure that family communications are done in culturally sensitive ways that accommodate family literacy levels and language needs.
- Written materials are available, and discussions are held in the languages that reflect the program's populations.
- Programs have a system for informal, ongoing, reciprocal, and positive communication about children's day to day activities.
- Families are included in more formalized communication processes to talk about children's growth and learning progress.
- There are formal and informal opportunities to engage with families about their interests, strengths, expectations, concerns, joys, and achievements.
- Programs are timely in their responses to families' feedback and concerns.
- Programs promote two-way communication that engages and respects families' viewpoints and interests.

Policies in **Practice**

- Families receive updates in their preferred communication mode (email, text, written update, phone call).
- · Interpreters are available as needed.
- In-person conferences between family members and early childhood professionals involve not only the teacher and parent but also include the student when appropriate.
- Program staff use OPERA listening: Open ended guestions, Pause, Eye contact, Repeat, Avoid judgment, Ask opinion, Advise last. (Baby TALK, 2016)
- Professionals seek input and suggestions from families on strategies they may have found successful.
- Program staff are sensitive to families' levels of comfort, knowledge, or interest in different areas.
- Professionals are aware that non-verbal, as well as verbal communication, can convey a message of acceptance.

- · Families receive information about development and ways they can assist their children in growing across all domains.
- Families are informed about their children's experiences during the day.
- · Families have a voice in sharing information about family and children's interests and activities.
- Families know about each child's schedule and routines, special events, meals, etc.
- Families have different options for communicating and participating in their children's experiences such as email updates, phone calls, in-person meetings.
- Families are confident that they will get answers to their questions in a timely manner.



FCE1c: Home-School Connection: Early learning programs connect in-home and out-of- home experiences to optimize children's learning.

Program Policies

- Programs strive to assure parallel practices where similar strategies and responses to children's learning and behavior are used at both school and home.
- Programs offer formal and informal opportunities for information-sharing.
- · Programs use a partnership approach with families to optimize children's learning.
- Programs design transition processes for children's moves within the program and for entering and leaving the program.
- Individualized services for children's special needs are provided in natural and inclusive environments and during daily routines and activities to promote their access to and participation in learning experiences.

Policies in Practice

- Services and goals are designed to reflect family adult's interests, hopes and dreams for their children.
- Programs offer home visits and/or conferences to formally review children's progress and develop learning goals that connect home and program learning.
- Programs offer adult resource and toy libraries.
- Take-home activity bags experiences are used to connect home and school learning.
- Families are engaged to determine optimal strategies for children's transition from one classroom to another.
- Preschools groups and kindergarten classes connect through pen pals, school visits, or teacher visits.
- Programs have formalized processes for sharing and receiving information from children's previous or future learning programs.
- Program staff, together with the professional team, work to modify and adapt materials, lessons, and environments to promote children's unique learning styles.

- Family adults stay informed about children's everyday experiences in their early learning program.
- Family adults are more confident about supporting their children's learning through at-home activities.
- · Family adults and children share learning experiences.
- Families are willing to share information about at-home circumstances that may impact children's learning.
- Family members are interested in volunteering or participating in the life of the early learning program.
- Children's transitions to/from other schools or programs are smooth. Family members
 are informed about the new environment, routine, and schedule and can prepare
 children for changes and new expectations.
- · Families receive information about children's growth and development with interest.



FAMILY PARTNERSHIPS

FCE1d: Family Participation: Early learning programs promote families' participation in their children's program experiences.

Program Policies

- Programs offer varied opportunities and types of experiences for which parents may volunteer or participate in program activities.
- Programs respect families' availability, interest, and comfort in participating in program life.
- · Programs design events or activities that reflect children's culture and home experiences.
- · Family members are invited to share their special skills or interests with the program's adults and children.

Policies in **Practice**

- · Programs design surveys or ask families during registration about their interests and availability.
- · Varied types of volunteer opportunities that consider families' availability of time and abilities are offered: classroom visits, newsletter, field trips, show and tell visits, donation of materials, information-sharing via phone chain.
- Knowledgeable adults may provide translations of books or materials.
- Family adults may share workplace experiences. For example, a hair stylist may show children what he does at work or contribute supplies for a dramatic play
- Families' culture and diversity are included in the program's curriculum and experiences for children.
- · Informal family-friendly events such as "donuts with dads" or "grandma reading days" are offered regularly.

- Adults are comfortable about their children's everyday experiences in the early childhood program.
- · Parents contribute to the life of the early learning program in some way and their contribution is valued.
- Family adults contribute to a strong partnership across home and program.
- · Family members are invested in the program and contribute based on their strengths.
- Families participate in regular program activities with confidence.
- · Family members participate in early learning program special events with excitement.
- · Families contribute information about their culture through the sharing of information and resources.



FCE1e: Decision-Making and Leadership: Early learning programs provide families with opportunities to contribute to their children's program operation.

Program Policies

- Families are included in leadership at various levels which includes decision making, written policy development, and ongoing review of program operation.
- Conflict resolution policies exist that are designed with guidance and input from families and identify procedures for complaints or suggestions.
- · Programs create pathways for families to advocate for their children's wants and needs.
- Programs involve families in program goal development and strategic planning.

Policies in Practice

- Programs convene family advisory boards, councils, subcommittees, and oversight groups to inform program operation and policy development.
- Families are informed of opportunities to participate in leadership training, either at the program, community, or state level.
- Families are afforded opportunities to offer suggestions and solutions for program and systems improvement.
- Families are aware of their rights and responsibilities and feel comfortable and knowledgeable about how to act on them.
- Families are informed about opportunities and encourage those who are interested to participate.
- · Programs use a variety of strategies for leadership and advocacy skill building.
- Programs have a schedule for regular review and update of policies, using family input.

Family's Experien<u>ce</u>

- Families' voices count in decision making, offering active contributions across levels.
- Families have the confidence to express their needs and the needs of their children.
- · Families are part of the team.
- Family members develop leadership skills that allow them to appreciate different perspectives of a decision and the rationale behind it.
- Families are advocates for early childhood quality and access.

PROGRAM CLIMATE AND ENVIRONMENT

FCE2: Program Climate and Environment: Early learning programs are welcoming to all children and families.

Program Policies

- Program administrators set expectations, a clear vision and goals, model effective practice, and make sure program. policies, operational procedures, and practices promote family engagement.
- · Program administration provides continuous learning and quality improvement for staff.
- Programs are committed to using data to improve family engagement practices on a continual basis.
- Programs' service delivery is strength-based.
- Facility environments are welcoming to all families and are inclusive of various cultures and economic levels.

Policies in Practice

- Administrators check in with families regularly to ensure they are satisfied and comfortable with children's care.
- Program staff are offered professional development and resources on family partnerships, culture, diversity, and communication.
- Family surveys or other means of seeking input are distributed to families and results are analyzed and used for improvement.
- Facility environments are pleasant, posted materials and bulletin boards include family- friendly information and are updated regularly.
- Posted materials reflect languages and cultures that are present in the program.
- Initial conversations and meetings with families are positive and welcoming and seek out family-based strengths and interests.
- Family spaces are available that include resources, information about the program, and offer opportunities for family members sit and talk together.
- · Facilities have areas for nursing mothers.

- · Families network with others and feel a sense of community.
- Children and siblings remain in the program over an extended period during the early childhood years.
- Families voice satisfaction to neighbors and community.
- Families participate and volunteer as often as possible.

FCE3: Community Partnerships: Early learning programs collaborate with community agencies to support children and families.

Program Policies

- Programs participate in community systems-building that helps to reduce gaps in service and supports families.
- Programs collaborate with other agencies and systems to pool resources and knowledge.
- Community stakeholders are invited to take part in program planning and decision- making.
- Program staff, family members, and community agencies collaborate as needed and appropriate to support children's growth and development.
- Referral processes are developed to assist families to access needed services and/or resources.

Policies in Practice

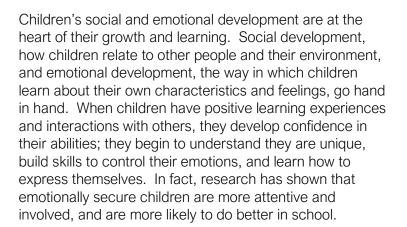
- · Professionals make suggestions (referrals) to families to obtain needed services.
- Posters and flyers about community events and services are posted in visible spots for easy viewing and access.
- Programs design opportunities for shared transitions across programs and schools.
- Program staff participate in community boards and/or meetings and share information with families.
- Families are asked to sign permissions that allow the program staff to communicate with other agencies and limit information-sharing to "need to know".
- Programs have developed ongoing information-sharing processes with other agencies who work with families (early intervention, human services agencies, educational enrichment programs, youth activity programs, fitness centers, libraries, public school special education services, etc.).
- Community agencies or program representatives are invited to volunteer or participate in programs' operations.
- Children attend field trips or are provided with opportunities to learn about community services such as libraries, museums, or other businesses in the community.

- Families will have fewer gaps and barriers as a result of community collaboration.
- Families are confident in sharing and voicing their perspective on community plans that impact them.
- Families share and receive support and information from other families.
- Families experience coordinated transitions from program to program that lead to children's readiness and success.



SOCIAL EMOTIONAL DEVELOPMENT (SED)

Myself, My Feelings, My Relationships



At the heart of children's social and emotional well-being are relationships. Professionals must intentionally build caring and trusting relationships that show warmth, care, and respect for children's individual needs and interests. When adults respond to children with praise, cues, and model positive behaviors, they become more competent and successful learners and acquire the needed skills to get along with others.



SED1a: Self-Awareness SED1b: Self-Esteem

SED 2 My Feelings

SED2a: Manage Feelings SED2b: Self-Regulation

SED 3 My Relationships

SED3a: Relationships with Adults SED3b: Relationships with Peers



Did you know?

Children who have developed strong bonds (attachment) to the adults in their lives are more likely to be able to control their emotions and get along with others.

Children develop connections, beginning at birth, and feel secure when the adults in their lives nurture and respond to them. Adults need to hold, cuddle and promptly attend to infants' needs to help them feel safe and calm. As children mature into toddlers and preschoolers, strong attachment experiences result in confident children who rely on familiar adults to be their safe base while exploring and learning.

Secure attachment helps brain development by giving children the confidence to explore and build those needed connections. Positive attachment experiences also help children to learn how to trust others, develop empathy, and manage their own feelings.

When early learning professionals read children's cues, promptly respond to their needs, and actively participate in their learning, they are supporting secure attachment experiences.



SED1a: Self-Awareness: Children will demonstrate an emerging personal identity through awareness of own personal characteristics, skills, and abilities.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
DEVELOPMENTAL INDICATORS	1al-1 Explore movement of hands, feet, body, and objects	1aYT-1 Show awareness of specific body parts; point to ears, mouth, nose, etc.	1aOT-1 Name own physical characteristics or body parts
	1al-2 Show joy or smile and coo at own image in the mirror	1aYT-2 Recognize self in the mirror	1aOT-2 Begin to show self- consciousness or embarrassment during some social situations
DEVELO	1al-3 Respond to name	1aYT-3 Say name	1aOT-3 Use first person pronouns to refer to self
	1al-4 Express likes and dislikes (preferences) through vocalizations or gestures	1aYT-4 Indicate likes or dislikes (preferences) through willingness to participate or complete activities or actions	1aOT-4 Name likes and dislikes (preferences) when asked
	1al-5 Recognize how actions affect others	1aYT-5 Express self as individual through gestures and actions	1aOT-5 Display assertiveness
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Show anticipation of feeding or being held Smile and reach for familiar adults; show unease at unfamiliar adults Notice and explore ownhands Laugh and reach for the mirror when shown Cry to show discomfort, hunger, or tiredness Turn to look at adult when name is called Raise knees to chest when on back for diaper-changing Pull off own socks 	 Point to body parts when asked Assert own needs by pointing, gesturing, or talking Focus on self in mirror Protest when given water rather than the preferred juice Clap when favorite food is being served Move own body to fit inside a tunnel toy with a sibling Hold on to a favorite toy as another child approaches saying, "mine" Resist help from an adult during dressing, "me doit" 	 Tell an adult, "I hit my elbow" or "I can bend my knee." Hide head when asked to relate age or a personal characteristic Show discomfort when an adult remarks on an accomplishment Declare interests or needs, saying, "I want to play with the blocks." or "I'm hungry." Tell an adult, "I like green but Joey likes red." Refuse help when trying to zip coat
SAMPLING OF PROFESSIONALS' PRACTICES	 Place unbreakable mirrors at eye level Hold child up to mirror and name body parts or features Use child's name during interactions Play games like "This Little Piggy" with body parts Describe baby's reactions to experiences Soothe child who is showing discomfort 	 Sing body part songs like "Head Shoulders Knees and Toes" Display photos of children and families in action Label cubby with name Allow time for children to complete tasks on own Acknowledge children's preferences Give either/or choices Tell family stories and read books from the child's home culture 	 Describe children's characteristics, "Your hair is brown just like mine." Talk about children's actions and preferences. "You can run fast, just like a cheetah!" "Youchoose that green cup often; you must really likegreen." Encourage children to draw themselves and others, talking about similarities and differences Acknowledge children's feelings

from the child's home culture

• Praise child who helps with routines

• Include dolls of different colors

and abilities in the family center

SED1a: Self-Awareness: Children will demonstrate an emerging personal identity through awareness of own personal characteristics, skills, and abilities.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DEVELOPMENTAL INDICATORS	1aYP-1 Recognize similarities and differences in own and others' personal characteristics	1aOP-1 Differentiate themselves by physical characteristics
	1aYP-2 Call attention to self in photos or videos	1aOP-2 Show increasingly accurate understanding of own strengths, preferences, limitations, and personal qualities
DEVEL	1aYP-3 Demonstrate knowledge of personal information	1aOP-3 Connect adult's actions to own accomplishments or actions
	1aYP-4 Use words to demonstrate knowledge of own preferences	1aOP-4 Make choices based on likes and dislikes (preferences)
	1aYP-5 Stand up for own rights	1aOP-5 Stand up for rights of others
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Name family members Notice that a friend has the same hair color Say, "I'm bigger." when standing near another child Tell a friend, "You like apples, but I like bananas." Say, "I want to play with the blocks." Ask a friend for a toy Recite first and last name Tell a friend, "I had that toy first." Ask an adult, "Read me that again!" after hearing a preferred story. Point out self in family photo 	 Tell a friend, "I have light hair; you have dark hair." Tell an adult, "We both are wearing red shirts." Share personal information with others, "I live in a house with my grandma. We have a dog." Announce, "I can run really fast." Select the green playdough, "I like green best." Tell an adult, "I am going to play with the blocks first; I love the blocks." Ask an adult to help complete a task Tell another, "We were here first." Tell an adult when two other children are arguing over atoy.
SAMPLING OF PROFESSIONALS' PRACTICES	 Model how to communicate wants and needs Ask children to draw their faces after they look in a mirror Make "me books" that include pages with self-portrait, family, and pages of favorites, such as things to do, food or book Review children's full names and addresses Graph children's preferences for colors, foods, books, etc. and talk about the results Discuss characters' interests and behaviors from a story Acknowledge children's expression of needs or interests, "It sounds like you're angry." 	 Plan activities that consider children's diverse interests Invite children to tell the group about a favorite personal experience Display children's family photos and photos of families from other cultural groups around the world Call attention to similarities amongst children, "You both like to draw." Acknowledge children's comments about another's feelings, "Thank you for letting me know about Bobby's problem." Provide opportunities for children to select their own activities or vote on something they like best



SED1b: Self-Esteem: Children will demonstrate emerging confidence in their own abilities.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will	
DEVELOPMENTAL INDICATORS	1bl-1 Indicate needs and wants; participate as adult attends to needs	1bYT-1 Alternate between doing things independently and wanting help or comfort	1bOT-1 Show pride in attempting to complete self-help or personal care tasks independently	
	1bl-2 Show beginning awareness of own skills and expectation of results from an action	1bYT-2 Demonstrate confidence in the ability to make things happen	1bOT-2 Attempt new tasks or activities with interest	
	1bl-3 Explore the environment when adult is nearby	1bYT-3 Explore the environment on own, but check back with a familiar adult occasionally	1bOT-3 Participate in varied and new experiences with adult encouragement	
	1bl-4 Show pleasure at accomplishments	1bYT-4 Show others something that's been completed	1bOT-4 Show joy in accomplishments	
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Open mouth when food is offered or raise arms to indicate need to be held Pull off own socks, then try toput them on Push a button on a pop-up toy, smile at the results, and repeat Clap after crawling up the steps Smile and show joy after scooting across the room Move purposefully to investigate toys or to reach a ball or hit an object Choose the same toy every day 	 Hold up a drawing, "Look." Take spoon away from adult, attempting to self-feed Clap after fitting each piece of a knobbed puzzle Try out a new experience while looking to adult for reassurance Join others in play with adult when adult is involved Play in the dramatic play area, then seek out adult, then return to play area again Smile when adult comments on a painting 	 Smile and clap when using the potty, saying "No more diapers!" With adult help, put on coat by self, using the coat flip method Watch others use a plastic knife to cut out playdough shapes then try it Try to spread jelly on toast Sing a new song or finger play Tell an adult, "Watch me run to that pole!" Tell a family member, "Look at my picture" that is displayed on the wall Taste a new food during snack 	
SAMPLING OF PROFESSIONALS' PRACTICES	 Encourage children to explore Describe and acknowledge the child's actions and accomplishments, "You took off your socks." Cuddle, nurture, and be responsive to child to foster trust and attachment Show interest in and be fully engaged with child Help child learn to calm self by model calming behavior, or offering soothing objects Be flexible, giving children time to remain engaged in activities of interest 	 Acknowledge children's attempts, "Youtriedreallyhard." Provide open-ended materials for child to create products Reassure child when trying something new Be available when a child seeks assistance Expect child to protest to express individuality Allow time to complete or try a new task independently Provide children with choices "Do you want to wear the red or blue sweater?" 	 Acknowledge and describe child's accomplishments, "You put together that puzzle!" Encourage children's decision-making by providing choices Praise children's attempts at new or difficult tasks, "Good try at catching that ball." Introduce new tasks with small steps, allowing time to try, then master each step Post or display children's drawings or finished products Create and display a photo book of children doing steps to complete a task 	

Relationships and Connections | SOCIAL EMOTIONAL DEVELOPMENT (SED)

SED1b: Self-Esteem: Children will demonstrate emerging confidence in their own abilities.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DEVELOPMENTAL INDICATORS	1bYP-1 Show confidence in ability to complete routines independently	1bOP-1 Show confidence in ability by taking on new tasks
	1bYP-2 Select more challenging activities with confidence	1bOP-2 Show pride in completion of challenging tasks and activities
	1bYP-3 Independently seek out play areas or activities	1bOP-3 Invite peers to join play or activity
	1bYP-4 Demonstrate one's accomplishments to others with pride	1bOP-4 Describe accomplishments with detail
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Show a drawing to a friend Tell a friend, "We made a really big building." Tell the adult, "Watch me run really fast!" Head directly for the small table toys upon arrival Tell parent, "See you later" and join friends in play Tell an adult, "I can put on my own jacket." Show an adult teeth after toothbrushing saying, "Look how clean they are!" Try new experiences after watching others or being told how to do it 	 Try a new game after it's been introduced by an adult Announce, "I am good at cutting this circle." "Ask Layla during snack, "Do you want to play at dramatic play today? We can both be doctors." Tell an adult, "This is hard!" while creating a patterned bracelet with beads Tell an adult, "First I put on these blocks, then I added the sticks, and then I added the other blocks." Describe a painting, "This is Mom and this is sister. And here's the grass and the sun and our dog."
SAMPLING OF PROFESSIONALS' PRACTICES	 Offer opportunities for child to find solutions to problems Ask a child, "What's another way that might work?" Notice when a child solves his or her own problem and state, "You figured it out!" Acknowledge a child's persistence with a difficult task Engage children in creating appropriate rules for home and other familiar settings Allow time for children to accomplish tasks independently "Praise children's accomplishments, "You did it!" or "What a beautiful picture." 	 Encourage children to try something new that builds on previous accomplishments, "Let's try to write the letters in your last name now that you can write your first name." Demonstrate confidence in children by allowing them to make reasonable decisions and choices. "Where do you want to play or what materials would you like to use today?" Tell children, "I knew you could do that; it was hard!" Offer opportunities to extend child-initiated projects over multiple days or weeks Ask a child about the steps to complete something? "How did you build that robot?" Provide opportunities where children can work together to complete a task or activity



SED2a: Manage Feelings: Children will identify, manage, and express their feelings.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
DEVELOPMENTAL INDICATORS	2al-1 Respond to adult's expression of feelings	2aYT-1 Imitate adult's expression of feelings	2aOT-1 Recognize feelings when named by adult
	2al-2 Express a range of emotions through body movements, crying or laughing	2aYT-2 Communicate feelings through gestures, actions, or basic words	2aOT-2 Label basic emotions
	2al-3 Rely on familiar adults for comfort	2aYT-3 Stay near or cling to familiar adult during times of distress or discomfort	2aOT-3 Seek out adult or use a comfort item during times of distress
	2al-4 Attend with interest when others show they are happy, sad, or fearful by their facial expressions, voices, or actions	2aYT-4 Show awareness of others' expressed feelings	2aOT-4 Respond in caring ways to others' expressions of feelings
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Show a range of emotions (happiness, sadness, fear, anger) with face, body, and voice Stop crying when picked up Suck on hand or comfort item when given by adult Relax when held, rocked, or talked to Kick legs or wave arms with joy or anticipation Watch others with interest Cry or respond with emotion when others use loud or harsh voices 	 Seek out comfort items, such as a blanket or bear, pacifier or thumb, to calm Reach for an adult for comfort when a loud sound startles or scares them Mimic adult's emotional gestures (stomp foot when upset, laugh when see something funny, etc.) Clench fist, grit teeth and say, "No." Tantrum when told, "No." Clap hands to express joy or laugh to express delight Use a "gentle touch" when reminded 	 Name feelings with words, "Sara sad" or "I not like that!" Label simple emotions in self Communicate source of distress, "Daddy, gone, I'm sad!" and recover quickly from distress Approach an adult for comfort after a fall Hold and kiss stuffed animal during difficult situations Show interest in characters' feelings during stories Take a crying child her blanket or lovey
SAMPLING OF PROFESSIONALS' PRACTICES	 Provide comfortitems when infants show distress Use a consistent, predictable routine and consistency Moderate responses, avoiding loud or sudden reactions to baby's emotions or play actions Provide brief moments of time for older infants to self-regulate (infants should not be left to cry for extended periods) Verbalize baby's feelings, "You are so happy this morning." or "I know you don't like getting your diaper changed." 	 Respond to toddlers' need for nearness when they display discomfort or unhappiness Acknowledge and accept the expressions of emotion: "Connor, you're lying on the floor kicking and crying. Are you trying to tell me that you really wanted that toy?" Play or sing basic songs that name emotions, "If your happy" Demonstrate responses to emotions with dolls or stuffed animals, "Teddy bear is crying because he dropped his cup. "Let's give him a hug." 	 Include soft materials or quiet areas during times ofdistress Read books or use puppets and stuffed animals to demonstrate emotion and empathy Model and talk about ways to calm or self-regulate Acknowledge and allow children to show emotions "It's ok to feel frustrated when someone knocks over your building. How can you let her know?" Talk about how others feel, "Johnny is sad because you took his toy."

Relationships and Connections | SOCIAL EMOTIONAL DEVELOPMENT (SED)

SED2a: Manage Feelings: Children will identify, manage, and express their feelings.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DEVELOPMENTAL INDICATORS	2aYP-1 Name basic emotions when demonstrated by others or represented in books	2aOP-1 Associate basic emotions with words, expressions or gestures or actions
	2aYP-2 Express own feelings through actions or words	2aOP-2 Communicate feelings or emotions in socially-acceptable ways
	2aYP-3 Seek reassurance from adult in anticipation of a difficult task	2aOP-3 Seek reassurance or recognition from adults when attempting to resolve distress or challenging situation
	2aYP-4 Express concern or interest for others' needs or feelings	2aOP-4 Respond with empathy and compassion at others' expression of emotion
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Tell another, "I get scared when it thunders because it's loud." Fetch a favorite book or toy for a friend who looks unhappy or in distress State during story time, "That dog is really mean." or "That boy is not nice to his friends." Tell others, "I'm really excited about going to Grandma's thisweekend." With adult support, tell another child, "I'm sorry" after a tower is knocked over when two children accidentally collide Ask an adult, "Can you help me? I don't know how." 	 Tell another child, "I'm so excited! Today is my birthday." Notice, "Jared is crying because he's upset that he brokethetoy." Tell a child, "Stop, you are wrecking my building." Ask an adult, "Is this how you do it?" Tell an adult, "I told Sami to stop hitting me; I don't like it." Reach out to another child who's upset, "You'll be OK, your parent will come back after work."
SAMPLING OF PROFESSIONALS' PRACTICES	 Identify children's feelings and connect to facial expressions, "Look at your big smile, you must be so proud!" Describe and model ways to regulate emotions: "You seem angry, let's breathe to calm down." Relate own feelings to a situation, "I get frustrated when I can't get this to work. I'm going to breathe and try again." Accept children's requests for help while encouraging them to try on their own, "This may seem really scary. "Let's do it together first, then you try." Use photos, role play or puppets with puppets to explain feelings 	 Display and label photos with children's different emotions Use teachable moments to talk about ways to respond to situations, "That fire alarm was scary. What can we do next time to help us feel better?" Provide creative outlets for children's expression of emotions through crayons and paint, journaling or music Give children the tools to solve their own disagreements, "Mia, tell Elijah how that made you feel." Re-create or use stories and activities for role play



SED2b: Self-Regulation: Children will begin to self-regulate.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
DEVELOPMENTAL INDICATORS	2bl-1 Self soothe to calm	2bYT-1 Find comfort in a familiar setting or calm with familiar adult or object	2bOT-1 Imitate self-regulation strategies when guided by an adult
	2bl-2 Regulate reaction to stressors by looking away or seeking adult attention	2bYT-2 Adjust behavior in response to adult cues and reactions	2bOT-2 Manage behaviors with adult help
	2bl-3 Exhibit behaviors to obtain adult help to solve a problem	2bYT-3 Imitate other children's problem-solving techniques	2bOT-3 Seek help from adult to solve a problem
		2bYT-4 Use temper tantrums to express distress or displeasure	2bOT-4 Show defiance
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Suck thumb or move to insert pacifier into mouth when distressed Smile after caregiver smiles and gazes at them Turn head and nestle into familiar adult's shoulder when a stranger reaches for them Reach for an adult when unhappy or scared 	 Hold a doll baby or blanket for comfort Calm when adult shows comfort and attention Stop throwing toys when asked or shown a different way Observe another jump or throw a toy and do the same Throw self down on the floor to express frustration or anger Tell another, "No" 	 Follow simple rules, such as walking inside or using a quiet voice Say, 'stop that!' to friend when angry Ask an adult to tell Lindsey to stop throwingsand Tell friend to 'be gentle' when playing outside Observe and imitate adults' responses to circumstances Practice taking deep breaths when asked by adult
SAMPLING OF PROFESSIONALS' PRACTICES	 Make baby's comfort items such as a blanket or lovey, available Consistently respond to infant's cries, laughs, or other communication Be a secure base by consistently supporting infants' needs Pick up babies when they are reaching for help or comfort Narrate emotional words, "Oh, you look sad! Let's take a walk." 	 Respond to and label children's strong responses, "You wanted more crackers, I'm sorry there aren't any more." Interact with children at their eye level, making eye contact as you speak with them Provide alternatives to unacceptable behavior. "Hitting hurts; make gentle touches to show me you want attention." Show children simple techniques for behavior control, "Let's take a deep breath." Acknowledge children's tantrums without scolding 	 Develop consistent schedules that help children anticipate what will happen next Provide a safe area for children's alone or calming down time Help children control their emotions during a time of distress by staying nearby and providing the language and strategies for calming Acknowledge children's strong responses and offer time for them to accept alternatives Use eitheror and choices to allow children a sense of independence, "Would you like the blue or the red cup?"

Relationships and Connections | SOCIAL EMOTIONAL DEVELOPMENT (SED)

SED2b: Self-Regulation: Children will begin to self-regulate.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DEVELOPMENTAL INDICATORS	2bYP-1 Use self-regulation strategies to calm down with adult guidance	2bOP-1 Independently use self-regulation strategies to solve simple problems
	2bYP-2 Show awareness of how actions and behavior affect others	2bOP-2 Adapt behavior to accommodate situation or adult response
DEVELOP	2bYP-3 Identify a solution for a problem with adult support	2bOP-3 Independently solve simple problems
	2bYP-4 Start and stop activities with warnings and cues	2bOP-4 Transition to new activities independently when asked
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Use words instead of grabbing or hitting to tell a child to give back a toy that was taken Follow direction to participate in transition activities with adult guidance Follow most rules withreminders With help, respond to an adult's question, "What can we do about this?" Acknowledge that another might feel angry if their block structure is knockeddown Take deep breaths and use self-talk to calm, when reminded 	 Look at adult for response to a behavior and modify according to the reaction Modify volume of voice when entering the building after adult says, "We're going inside now, shhhh." Tell another, "Let's set the timer and you can have the computer when it dings." Explain to adult, "I told Gina to put that toy back and to stop bothering me." Explain to another an acceptable strategy for solving a problem
SAMPLING OF PROFESSIONALS' PRACTICES	 Model naming and regulating feelings within the context of daily experiences: "I feel angry when things don't go like I was hoping. I am going to breathe." Co-regulate with an upset child by moving to eye level and soothing child (offering hug, take deep breaths, or other strategies) Use picture schedules so that children know what comes next Offer warnings before transitions Involve children in problem solving alternative ways to respond to negative situations, "How do you think you might have done that differently?" 	 Create a "safe area" (e.g., a beanbag or big floor pillow) for children's use as needed Identify children's feelings and appropriate responses Create a "peace table" where children can go to resolve a difference with another; reinforce their solution Praise children when they appropriately solve problems Remind children of expected behaviors prior to a transition or change in activity, "Remember, we walk quietly to our cubbies to get our coats."

SED 3: MY RELATIONSHIPS

SED3a: Relationships with Adults: Children will form relationships and interact positively with adults who consistently respond to their needs.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
DEVELOPMENTAL INDICATORS	3al-1 Show secure attachment or seek to be near familiar adult	3aYT-1 Rely on adult as a safe base for exploring the environment	3aOT-1 Separate from adult for play but check back often for support
	3al-2 Communicate needs to familiar adults through vocalizations and	3aYT-2 Look to familiar adult for help	3aOT-2 Ask familiar adult for help
	3al-3 Initiate simple back and forth play with adult	3aYT-3 Participate in back and forth activities with adults	3aOT-3 Initiate interactions and play with adults
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Recognize trusted adults with smile, turning toward preferred voice Cry when unfamiliar adult approaches Smile when caregiver laughs React to emotional cues from adults or peers, such as showing stress if an adult yells 	 Look to a trusted adult for assurance when exploring a new material or physical space Use body movements to initiate social interactions (e.g., pat adult's face) Respond when adult says, "peek- a-boo" Mimic adult dance or movement actions Take a doll or toy from adult to help dress or a toy to open/close Use gestures or simple words to express needs, wants or interests 	 Show comfort or preference for adults who are in frequent contact Seek out familiar adults, especially in times of distress or need Engage in reciprocal communication with familiar adults Imitate adult situations imitates adult activities, such as pretending to fish or cook or 'reading' next to adult who is reading Respond to adults' verbal greetings Communicate with adults about recent activities
SAMPLING OF PROFESSIONALS' PRACTICES	 Nurture child with kind words, hugs, and cuddles Respond to child consistently Provide help and comfort when child is distressed Use responsive caregiving techniques Use verbal modeling Play social games Read stories to infants and toddlers Use consistent responses to behaviors 	 Establish routines and predictability Observe and stay close to child, offering support as needed; reinforce small accomplishments Recognize that responses to child's calls for assistance are important opportunities to develop trust and show respect 	 Encourage children's independent play, staying nearby to offer encouragement and support as needed Ask simple questions and wait for children to respond to engage them in conversation Participate in children's play, allowing them to take the lead Respond positively to child's questions and calls for assistance Be responsive to children's comments or request for feedback

SED 3: MY RELATIONSHIPS

SED3a: Relationships with Adults: Children will form relationships and interact positively with adults who consistently respond to their needs.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DICATORS	3aYP-1 Separate from trusted adult without distress	3aOP-1 Separate and easily accept explanation for parting with trusted adult
DEVELOPMENTAL INDICATORS	3aYP-2 Accept guidance and information from trusted adults	3aOP-2 Cooperate with adult guidance to achieve adult approval
DEVELO	3aYP-3 Interact with adults in varied ways	3aOP-3 Initiate and engage with familiar adults to share mutual interests
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Wave good-bye when a familiar adult departs, then join play Express affection for significant adults such as saying, "I love you" at nap time Carry out actions to please adults, "I'll help carry that." Seek out a trusted adult for comfort when feeling sad or angry Ask an adult to join them in play activities Ask an adult to read to them Tell an adult about activities or accomplishments Respond to an adult's questions, carrying on a backand-forth conversation 	 Tell an adult as they arrive, "My Dad has to get to work early today so Grandma brought me." Express affection to an educator or caregiver with hugs or words and accept affection in return Clean up or willingly participate in a transition to acquire adult approval Cooperate with an adult who offers individualized instruction or support Seek out an adult for assistance when upset or if help with problem-solving is needed. Tell an adult, "We both like to play with blocks!"
SAMPLING OF PROFESSIONALS' PRACTICES	 Greet children positively each, showing them you're happy to see them Show empathy as children express various emotions Join in children's play, asking questions to extend their thinking and play skills Provide meaningful and significant feedback to children's comments and accomplishments, "You worked hard to put all of those pegs in the pegboard!" Be attentive to children's questions, responding with more than "yes/no". 	 Invite other facility adults to participate in children's experiences from time to time Plan and schedule the day to ensure connections with each child daily Show interest in children's accomplishments Praise children when they exhibit positive behaviors, "Thank you for walking to the table so quickly!" Talk to children during mealtime about what they did the night before Engage in children's play, allowing them to take the lead and assign you roles

SED3b: Relationships with Peers: Children will develop ways to interact and build relationships with peers.

	Telationismps with peers.		
	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
ICATORS	3bl-1 Show interest in other children, and notice their actions or faces	3bYT-1 Show interest in other children when near	3bOT-1 Play alongside others, occasionally sharing or interacting with others
DEVELOPMENTAL INDICATORS	3bl-2 Imitate the sounds and actions of others	3bYT-2 Respond to other children's emotional expressions	3bOT-2 Recognize and respond to that other children's expression of feelings
SOBSERVABLE ACTIONS	 Gaze at peers Become increasingly aware of and notice others Mimic others' emotions such as smiling or giggling in response to another's smile or giggle or crying in response to another 	 Show enjoyment in interactions with other children through gestures, facial expressions, and vocalizations Follow older siblings or children around Imitate others' action; clapping 	 Occasionally seek out other children and plays alongside Observe and imitate another child's behavior or activity Spontaneously show preference for familiar playmates
CHILDREN' S C	infant's cry • Crawl or scoot to another child	when they clap or dancing when others move Interact briefly with peers nearby	 Initiate social interaction Respond verbally when interacting with peers (e.g., laughing or babbling)
SAMPLING OF PROFESSIONALS' PRACTICES	 Respectfully imitate child while playing and wait for child to repeat back Provide opportunities for child to play and interact with other children Call attention to and describe others' actions or feelings, "look at Mary Claire laughing at the bubbles" Use self-talk to describe your own thoughts and actions in real time with infants 	 Arrange opportunities for children to be near others, with adult supervision Create activities that take two to accomplish Read books about children playing together Call attention to others' actions and feelings, "Wow, look how Janine washed her hands!" Provide duplicates of toys 	 Provide activities for children to play in groups of two Provide guidance and model how to play with friend Read stories about friends playing and getting along together Create scripted stories with children as the main characters successfully solving age appropriate problems with age appropriate solutions Develop and reinforce turn-taking opportunities and actions

SED3b: Relationships with Peers: Children will develop ways to interact and build relationships with peers.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
CATORS	3bYP-1 Form relationships with a few children	3bOP-1 Sustain relationships with other children for an extended period of time
DEVELOPMENTAL INDICATORS	3bYP-2 Use comforting words or actions to respond to another child's distress	3bOP-2 Take the perspective of another child and respond in a manner that is supportive
	3bYP-3 Demonstrate strategies for entry into social play with peers	3bOP-3 Play with peers in a coordinated manner including assigning roles, materials and actions
	3bYP-4 Show beginning prosocial behavior when interacting with other children (cooperating, turn-taking, sharing)	3bOP-4 Engage in prosocial behavior during play (cooperating, turn-taking, sharing)
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Talk to another child who is playing in the block corner alongside Comment on what the child is doing Give a hug to a child who is crying Talk with other children during snack or mealtime. Laugh with another child as they pedal tricycles around the riding track Tell a child, "Come sit near me." Respond appropriately when asked to share a toy with another Work together, with adult support, to complete an activity 	 Ride bikes together or play act a scenario in dramatic play Understand the difference between helpful and hurtful ways to get something or meet a need Ask to join agroup Tell a friend, "You be the doctor and I'll be the patient" or "I will put on the red cubes and then you can put on the blue ones." Talk with a peer to decide who will get the first turn, with educator support and practice Wait for a peer to finish speaking before talking during conversations
SAMPLING OF PROFESSIONALS' PRACTICES	 Join children's block or dramatic play and model how to work together to complete a task Talk about ways that friends can play together Ask questions such as, "How could you work together to get that done?" Read stories about friends Use puppets to model ways for children to play together Support children's play entry skills, "Sarah and Jose are building a tower? Let's ask if you could join them." 	 Schedule large blocks of time where children interact with each during play, assuring adult supervision and guidance Create and encourage cooperative play experiences where small groups work together to complete a task Encourage children to offer feedback to others about their accomplishments Read stories and ask children to reflect on how the characters might be feeling and how they might respond differently Ask questions such as, "What could you do to be helpful instead of hurtful?"



Adaptations and Accommodations for Children with Unique Needs

Environment

- Have visual supports of expected behaviors and boundaries throughout the classroom.
- Have a calm down/safe place for problem behaviors and strategies to use while they are calming down.
- Always acknowledge children's feelings and have them identify their own feelings.
- Label objects in multiple languages that reflect those of children.
- Keep the environment orderly and tidy to help children feel secure and to

Daily Schedule and Routines

- Have a consistent and daily routine and have it posted in a central location for everyone to see.
- Use timers/songs to help with transitions.
- Routinely (morning meeting) review the class expectations/rules; use interactive picture schedules.
- Give warnings ahead of transitions, using timers or sounds.
- Alternate between active and calming activities to keep children engaged and to meet their need for movement.

Materials

- Have calm down activities such as calming bottles, sensory tubs, pinwheels.
- Post or use pictures of various emotions to help children express their emotions.
- Provide books in various centers with various types of children, families, and emotions.
- Read or play videos of social stories that illustrate appropriate behavior and interaction.
- Display pictures of feelings, labeled in children's native languages.

Instruction and Activities

- Have students identify feelings each day during daily questions, signing in, or morning message.
- Role play green and red choices and how to manage different types of feelings.
- Role play problem solving situations and how to handle them.
- Teach expectations and appropriate behaviors.
- Differentiate activities to accommodate children's differences in abilities and uneven growth across domains of learning.



Adults who offer choices to young children support their early decision-making and their feelings of independence and control. Choices also enable early childhood professionals to turn potentially negative outcomes into positive ones. An adult who asks a toddler, "Would you like the square cracker or the round cracker?" assures the child is getting a healthy snack (instead of the cookie she was reaching for), while giving her a feeling of decision-making power. The adults who asks children, "Which would you like to do...ride bikes or take a walk?" encourages a reluctant group to get their needed outdoor exercise. How can you turn your directives into more-appealing choices for children?

A Sampling of Foundational Practices

Environment and Materials

- Display materials and toys in ways that children can access and selfselect.
- Include dolls, clothing, books and other materials that represent the children's community or culture.
- Create safe spaces for children who need quiet or alone time.
- Include emotion pictures or cards in multiple areas of the classroom.
- Create a predictable environment using visual or auditory cues for each transition.

Instruction

- Provide specific verbal praise that describes accomplishments or effort.
- Respond with positive intent, curiosity, and empathy to children's comments and/or questions.
- Allow time during the day for children to self-select activities and play.
- Maintain consistent schedule the majority of time devoted to childinitiated play.
- Provide advance notice and emotional support when daily schedules change.

Children's Books

- Baby Faces by Margaret Miller
- The Grouchy Ladybug by Eric Carle
- The Pout Pout Fish by Deborah Diesen
- If You're Happy and You Know it! by David Carter
- Knuffle Bunny by MoWillems
- Bear Feels Sick by Karma Wilson and Jane Chapman
- Don't Let the Pigeon Stay Up Late! by Mo Willems
- ABC I like Me by Nancy Carlson
- Amazing Grace by Mary Hoffman
- · Arthur's Nose, by Marc Brown
- · Hands are Not for Hitting by Martine Agassi
- · Quiet and Loud by Leslie Patricelli
- · Baby Dance by Ann Taylor
- Because I Love You So Much by Guido van Genechten
- Counting Kisses by Karen Katz
- Owl Babies by Martin Waddell
- · Peace is an Offering by Annette LeBox
- The Way I Feel by Janan Cain
- · Jabari Jumps by Gaia Cornwall
- · Tomorrow, I'll Be Brave by Jessica Hische
- · I Can Do Hard Thing by Gabi Garcia
- Llama, Llama Misses Mama by Anna Dewdney

Adult Resources

- Harvard's Center on Developing Child: Resource Library https://developingchild.harvard.edu/resources/
- Collaborative for Academic, Social, and Emotional Learning: https://casel.org
- Vanderbilt's Center on the Social and Emotional Foundations for Learning: http://csefel.vanderbilt.edu
- Conscious Discipline https://consciousdiscipline.com
- NAEYC: Promoting Social Emotional Learning https://www.naeyc.org/resources/pubs/yc / mar2018/promoting-social-andemotional-health

Family Engagement

- Invite family members to share customs and traditions.
- Find out about children's likes, interests, and routines before they enter the program.
- · Post family pictures.
- Display children's accomplishments on a family board.



SOCIAL STUDIES (SST)

Learning about Myself, My Family, and My Community



Social studies learning helps young children embrace diversity in all areas of their lives: in their family, in their community, and with other children and adults. Often children's first group experiences outside the home are in the early childhood setting that introduces them to life within a community. When they work and play as part of an early learning community, they begin to understand that others contribute different perspectives, attitudes, and cultures. The appreciation of others, and the way in which they, themselves, belong help children become successful in school and in life.

Social studies learning provides young children with opportunities to develop an understanding of roles and rules within their families, communities, and the world around them. As children learn to interact with others. follow rules and routines, and discover the importance of the past, they develop an awareness of social systems and social concepts. Social systems include discovering concepts of belonging, following rules and routines and learning about the community. Social studies concepts help children develop an understanding of basic concepts of money and exchange, the relationship of the past with their current world and the physical features of their community.

Did you know?

We all have a culture.

Culture refers to the values, customs and ideas we carry with us as we engage with others and our world. Young children bring with them their diverse cultures, offering early childhood professionals an opportunity to honor and draw upon those differences to help children develop an appreciation of their own uniqueness and that of others. Culturally responsive practices promote environments where children can see and experience their own and others' cultures in materials and activities, where they learn about ways they are alike and different, and where they see adults who model empathy, compassion and respect.

SST 1 Social Systems

SST1a: Family Structure SST1b: Community

Belonging SST1c: Diversity

and Culture

SST 2

Social Studies Concepts

SST2a: Economics SST2b: Geography SST2c: History

SST1a: Family Structure: Children will develop a sense of belonging to a family group, articulate family members' roles, and identify how families are alike and different.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
DEVELOPMENTAL INDICATORS	1al-1 Respond to immediate family/adults	1aYT-1 Recognize immediate family members	1aOT-1 Identify immediate family members
	1al-2 Show affection for familiar adults and children	1aYT-2 Seek out family members to have needs met	1aOT-2 Imitate role of family member
			1aOT-3 Recognize known versus unknown adults in child's life
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Reach for and smile at a familiar adult orpeer Nestle into a familiar adults' lap or shoulder when being held 	 Respond to familiar family members and other adults Recognize family members in photos Walk to family member to show a toy Reach for a familiar adult to be held after falling Seek out familiar adult for a snack 	 Point to and identify family members, "That's my Mom" or "There's Grandpa." Pretend to be the mommy or daddy in the dramatic play area Hold a doll or stuffed animal, pretending it's a baby Show caution with strangers; indicate preferences for familiar adults Know first and last name
SAMPLING OF PROFESSIONALS' PRACTICES	 Direct child's attention to and name familiar people Create a photo album with family members and "read" to baby Hold baby frequently and show affection Read books that depict family members 	 Display photos, books, and other materials that reflect family relationships Call adults by name even when they're not present Make simple dress-ups and housekeeping types of materials available in the home living area Respond to children's needs in a timely manner 	 Name family members and talk about what they do, "Your Daddy picks you up on Thursdays after he's finished working." Provide home materials in the dramatic play area, such as food, pots and pans, dolls, a crib, and dress upclothes Model appropriate role play and use of materials Provide books and read stories about families Display families' photos

SST1a: Family Structure: Children will develop a sense of belonging to a family group, articulate family members' roles, and identify how families are alike and different.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DEVELOPMENTAL INDICATORS	1aYP-1 Name immediate family members	1aOP-1 Name extended family members (aunts, grandparents, etc.)
	1aYP-2 Describe actions or roles of specific family member	1aOP-2 Talk about relationships with other family members
DEVELOPA	1aYP-3 Identify personal relationships with significant adults	1aOP-3 Discuss how families differ and how they are the same
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Participate in dramatic play that imitates family relationships; "You be the Mommy and I'll be the baby." Name the relationship of family members, "That's my sister." Describe what a family member does, "My Mom goes to work at the store." My brother cries a lot." Draw a family portrait 	 Tell an adult about something that happened at home the night before Talk about the family members while looking at pictures, "That's my Aunt; she lives far away." Relate family events, "It was Grandpa's birthday yesterday and we made him a big cake." Compare who's in each other's families, "You have a big sister like me, but I have a baby and you don't." Draw a picture of family members to include in an "All About Me"book
SAMPLING OF PROFESSIONALS' PRACTICES	 Show pictures representing different family members and their roles Discuss children's family members during snack time, "What does your Dad like to eat for snack?" or during a transition, "Did your Mom help you get dressed today?" Invite family members to volunteer or visit to learn about the children's routines and schedule Talk with family members to understand their athome routines Provide books and stories about families 	 Talk with children about the different members of their families Graph or chart children's families, noting similarities and differences, such as the number of children with brothers; the number with babies, etc. Talk about older and younger siblings Create a book where every child contributes a page about their family Invite families to make a family tree using photos or drawnpictures Read books about families and their roles

SST1b: Community Belonging: Children will build a sense of belonging to a group and follow its rules.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
CATORS	1bl-1 Seek comfort from familiar adult	1bYT-1 Separate from caregiver in familiar settings	1bOT-1 Identify self as part of a group
ENTAL INDIC	1bl-2 Show anticipation of daily events	1bYT-2 Participate in simple routines with adult support	1bOT-2 Participate in an adult led routine with adult support
DEVELOPMENTAL INDICATORS		1bYT-3 Look to adult for assistance	1bOT-3 Follow simple rules, with adult reminders
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Reach for a familiar adult Calm when a familiar adult offers comfort Reach for bottle or food Begin to cooperate during diaper change, clothing change, and bath time 	 Separate from family without distress Attempt to help dress and feed self Respond to "no" Respond to change in adult tone of voice or visual cues 	 Tell how they are part of a group, "We are in Miss Lena's class." Clean up toys with adult prompts Take turns with adult prompts Accept redirection from an adult
SAMPLING OF PROFESSIONALS' PRACTICES	Promptly respond to cries and reaching Establish consistent routines for diaper change, clothing change, feeding, etc.	 Help child wave goodbye to family member Encourage child to assist in dressing, feeding, etc. Give simple directions that child can easily follow Talk about simple routines as they occur 	 Give your class or group a name and use it during the day, "OK, tadpoles, it's almost time for lunch." Give simple one-step directions Establish simple rules using basic and positive wording, "Walk." "Wash hands after you go to the potty," Keep the same schedule every day, using the same routines Pair rules and routines with rhymes, songs, etc. Establish and provide a visual schedule and follow it regularly

SST1b: Community Belonging: Children will build a sense of belonging to a group and follow its rules.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DEVELOPMENTAL INDICATORS	1bYP-1 Identify a group they belong to	1bOP-1 Differentiate groups they belong to
	1bYP-2 Comply with schedules and routines throughout throughout their environment	1bOP-2 Follow routines and schedules
	1bYP-3 Understand that rules may be different in different places or situations	1bOP-3 Understand natural and logical consequences for not following rules
DE	1bYP-4 Display interest in helping others	1bOP-4 Seek out opportunities for leadership
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Explain, "I'm in Mr. Bill's group." or "Miss Jo is my coach." Repeat parts of the daily schedule in sequence, "We have snack first, then we go outside to play." Transition from one activity to another with minimal adult support Comply with simple rules when reminded, "Walk" or "Use your inside voice." Tell another child, "I can help you carry that." 	 Describe and compare their class, team, group, etc. to others Tell a friend, "We need to line up now." Explain "It's too loud; we need to use our inside voices." Follow the routine of hanging up jackets after coming in from outside Help set the table for snack or feed the fish
SAMPLING OF PROFESSIONALS' PRACTICES	 Talk about activities and experiences the children do as a group Establish and provide a visual schedule and follow it regularly Give warnings before moving from one activity to another Use the same steps for routines every day, "First we turn on the water, then we use soap, next we rub for 20 seconds" Establish job/chore responsibilities such as a helper chart 	 Assign the class or group a name and then use it during transitions. "OK, Blue room, let's line-up to go outside." Discuss significance of rules, schedules, and routines Describe anticipated changes in the schedule or routines, "Tomorrow we are going to have a special visitor." Use natural or logical consequences as often as possible, "If it takes too long to put on our coats, we'll have a shorter amount of time to play outside." or "If you don't wear your mittens, your hands will get cold." Repeat and prompt multi-step directions Provide a visual schedule and follow it regularly

SST1c: Diversity and Culture: Children will show understanding of how people and customs are alike and different.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
DICATORS	1cl-1 Show enjoyment when adult names or plays games like "peekaboo" or "This Little Piggy"	1cYT-1 Gaze at self in the mirror	1cOT-1 Identify own traits and characteristics
DEVELOPMENTAL INDICATORS	1cl-2 Show interest in others' differences in appearance	1cYT-2 Show curiosity and explore characteristics of others	1cOT-2 Recognize the way self is the same or different than others
DEVELO	1cl-3 Explore culturally diverse music and books, with adult support	1cYT-3 Participate in music, literature, etc. surrounding holiday, cultural and/or birthday celebrations	1cOT-3 Recognize that people celebrate different events or have different customs
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Smile or laugh at adult who plays "This Little Piggy" or other games that name or play with body parts Show curiosity and reach for an adult's glasses or curly hair Calm or show enjoyment while listening to culturally diverse music Smile or look interestedly at books with culturally diverse people 	 Point to body parts on self, others, and dolls Reach out to touch another's hair or face Sway or show delight in different styles and types of music While looking at books, respond to "Where's the baby's nose?" then, "Where's your nose?" 	 Name or touch body parts when asked Tell adult that a friend has the same color hair Ask questions about another friend or adult, "Where's Eva?" Participate in rhymes, chants, songs, dances from different cultures Listen and attend to pictures and books from various cultures
SAMPLING OF PROFESSIONALS' PRACTICES	 Talk about body characteristics during diapering or dressing Play peekaboo or gentle games that identify body parts such as "This Little Piggy" Play culturally diverse music Read books that show with children from different cultures 	 Hold child to mirror and point out body parts Sing and relate finger plays and rhymes from different cultures Play culturally diverse lullabies or quiet music during nap time Post pictures of different children and families Include dolls of differing cultures and abilities in the dramatic play area 	 Talk about children's physical characteristics as they look in mirrors and then draw themselves Include dress-up clothes, diverse doll babies and props from different cultures in the dramatic play area Introduce musical instruments from different cultures and play different types of music Ask children how theyrecognize special events at their house Label objects, count or use simple words that reflect the cultures of the children in the group

SST1c: Diversity and Culture: Children will show understanding of how people and customs are alike and different.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DEVELOPMENTAL INDICATORS	1cYP-1 Describe own traits and characteristics	1cOP-1 Compare traits and characteristics of self with others
	1cYP-2 Identify differences and similarities in physical characteristics of self and others	1cOP-2 Discuss differences and similarities between themselves and others
DEVELO	1cYP-3 Identify traditions of family and other cultures	1cOP-3 Show appreciation of own culture or customs
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Draw and describe picture of self Enjoy singing happy birthday or hearing how another child celebrates birthdays Tell another child, "We do that at our house too." Ask questions about others' appearance or behavior Notice how friends look the same or different than them 	 Note, "I have really long hair, but Stella's hair is short. She just got it cut." or "Danny and I can run really fast. We both have long legs." Place themselves in a group or category by attribute, with adult support, "I am going to stand with the boys." Talk about a recently-attended celebration, "We knocked down the piñata with a great big stick!" Tell an adult, "We always have a picnic after church." Tell another child, "My dad takes me to the park after school sometimes."
SAMPLING OF PROFESSIONALS' PRACTICES	 Ask children to draw self-portraits throughout the year, noticing more complex drawings as the year progresses Play games and routines that highlight similarities "Everyone wearing a red shirt line up." Include diverse foods during snack Read books that describe ways in which children celebrate different events Invite family members to visit and describe special cultural events 	 Create books that depict all the children doing something similar, "We Like to Play Outdoors" showing each child doing something different outside Use graphing activities to notice children's physical characteristics' similarities and differences; graph children's hair or eye color or number of children with long or short hair or number of children wearing shoes, sneakers or boots Include different skin color paints and paper, and mirrors, for art activities Add props in the dramatic play area that represent different cultures or cultural celebrations Play music from different cultures, calling attention to similarities and differences, "Both of those songs are very fast." "This song uses quiet tones; this one uses loud tones."

SST2a: Economics: Children will understand about supply and demand, why people work, money, and community helpers.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
ICATORS	2al-1 Depend on others to meet needs and wants	2aYT-1 Express wants and needs with simple phrases or gestures	2aOT-1 Request specific strategies to alleviate needs and wants
DEVELOPMENTAL INDICATORS	2al-2 Explore costumes and props that represent community helpers	2aYT-2 Engage with costumes and props that represent community helpers	2aOT-2 Recognize community helpers through uniforms and equipment
DEVELOPI			2aOT-3 Show understanding of community helper's roles
			2aOT-4 Show an emerging understanding of the purpose of money
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Vocalize or gesture needs or wants Reach for familiar adult for comfort Gaze at brightly colored uniforms or different textured fabrics 	 Use phrases like "all gone" or "more" Make a choice when offered two options Put on a firefighter's hat Use a stethoscope on a stuffed animal 	 Say "I need more milk." Or "I'm wet." Tell an adult, "I want to play with the trains." Select a book to read when offered a fewoptions Put on a helmet during dramatic play and tell a friend, "Firefighters and construction workers both wear helmets." Use props related to occupations during play Use pretend money during dramatic play
SAMPLING OF PROFESSIONALS' PRACTICES	 Respond promptly to children's expressed needs Describe the way in which you are meeting children's needs, "I'm going to change your wet diaper now." 	 Empower children's decisions by giving either/or choices Make available simple dressups and props Describe and ask questions about children's actions when they dress up. "You put on the fire fighter's helmet, are you going to put out the fire?" 	 Provide opportunities forchildren to make their own choices, "Which color are you going to paint with, red or blue?" Include prop and costumes for children to act out community helper roles Read books about community helpers Invite community helpers to visit and describe theirwork

SST2a: Economics: Children will understand about supply and demand, why people work, money, and community helpers.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DEVELOPMENTAL INDICATORS	2aYP-1 Begin to recognize the difference between wants and needs	2aOP-1 Realize that people depend on others to have needs met
	2aYP-2 Identify various community helpers through their uniforms and equipment	2aOP-2 Describe roles of various community helpers and workers
DEVELOPA	2aYP-3 Express understanding of occupations through dramatic play	2aOP-3 Describe occupations' roles and purposes
	2aYP-4 Demonstrate awareness of the purpose of jobs, money and its exchange	2aOP-4 Understand the purpose of saving for tomorrow
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Ask for help to tie shoes or to open a juice box State what he/she wants to be when grown up, even though it may change from day to day Play store or other pretend activities where money is exchanged for a service Describe the jobs family adults hold, "My Grandma works at the grocery store." Get excited when receives a coin for the piggy bank Tell a friend, "My Mom is going to buy me new shoes when she gets enough money." 	 Describe the way police officers can help Talk about how the dentist checks to make sure their teeth are clean and healthy Talk about the way money in the piggy bank can be used to purchase something special Recognize and name coins Create elaborate play scenarios about community helpers that involve real or make believe props and costumes Describe the different jobs that familiar adults hold, "My Dad is a plumber and he fixes people's leaks."
SAMPLING OF PROFESSIONALS' PRACTICES	 Ask, "Where are you going to play today?" Add community helper costumes to the dramatic play area Read a book about community helpers, then put out related props Ask children, "How much do you think that costs?" Ask family members to visit and talk about their jobs Invite community business people to read to the children Acknowledge, "You really want that toy, but we need to wait for another day." 	 Talk about the ways in which police officers, fire fighters, doctors, etc. keep us healthy and safe Add additional props to the dramatic play area to extend children's play Join in children's play, asking questions to extend their play Ask children to help count out the money needed to make a purchase Take a field trip to a local business Invite community business people to talk about their jobs

SST2b: Geography: Children will identify basic concepts of location and features in the community.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
DEVELOPMENTAL INDICATORS	2bl-1 Explore surroundings and materials in the environment	2bYT-1 Locate familiar objects when given basic directions	2bOT-1 Follow requests or instructions that involve direction words or prepositions
MENTAL I		2bYT-2 Recognize familiar locations	2bOT-2 Point out familiar places in the neighborhood
DEVELOPI			2bOT-3 Use different materials that represent geographical features
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Stare at objects within sight Crawl or scoot to explore objects of interest Move objects from hand to hand or with legs and feet to learn more 	 Find a toy hidden under a blanket when adult says, "Where is the doll?" Climb onto a chair or off after adult says, "climb up" or "get down" Show anticipation when approaching home's driveway or school's parking lot 	 Play at the sand and water table Tell an adult, "I see the grocery store." Say, "That's where I go to school." Point out, "There's the river." Follow directions to find and retrieve a ball "under the chair" or "on top of the table" Participate in a simple obstacle course to go over, under or around
SAMPLING OF PROFESSIONALS' PRACTICES	 Provide space and time for infants to move around Rotate objects for children to manipulate and explore Encourage infants to reach or crawl to an newlocation Talk about locations or surroundings, "That chair is really high." 	 Describe features in the immediate environment Play simple hide and seek games Talk about buildings and landmarks while walking or driving, "There's the red doors; that's your school." Play games where children move their bodies up, down, around, etc. 	 Provide sand and water play opportunities Provide pictures of various types of land and water Discuss the various types of land and water and how they are different Read books about land and water Point out and name landmarks during walks or outings, "Look at the people boating in the river." Create an environmental print alphabet or book Give directions to help a child locate a particular object

SST2b: Geography: Children will identify basic concepts of location and features in the community.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DEVELOPMENTAL INDICATORS	2bYP-1 Talk about the location of objects, such as near and far	2bOP-1 Use directional terms such as turn left, straight ahead
	2bYP-2 Identify landmarks or places through their logos and signs	2bOP-1 Name own street, town and/or neighborhood
DEVELOP	2bYP-3 Draw pictures of geographical features in the neighborhood	2bOP-1 Create representations of different landforms and landmarks during play
	2bYP-4 Show interest in geographic tools, such as globes, GPS, or maps	2bOP-1 Use geographic tools to identify landmarks in a specific location
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Identify familiar restaurants, stores, child care, churches and popular icons based on their logos Ask to stop at a certain location by name after seeing a known logo Tell another that grandma lives really far away Announce, "I threw that ball really far." Include trees, flowers or a lake in a drawing of the neighborhood Use a map during play to find the way home Pretend to punch in the coordinates of an address on the GPS 	 Ask an adult, "Is this the left foot?" while putting on shoes Respond when asked, "Should we turn left or right?" Recite address when asked Use sand to make mountains or water to make rivers or a waterfall Build a tunnel with blocks Use a simple map to go on a treasure hunt Participate in songs/activities that involve different landforms Turn the globe to look for a far-off (or pretend) place during play
SAMPLING OF PROFESSIONALS' PRACTICES	 Read and discuss books about the local environment Visit and discuss prominent features in the local environment Make a picture book of locations frequently visited and share with the child Name/point out locations often visited or that are included on a child's daily route Discuss significance and roles of maps, globes, GPS Provide maps, globes, and digital GPS to explore independently or with adult support Provide materials to create simple maps Include travel guides and books, treasure maps and map reading in dramatic play and block area 	 Read and discuss books about the local environment Share videos that show the prominent features of different environments Visit and discuss prominent features in the local environment Make a picture book of locations frequently visited and share with the child Point out locations often visited or that are included on a child's daily route Provide maps, globes, and digital GPS to explore independently or with adult support Provide materials to create simple maps Research information about a particular place or location on the internet

SST2c: History: Children will demonstrate an understanding of events and people from the past and present.

	By 9-12 months, most	By 18-24 months, most	By 36 months (3 years), most
	INFANTS will	YOUNG TODDLERS will	OLDER TODDLERS will
ATORS	2cl-1 Show anticipation for routine activities	2cYT-1 Show anticipation for scheduled activities	2cOT-1 Describe what happens next in a routine
DEVELOPMENTAL INDICATORS	2cl-2 Demonstrate beginning understanding of object permanence	2cYT-2 Respond to familiar sequences and routines	2cOT-2 Begin to connect past and present experiences
VELOPME		2cYT-3 Recognize the end of an activity	2cOT-3 Recognize the beginning and end of an activity
DE			2cOT-4 Imitate a sequence for a routine during play
			2cOT-5 Show understanding of words that describe time
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Show excitement at the sign of a bottle orcup Look for toy under a blanket Enjoy playing peekaboo 	 Lift arm or leg to helpduring dressing Show understanding of what comes next in the daily routine, such as put head down to sleep after book reading Clap at the end of a song or finger play Say, "All gone." 	 Describe what happens before bed, "First I get my bath, then I brush my teeth, then get into my pajamas." Put play food in pan, cook, then serve Say, "I used to do that tomorrow." Clap at the end of a song Tell an adult, "I used to cry at the doctor when I was a baby but now I'm big and I don't cry."
SAMPLING OF PROFESSIONALS' PRACTICES	 Play peekaboo and other disappearing types of games Describe diaper changing or dressing while you're doing it. Call attention to missing items, "Here's your blanket; it was hard to find." 	 Talk about what happens before and after an activity Say, "That's the end of the story." when you are finished reading a book Use language that describes time, such as now, later, tomorrow Describe what's coming next, "It's about time to eat." 	 Describe and label events or things you've done in the present, past and future Tell stories that begin with "A long, long time ago" or "Next week we will" Compare current pictures of children with ones from when they were babies Ask the children to tell you what they did at home last night

SST2c: History: Children will demonstrate an understanding of events and people from the past and present.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DEVELOPMENTAL INDICATORS	2cYP-1 Describe the steps of a routine	2cOP-1 Use the posted schedule to describe the day's activities
	2cYP-1 Recognize how past events relate to their circumstances	2cOP-2 Distinguish between events that happened in the past, present or future
/ELOPME	2cYP-1 Talk about past experiences/events	2cOP-3 Talk about an event that happened or will happen
DE/	2cYP-1 Recall parts of a story or what happened during the day	2cOP-4 Discuss past experiences or events in the correct sequence
	2cYP-1 Use words that indicate time, but they may be inaccurate	2cOP-5 Use time vocabulary with some accuracy
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Tell a friend, "First, we get the paper, then we can color." Ask, "Will we have a snack after we clean up?" Describe a part of a favorite story Use the phrase, "When I was a baby" that indicates understanding of the past Tell Mom during pick-up, "We played with playdough today." 	 Say, "When I have my birthday I will be five." Tell an adult, "I played at Grandma's yesterday." Remind a friend that outside time comes after rest Retell a story in the correct sequence Describe events that happened in the family, "Dad got sick and had to go to the doctor but he's better now."
SAMPLING OF PROFESSIONALS' PRACTICES	 Provide opportunities for children to talk about or draw a memory Ask children to draw pictures of what they looked like when they were a baby and what they might look like when they're grown up Pause during reading a familiar story and ask, "What happens next?" Act out the sequence of a story Use time-related vocabulary to describe routines and the schedule, "We have circle time at 10:00" or "We go to soccer shots on Wednesday afternoon." 	 Ask children to predict what might happen if Examine change over time; look at pictures that show the sequence of a caterpillar turning into a butterfly or a seed sprouting Use a countdown calendar to prepare for an upcoming event Remind children of what comes next in the daily schedule. "We just had snack so now it's time to read a story." Or ask, "We just had snack; what comes next?" Recall events in stories, "Let's talk about the book wereadyesterday. Remember when"



Adaptations and Accommodations for Children with Unique Needs

Environment

- Include dolls, books and puppets that show people with differing abilities and different cultures.
- Display family photos and make a family tree.
- Provide a quiet space for children who need a break.
- Use visual reminders for boundaries (tape on the floor, stop signs, etc.).
- Label objects in multiple languages that reflect those of the children.

Daily Schedule and Routines

- Use a picture schedule to help children anticipate the order of the day.
- Modify the length of activities to reflect individual children's attention spans.
- Incorporate activities that reflect different cultures.
- Walk through or explain the sequence of events before an activity or outing.
- Embed music from different cultures throughout the day for a calming effect.
- Establish consistent and dependable rules and routines.

Materials

- Include real objects and artifacts like pots and pans or costumes in the dramatic play area.
- Use stories that have been designed specifically for the child and describe familiar people or customs.
- Post pictures of children completing steps for familiar routines.
- Use real pictures to reinforce discussion topics.
- Utilize video examples of community helpers, celebrations, etc. to illustrate concepts.
- Make family photo albums with real pictures to practice naming family members.

Instruction and Activities

- Teach children the routines they will be expected to follow.
- · Give directions one small step at a time.
- Use visual supports or scripted stories to help explain and describe concepts such as community workers or purchasing.
- Use picture schedules to show classroom jobs.
- Learn some key words for children's routines and basic activities in their native language.
- Invite family volunteers to share cultural customs.



A cultural enrichment approach uses families' home cultures as their foundation. When young children see themselves and their family reflected in the language, books, dress-ups, food, and customs of their early learning program, their self-concepts and personal identities are enhanced. They are more likely to feel understood and to interact positively with others. Look beyond your materials and environment and determine ways in which you can learn more about families' culture that can be incorporated into your early learning program.

A Sampling of Foundational Practices

Environment and Materials

- Display real photos of the children and their family members.
- Include toys and objects that reflect different cultures, such as musical instruments, books and dress-ups.
- Include and use mirrors for children to view themselves and others, noticing similarities and differences.
- Add community helper costumes, puppets, books, photos.
- Include real pictures of different land types or parts of the world.
- Add globes and maps to different learning areas.
- Provide pretend money or ways to act out purchasing and money exchange.

Instruction

- Help children learn their full names, address and phone number.
- Include celebrations from different parts of theworld.
- Take children on neighborhood walks, discussing the scenery and its changes from day to day and week to week.
- Include recycling and conservation in your daily routines.
- Read books, and include them in your library, that depict different types of families and cultures.
- Create a few positively-worded rules for children tofollow.
- Use a calendar with children to talk about and record experiences and upcoming events, NOT for rote learning of days and months.

Children's Books

- · The Colors of Us by Karen Katz
- Families by Ann Morris
- A Rainbow All Around Me by Sandra Pinkney
- All Are Welcome by Alexandra Penfold
- The Big Umbrella by Amy June Bates
- Whoever You Are by MemFox
- Big Mama's by Donald Crews
- Tractor Mac Teamwork by Billy Steers
- City Green by DyAnne DiSalvo-Ryan
- · Where Do I Live? by Neil Chesanow
- Whoever You Are by MemFox
- A Handful of Buttons by Carmen Parets Luque
- · Follow that Map by Scot Ritchie
- More, More, More Said the Baby by Vera Wiliams
- · Growing Vegetable Soup by Lois Ehlert
- · Farmer Duck by Martin Waddell
- A Chair for My Mother by Vera Williams
- Ox Cart Man by David Hall and Barbara Cooney
- If You Give a Mouse a Cookie by Laura Numeroff
- Two Homes by Clari Masurel
- What Grandmas/Grandpas Do Best by Laura Numeroff Joffe

Adult Resources

- Social Studies in Preschool? Yes! By Ann S. Epstein, Young Children, March 2014.
- Social Studies in Today's Early Childhood Curriculum. 2005. NAEYC. Beyond the Journal. September 2005
- NAEYC (2009). Where We Stand: On responding to cultural and linguistic diversity
- Scholastic: Teaching Diversity: A Place to Begin
- Infant Toddler Social Studies: Activities to Develop a Sense of Self by Carla Goble
- Creating Diversity-Rich Environments for Young Children by Angèle Sancho Passe

Family Engagement

- Invite family or community members to talk about their jobs.
- Invite family members to share their customs or traditions.
- Send home brief lists of books, songs and finger plays that have been shared.
- Encourage children to draw pictures of their family while at home and bring them to school for display.



SECTION

Exploration and Critical Thinking: Developing STEM Skills



Approaches to Play and L	Learning8
--------------------------	-----------



Science	Exploration	n and Knowl	ledge	99
---------	--------------------	-------------	-------	----



Ī	Mat	hema	tical	Thinki	ng	 	12	23	
					9				г



APPROACHES TO PLAY AND LEARNING (APL)

Developing Skills and Attitudes for Success



Children approach play and learning in different ways. Some children dive right in while others may be a little slower and more deliberate. But all children benefit from opportunities to discover new ideas and information through play and active exploration. Their growing curiosity, creativity and enthusiasm for learning work in tandem with their developing-engagement through persistence, attentiveness and problem solving to acquire knowledge and accomplish goals and tasks. These emerging skills or dispositions focus on how children learn and are known as approaches to learning. They help children become successful in school and in life.

Play motivates and encourages children to become and stay engaged in learning. Developmental theorists and practitioners alike all agree that play is the foundational method for children to build those approaches to learning (or executive function) and make connections. When professionals offer a variety of experiences, facilitate a sense of "wonderment" and curiosity, and encourage actions and interactions with objects and individuals, children are activating their executive function that leads to more thoughtful reflections, more self-reliance, and increasing independence.

APL 1 Play

APL1a: Imaginative Play APL1b: Collaborative Play

APL 2 Constructing and Gathering Knowledge

APL2a: Persistence, Engagement, and Attention APL2b: Task Analysis

APL2c: Reasoning and Problem Solving

APL 3 Wonderment and Curiosity

APL3a: Curiosity, Invention, and Initiative

APL3b: Risk-Taking and Flexibility

Did you know?

Children's temperament or personality can influence the way in which they learn and behave.

Traits such as activity level, mood, adaptability, intensity, sensitivity, and persistence join together to define children's temperament, Some children may be easy or flexible. Others may be active or feisty, and still others may be slow to warm, cautious or fearful.

Easy children are typically happy and calm with regular habits and can generally adapt to change quickly. Active children may be considered difficult. They have strong reactions to things and are often bothered by too much noise or stimulation. Children who are cautious approach the world with hesitation and may be reluctant to try newthings. They may be described as shy, needing time to become used to new things or people.

When professionals observe and interact with children to understand how they demonstrate these temperament traits, they can match learning experiences and expectations, often called "goodness of fit."



APL1a: Imaginative Play: Children will use their imaginations to learn about the world around them.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
ICATORS	1al-1 Use a familiar object for a different purpose or in a different way	1aYT-1 Use objects for a real or imagined purpose	1aOT-1 Use objects to represent something different
DEVELOPMENTAL INDICATORS	1al-2 Imitate observed actions	1aYT-2 Imitate or act out real life events	1aOT-2 Pretend to be somebody or something other than self
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Tap wooden spoon on floor to make sounds Pour water from cup during bath time Attempt to hide face with blanket for peekaboo Watch adult wave bye-bye and try the same action 	 Fill and dump blocks into a cardboard box Open mouth to say "aah" like at the doctor Pretend to brush doll's teeth Put a car on top of a rampto watch it go down 	 Hold and comfort a doll as if it were a baby Crawl around on the floor, barking like a dog Fly like an airplane with arms outstretched, saying vroom, vroom Wear a scarf as a cape and fly through the sky like a superhero
SAMPLING OF PROFESSIONALS' PRACTICES	 Have varied types of objects in the environment for children to manipulate Interact back and forth with child to encourage their response with familiar movements Model different actions and activities and wait for child to repeat them, such as peekaboo or hand clapping 	 Sing songs and finger plays that include actions Talk about the characters' actions in books Use puppets or stuffed animals to imitate actions or tell a story Help children pretend with invisible objects such as pretending to drink milk with your hand Pretend to rock a doll and say, "Baby is tired; night-night baby." 	 Stock the dramatic play area with dolls and stuffed animals and related props Ask questions or talk about children's play, "How is your baby feeling today?" or "That elephant looks really sad." Encourage children to move creatively during transitions, "Let's jump like bunnies tothe table." Interact with children in the dramatic play area as they take on different roles, "Are you the doctor or the nurse?" "Can you fix my hair? It's a mess!" Model pretend play in the block area, "This block is going to be my hammer."

Exploration and Critical Thinking: Developing STEM Skills | APPROACHES TO PLAY AND LEARNING (APL)

APL1a: Imaginative Play: Children will use their imaginations to learn about the world around them.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
IICATORS	1aYP-1 Engage in make-believe play that mimics reallife experiences	1aOP-1 Use props and create characters as part of pretend play
DEVELOPMENTAL INDICATORS	1aYP-2 Coordinate play with another, beginning to assign roles	1aOP-2 Engage in elaborate and sustained imaginative play
DEVELOPI	1aYP-3 Invent an imaginary friend	1aOP-3 Distinguish between real life and fantasy
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Pretend to cook a meal with pots and pans Tell a friend, "You be the mommy and I'll be the baby, and you put me to bed." Ask, "Can I take your order please?" when pretending to work at a fast food restaurant Talk about a pretend character as if it were a friend, "Shhhmy piggy is sleeping." Tell an adult, "My dog, Spot, and I are going to go on a walk now." 	 Tell you that monsters are not real Act out a scenario with a sick dog who needs to go to the vet, get a shot, and go home and rest Re-enact a favorite story, such as The Three Bears Work with a friend to build a house with people, pets and furniture Engage in pretend play that extends over time, such as creating an ice cream shop with customers and sales clerk, pretend ice cream and toppings, money, etc
SAMPLING OF PROFESSIONALS' PRACTICES	 Stock a family living area with costumes and props Encourage participation in dramatic play as an option during free play Ask children, "What would you do if" while reading a story Join children's play in the dramatic play area, responding to their directions and asking questions to extend their thinking, "What toppings do you have for my pizza? How much will it cost? Do you do takeout?" Rotate the materials in the dramatic play area using prop boxes that have the materials to help children act out real life experiences such as a veterinarian clinic, pet shop, fast food restaurant, doctor's office or grocery store 	 Involve children in the selection or creation of dramatic play scenarios. After reading a book about a pizza shop, ask them what they'd need to create a pizza shop, then have them help make the props Encourage children to continue the dramatic play scenario from one day to another, leaving the materials set up Retell a story asking children to act it out as they become familiar with it Talk about things that are real and make believe Read books about imaginary characters, asking children questions like, "Do you think cows really fly?"



APL1b: Collaborative Play: Children will learn to work and play together to achieve a common goal.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
DEVELOPMENTAL INDICATORS	1bl-1 Observe and seek to be near another baby or child	1bYT-1 Play near another child with different toys or activities	1bOT-1 Play alongside other children
MENTAL I	1bl-2 Engage in simple turn- taking	1bYT-2 Seek adult or peer audience during play	1bOT-2 Share toys or materials with adult support
DEVELOP	1bl-3 Engage in imitative play actions with adults	1bYT-3 Initiate imitative play games	play experience
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	Watch other children during meal time Crawl near another child and observe Remove blanket from face during peekaboo Imitate adult's sounds or facial gestures	 Play with a shape sorter while another child plays with stacking cups nearby Hold up a picture and say or gesture, "Look." Tell an adult to "Watch me" while riding a bike. Reach for an adult's hand to engage in play together Show interest in an action song and attempt to imitate hand motions 	 Build a block structure while another child is playing with cars Create play dough snakes and worms next to a child who is making play dough cookies Share a truck after adult helps identify a timeframe, "In two minutes it will be time to share the truck with Lindsay." Hand another child a block to use
SAMPLING OF PROFESSIONALS' PRACTICES	 Engage infant in shared, back and forth play, like peekaboo or "how big is baby?" Make eye contact when communicating with baby Listen to baby's sounds and repeat them back Model how to hold and rock doll as if it were a baby Place infant near other babies or children 	 Provide more than one of the same or similar toys in a play area Respond to children's gestures that request your involvement in their play Acknowledge children's accomplishments or play, "You are making that car go really fast." Read books about children playing together 	 Supply learning areas with more than one of the same toy Help children share, "Stevie would like to join us for play dough but there isn't any dough left. How can we give her some?" Join in children's play, encouraging children to interact to perform a play scenario or accomplish a shared project Ask a child, "Campbell needs another peg; can you find her one to use?"

Exploration and Critical Thinking: Developing STEM Skills | APPROACHES TO PLAY AND LEARNING (APL)

APL1b: Collaborative Play: Children will learn to work and play together to achieve a common goal.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DEVELOPMENTAL INDICATORS	1bYP-1 Interact with others to create play scenarios	1bOP-1 Develop and sustain complex play themes and roles in cooperation with peers
MENTAL II	1bYP-2 Begin to develop friendships, showing preferences for specific children	1bOP-2 Seek out specific children to engage in play experiences
DEVELOPI	1bYP-3 Communicate interest in others' ideas through verbal and nonverbal means	1bOP-3 Take another's perspective
	1bYP-4 Express knowledge of everyday lives and culture through play	1bOP-4 Articulate values and "rules" through play
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Engage with others to care for a sick child, assigning self as the mother, a child to be sick and another to be the doctor Tell a friend, "Let's be firefighters and put out that fire." Seek out a child asking, "Do you want to play at the water table with me?" Draw a picture of two children, "That's Jimmy and me playing on the swings." Ask another, "What are you building?" Walk up to the art easel to watch another paint 	 Work with other children to build a block city with houses, stores, roads, etc. After reading a story about pets, create a pet store in the dramatic play area using stuffed animals, boxes for cages and the doctor kit Ask, "Angie, do you want to do that puzzle with me again like we did yesterday?" Try a different way to finish a block tower based on a suggestion from another Remind others, "You need to take turns."
SAMPLING OF PROFESSIONALS' PRACTICES	 Join in children's dramatic play, extending their play through open-ended questions and connecting children's play Invite children to play alongside each other Offer opportunities for children to share their work/ play with others Ask for children's opinions or "How do you feel when you hear them say that?" Create play scenarios that reflect daily living experiences or culture 	 Allow children's creations to remain in the play area from day to day to encourage extended play Read books about a topic that may provide new ideas to expand play Ask a child who they are going to playwith Encourage children to help each other when initial play experiences aren't successful Involve children in the development of the rules



APL2a: Persistence, Engagement, and Attention: Children will develop the ability to focus their attention and concentrate to complete tasks.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
ICATORS	2al-1 Focus attention on people or objects nearby	2aYT-1 Focus attention on activities or people for a short period of time	2aOT-1 Focus on a task but may lose interest
DEVELOPMENTAL INDICATORS	2al-2 Deliberately try to make things happen	2aYT-2 Repeat tasks and activities over and over again to achieve a goal	2aOT-2 Repeat actions or events to gain mastery
DEVELOPI	2al-3 Attend to different sights, sounds or people in the environment	2aYT-3 Show interest in activities going on in the environment	2aOT-3 Attend to a selected activity in the environment
	2al-4 Repeat action multiple times for enjoyment	2aYT-4 Show delight after a completed activity or act	2aOT-4 Show delight in accomplishing a challenging task
		2aYT-5 Demonstrate desire to complete tasks by self	2aOT-5 Complete a task from start to finish with adult support
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Examine a toy Make eye contact with an adult Drop a spoon over and over to watch adult's response Push a button to make noise Work the parts of a pop-up toy 	 Fill and dump blocks in a bucket over andover Watch others atplay Say, "I do it" when adult tries to help Clap or smile after accomplishing a task Work at a simple puzzleuntil completed Allow children to use toys or materials in their own way, perhaps unconventionally 	 Concentrate on completing a painting Start to build with blocks, then walk away to play somewhere else Work on stringing beads into a necklace Ask to wear a finished bead necklace with pride Work at fitting puzzle piecesto complete a puzzle Clap and tell adult after finishing a difficult task, "Look, I put that puzzle together!"
SAMPLING OF PROFESSIONALS' PRACTICES	 Engage an infant in an action multiple times while child is attentive Describe what is happening as infant tries something new Describe objects or people that are in the environment Provide simple toys that require an action 	 Encourage children to stay engaged in tasks by asking questions or showing interestin theirwork Provide time in the daily schedule for children to complete a task, then try to do it again Leave the same materials in learning areas for more than one day for children to go back to multiple times Praise a child's attempts and accomplishments Give children time to complete a task independently 	 Break tasks into small steps to maintain children's interest Provide time for sustained work on a task Arrange areas in the room to minimize distractions Praise children's accomplishments using descriptive and specific words, "You worked hard to put that puzzletogether!" Talkaboutchildren'swork, "How did you do that?" or "That must have been hard to do." Add new materials or ideas to expand children'sthinking

Exploration and Critical Thinking: Developing STEM Skills | APPROACHES TO PLAY AND LEARNING (APL)

APL2a: Persistence, Engagement, and Attention: Children will develop the ability to focus their attention and concentrate to complete tasks.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
ICATORS	2aYP-1 Maintain focus on a project over a period of time with adult support	2aOP-1 Stay focused on activities and tasks until completion
DEVELOPMENTAL INDICATORS	2aYP-2 Try different ways to complete a task when something doesn't work	2aOP-2 Persist with task completion even after previous efforts have failed
DEVELOPM	2aYP-3 Stay engaged in an activity or task while other activities are occurring in the environment	2aOP-3 Stay engaged in an activity or task despite interruptions
	2aYP-4 Express satisfaction in a completed task	2aOP-4 Generalize the success to another task
	2aYP-5 Express goals and follow through with them.	2aOP-5 Set simple goals that extend over time, make plans and follow through
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Try a different way to stack blocks after a tower falls over Look for the missing piece in a puzzle State, "I worked hard on that picture." Tell an adult, I'm going to get dressed after I eat my breakfast." Finish reading a book while others move to play in a different area State, "I was really strong to lift that box." or "Look at the picture I made!" Tell an adult, "I'm going to write my brother a letter", then go to the writing area and complete a letter 	 Work on a puzzle until all pieces have been placed Tell a child, "I'll be right there, I'm almost finished." Rebuild a block tower after the initial attempt fell Try to cut around a shape again after first one was cut in half Keep painting at the easel even after a friend approaches to show a new object or toy Make a plan to create a train from cartons and be the conductor, driving to Disney World, and work on this project for several days
SAMPLING OF PROFESSIONALS' PRACTICES	 Play background music to minimize distractions Include sustained play time within the daily schedule Encourage children to continue working on a project from one day to the next (not requiring clean-up on specific creations) Ask questions that encourage children to finish a task, "What will you do next?" Ask probing questions about a child's work 	 Comment on children's attentiveness or persistence to a task Use strategies to help children pay attention, such as clapping hands or saying "Look at me." Create opportunities for children to develop a project that will last over time. Include research, input on design and finally, the creation. For example, with the children, research ways to create a garden; decide what flowers or vegetables to plant; prepare the soil and plant the seeds; water and weed; and observe growth over time



APL2b: Task Analysis: Children will identify the steps needed to achieve a goal.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
DICATORS	2bal-1 Demonstrate familiarity with routines, objects, and materials	2bYT-1 Observe another's actions and replicate	2bOT-1 Notice similarities and differences between tasks
DEVELOPMENTAL INDICATORS		2bYT-2 Anticipate the next step of a familiar routine or activity	2bOT-2 Describe the sequence of a familiar routine
DEVELOR		2bYT-3 Use a variety of ways to meet a goal	2bOT-3 Make choices to achieve a goal
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Show recognition of a specific toy or object Quiet when comforted with a familiar doll or stuffed animal Lift legs for diaper changing Reach for familiar adult or object 	 Watch others' actions and use simple phrases to describe Make a block tower after watching another child build with blocks Hold out hands to be dried after washing Imitate hand movements to a song or finger-play after watching adult or other children 	 Describe what we do first, next, last "First, I'm going to fill this cup with sand and then I'm going to dump it into thisbucket." Tell another child, "We go outside after we eat snack." Tell an adult, "Last time we had cheese crackers, now we're eating pretzels."
SAMPLING OF PROFESSIONALS' PRACTICES	 Offer objects that are familiar to calm or soothe Remind infant of past uses while playing or experiencing an activity "Remember, you tasted this yesterday." Provide toys that can be used in more than one way Talk to children during routines, describing the steps you are taking to complete the task Provide a variety of safe and interesting toys for exploration 	 Describe actions as they are being completed Talk about the steps to an activity, "First we'll turn on the water, then we'll put on soap" Model positive behaviors or actions Praise child or others for positive actions Use self talk to describe consideration of a different way to do things, "Hmmm, that didn't work, I think I'll try to do it this way." 	 Describe how actions are alike or different, "This boat floated just like the other one." or "I used the red crayon for this circle and the blue crayon on this circle." Describe the steps to a routine, leaving out the end of a step to allow children to complete it, "First, we sing our good morning song, then we" (ask children to tell you what'snext) Remind children of the daily schedule, "After lunch we read a story, then take anap." Use self talk to describe ways to achieve a goal, "I wonder what I can use to make this taller?"

APL2b: Task Analysis: Children will identify the steps needed to achieve a goal.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DICATORS	2bYP-1 Consider different ways to approach the same task with adult help	2bOP-1 Demonstrate understanding that a task can be achieved in multiple ways
DEVELOPMENTAL INDICATORS	2bYP-2 With adult support, develop the steps needed to complete a simple task	2bOP-2 Break down multi-part tasks into steps
DEVELOR	2bYP-3 Express short term goals or plans and follow through with them	2bOP-3 Independently identify and seek things needed to complete activities or tasks
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 State "I'm going to make a snake." with play dough Tell an adult the types of blocks needed to build a house, "I need the long blocks to make the walls and the short ones to make the windows." Tell an adult an idea for completing a task, "We could put this on the baby to make a hat." State, "I'm going to play with the babies after I take my nap." 	 Identify an easier way to complete a task Gather needed supplies to make a block town or a birthday cake Say, "Now I'm going roll the playdough with my hands instead of the rolling pin." Look for the last puzzle piece to add Say, "I need to add one more tree on this picture."
SAMPLING OF PROFESSIONALS' PRACTICES	 Ask questions like, "What should we do next? What's the first thing we need to do? What's the last thing we need todo?" Introduce new materials to children before putting them in learning centers for play Ask children where they are going to play before free play begins Ask children where they played and what they did there (after play time) Write about the steps of an activity as you describe them, then check them off with the children as they are completed, "OK, we just got out our paper and crayons, next it says we are going to draw our families" 	 Introduce children to new materials and how they might use them Seek children's ideas and accept different perspectives and ideas, indicating all are valuable Ask what materials might be needed to complete an activity, "The table's almost set. What else do we need? What's missing?" Use self-talk to describe the steps to a goal, "I am going to make scrambled eggs. "First we break the eggs, then we beat them, next they go in the pan" Create a book with children that describes an experience with each page representing a part or step of the experience



APL2c: Reasoning and Problem Solving: Children will identify and develop strategies for solving simple problems.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
DEVELOPMENTAL INDICATORS	2cl-1 Notice effect of own actions when interacting with a variety of objects and people	2cYT-1 Observe others' actions with objects and materials	2cOT-1 Repeat action to obtain a specific effect
MENTAL I	2cl-2 Use an object in more than one way	2cYT-2 Use trial and error to complete a task	2cOT-2 Try a new way to solve a problem
DEVELOPI	2cl-3 Purposely complete actions to make something happen	2cYT-3 Repeat action to produce an effect or response	2cOT-3 Purposely complete actions to make something happen
	2cl-4 Use an object, action, or adult to accomplish tasks, such as pulling a blanket to reach a toy or pushing a button to hear a sound.	2cYT-4 Experiment to find a solution to a problem	2cOT-4 Imitate others' actions to complete a task or activities
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Scoot across the room to reach a toy Drop a block, then a rattle to watch the effect Explore the characteristics of different objects 	 Watch and imitate another child who is jumping up and down Search for items that are missing Press the knob on a pop-up toy to make it open Bang on a drum over and over to make a loud noise 	 Pour water from a cup to watch what happens Ask, "why?" Be observant about children's actions and extend their ideas through materials or interactions Push a cart around an obstacle to move it to a particular place
SAMPLING OF PROFESSIONALS' PRACTICES	Acknowledge and encourage new learning by each child Stay near child to offer support as needed	 Wait for the child to seek help before offering it Describe the child's actions to elicit a response such as "You made the toy pop. How did you do that?" 	 Guide the learning process rather than providing solutions Ask open-ended questions that prompt a child to think about cause and effect Model different ways to use materials and encourage children to do the same

Exploration and Critical Thinking: Developing STEM Skills | APPROACHES TO PLAY AND LEARNING (APL)

APL2c: Reasoning and Problem Solving: Children will identify and develop strategies for solving simple problems.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DEVELOPMENTAL INDICATORS	2cYP-1 Experiment with similar actions on different objects	2cOP-1 Apply prior knowledge and experiences to new ideas and activities
MENTAL	2cYP-2 Experiment with a variety of strategies to solve a problem	2cOP-2 Describe the steps they will use to solve a problem
DEVELOP	2cYP-3 Apply previously-successful strategies to complete a task	2cOP-3 Evaluate different strategies for problem solving and select the strategy they feel will work without trying it
	2cYP-4 Seek and make use of ideas and help from adults and peers to solve problems	2cOP-4 Ask specific questions of adult or peer to solve a problem
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Ask, "How can I get this paint off my pants?" Try to pour sand into a small cup after pouring it into a bucket Try to reach a toy by first stretching, then getting a stick to push it within reach Tell an adult, "We tried to put all the pencils in this can, but they didn't fit. We are going to use this one." 	 Tell an adult, "I think we can make that smaller by cutting off this end." Respond to, "Should we use the large or small brush to paint this shape?" Suggest more than one way to reach an object, First, "We could use this stick to get it or climb on the stool. I'll try the stick first."
SAMPLING OF PROFESSIONALS' PRACTICES	 Model curiosity, "I wonder what would happen if" Include materials that encourage children to explore and manipulate them Add toys or materials that can be used in different ways Respond positively when a child tries something new and makes a mistake, "That was a great try, how could you do that a little differently to make it work?" 	 Provide opportunities for children to gather to discuss a problem and suggest ways to resolve Help children consider different ways to solve a problem, "That's one way, is there another idea?" Brainstorm ways to complete a task Ask, "How can we find out about that idea?" Make a book with children's drawings and a summary of a completed task or experience "First, we read the book about apples, then we went to the apple orchard to pick apples, then we made applesauce."



APL3a: Curiosity, Invention, and Initiative: Children will show eagerness, imagination, and creativity as they try new tasks.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
DEVELOPMENTAL INDICATORS	3al-1 Show interest and excitement while exploring new experiences in familiar settings	3aYT-1 Delight in finding new properties and uses for familiar objects and experiences	3aOT-1 Invent new uses for materials other than those originally intended
	3al-1 Explore materialsby using their senses	3aYT-2 Gesture to adults to describe or name new objects or toys	3aOT-2 Ask short questions to learn new information and show interest in routines and daily activities
	3al-1 Reach for the same objects or toysrepeatedly	3aYT-3 Indicate preferences for objects or activities	3aOT-3 Be insistent about preferences
	3al-1 Try a new actionwith a familiar object	3aYT-4 Delight in finding different and unique ways to use familiar objects	3aOT-4 Express joy or satisfaction through simple, actions, gestures, and words
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Pick up objects and put them in mouth Watch another performingan action Show interest in fingers or toes Touch and explore adults' characteristics to learn about them 	 Demonstrate excitement about trying something new Point to new objects for adults to name or describe Choose the same book over and over Show a preference for a particular doll-baby, carrying it around Climb up and slide down the slide, clapping after slide down 	 Show eagerness and curiosity as a learner Tell an adult "no" Demand the blue cup while refusing to drink from the red cup Pick (or request) the same shirt to wear every day Ask why and how questions Clap and wiggle with joy while playing a simple game Say, "I like doing this puzzle."
SAMPLING OF PROFESSIONALS' PRACTICES	 Place infants near each other to encourage interest in others Include mirrors in areas where children can look at themselves Make eye contact when completing routines Take children outside for sensory play and exploration 	 Offer toys and materials with different textures and sounds Reinforce children's attempts to try new things by smiling and praising Allow time for exploration throughout the day Name toys and activities 	 Provide different types of books for children to read Make available creative materials such as play dough, paint or crayons Rotate or add new materials to learning centers periodically Create new scenarios in the dramatic play area with new props and equipment, such as a pet store, doctor's office or ice cream shop

Exploration and Critical Thinking: Developing STEM Skills | APPROACHES TO PLAY AND LEARNING (APL)

APL3a: Curiosity, Invention, and Initiative: Children will show eagerness, imagination, and creativity as they try new tasks.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DEVELOPMENTAL INDICATORS	3aYP-1 Demonstrate willingness to participate in both familiar and new experiences	3aOP-1 Show eagerness to learn about and discuss new topics, ideas, and tasks
	3aYP-2 Ask questions to obtain clarification	3aOP-2 Ask questions to understand a new concept
DEV	3aYP-3 Make choices and complete some independent activities	3aOP-3 Show independence and purpose when making choices.
	3aYP-4 Discover things that amaze them and seek to share them with others	3aOP-4 Use complex and varied language to share ideas and influence others during play
		3aOP-5 Select and carry out activities without adult prompting
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Show interest in and express that interest to adults and peers, "Look at this bug I found on the ground." Ask questions about the people and things around them When a new student comes to class, ask why and where they came from 	 Ask questions about future events Choose different ways to explore things (such as using a magnifying glass or a bug jar to examine an insect) Show interest in a growing range of topics, ideas, and tasks, and determine new and intriguing ways to explore them Demonstrate interest in learning new skills; may indicate interest in using new materials (such as gel pens or glitter glue) to complete tasks
SAMPLING OF PROFESSIONALS' PRACTICES	 Allow children to move materials from one learning area to another Provide a wide variety of objects, experiences, and exploration from different cultures and family types Listen and respond to children as they share thoughts. Provide props and pictures to assist children in expressing thoughts using unknown vocabulary 	 Use "I wonder" statements to encourage children's creativity with use of objects Provide materials that will assist a child's expression of a memory. Encourage conversation about their memoryto facilitate inquiry Ask children to communicate what they like or dislike and encourage them to express why. Use facial expressions to reflect interest in what the child is communicating



APL3b: Risk-Taking and Flexibility: Children will demonstrate a willingness to take risks and try new things.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
DEVELOPMENTAL INDICATORS	3bl-1 Look to adults for reassurance when trying new things	3bYT-1 Move away from an adult to try new things but check in frequently	3bOT-1 Explore environment freely with an adult nearby
	3bl-2 Notice changes in the environment	3bYT-2 React to unexpected events with laughter or interest	3bOT-2 Transition to new activities with adult encouragement
	3bl-3 Try to do things that are hard (such as crawl or walk) looking to adults for reassurance	3bYT-3 Show interest in toys that offer a challenge and try to figure out how they work and how to use them	3bOT-3 Demonstrate a willingness to participate in new experiences
	3bl-4 Seek to discover where something was and where it might be (object permanence)	3bYT-4 Seek new experiences that create joy and excitement	3bOT-4 Accept changes in plans and schedules with minimal opposition
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Explore new experiences both indoors and outdoors Try to crawl, walk or climb, either with or without adult assistance Try to climb out of crib or on top of chairs and furniture to experience new perspectives 	 Use facial expressons to indicate willingness to transition from activity to activity Say "NO" initially but shift to another activity with little duress Indicate interest in new toys when presented, using senses to examine them Look for resassurance from adults to proceed to unknown tasks 	 Acknowledge a mistake and suggest a remedy After gentle encouragement, move freely from one activity to another Use a picture schedule to shift from activity to activity Approach a challenge with confidence, "I can doit!"
SAMPLING OF PROFESSIONALS' PRACTICES	 Provide infants support and assurance that they are safe Use positive facial expressions to support children in explorations Be available to provide physical or emotional support to children as needed Provide toys that make noise, pop, or change in some way to provoke thoughts about how something works 	 Show interest in children's work and indicate joy or disappointment in successes and challenges Model flexibility, trying other ways of completing something or needing to try again, "Uh-oh my block tower fell down, I need to try it again" Encourage children to "get back up" after falling or failing on a task and reassure them that they are ok 	 Consider different ways to introduce new experiences or ideas to accommodate children's different approaches to learning Show or model flexibility, "You'd like 5 more minutes to play? Ok" Show pleasure in the ways children tackle tasks and encouraging them to keep working when unsuccessful Establish a regular yet flexible routine

APL3b: Risk-Taking and Flexibility: Children will demonstrate a willingness to take risks and try new things.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
IICATORS	3bYP-1 Choose to participate in an increasing variety of familiar and new experiences	3bOP-1 Approach new experiences, topics, and ideas with interest
DEVELOPMENTAL INDICATORS	3bYP-2 Ask to participate in new experiences they have observed or heard about	3bOP-2 Express a belief that they can do things that are hard
	3bYP-3 With support and guidance, differentiate between appropriate and inappropriate risk taking	3bOP-3 Try things they are not sure they can do while avoiding dangerous risks
	3bYP-4 Try different roles or play approaches with adult support	3bOP-4 Take on new roles in a group setting
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Explore a new climbing structure on the playground Follow simple commands to transition from one activity to another Express a confidence in their ability to do something by themselves Express verbally, step-by-step, how they did something Express a desire to learn something increasingly complicated and complex believing they are able to do it 	 Independently seek new challenges Approach new experiences independently and offer explanation(s) of how they learned something new Express desire to learn new, challenging tasks. They will offer suggestions on how to proceed Explain how to accomplish new and challenging tasks to adults or peers
SAMPLING OF PROFESSIONALS' PRACTICES	 Help children think through alternative strategies, "Rosie is playing with that ball now, can you find another one?" Support children's own ways to solve problems and let them know that there is more than one "right way" to do something Try different ways to introduce change and variety (provide advance warning of changes in routine, using pictures where possible) 	 Plan for and recognize different interest levels and abilities to tolerate materials, mistakes, and engagement with other children Accommodate differences by being flexible and introducing more challenging experiences gradually Ask probing questions when children appear to be confused to help them understand and build meaningful connections Model constructive reactions to mistakes explaining that everyone makes them from time to time



Adaptations and Accommodations for Children with Unique Needs

Environment

- Use markers such as bookcases or other furniture, rugs, and colored tape on the floor to represent boundaries between spaces and learning areas.
- Arrange the classroom furnishings so all children can move and maneuver around the room and learning centers by themselves.
- Provide hands-on materials and experiences.
- Use visuals to designate when an area is full.
- · Include authentic cultural artifacts.

Daily Schedule and Routines

- Vary the pace and duration of activities, alternating between active and calming activities to keep children engaged and to meet their need for movement.
- Use visual cues (hands-on demonstrations and modeling, objects, pictures) as needed to help the child to better grasp the directions.
- Create consistent, predictable, and structured classroom routines.
- · Give warnings ahead of transitions.

Materials

- Provide open-ended materials, such as clay, blocks, and puzzles.
- Use lots of visuals such as picture schedules, choice boards and picture cards that designate activities.
- Include big books, board books, flannel board sets, books on CD, etc.
- Offer soft comfortable places such as pillows, bean bags, cushions, carpet, etc.
- Use materials with contrasting colors and/ or textures.

Instruction and Activities

- Teach only a small number of 'key' skills at one time.
- Teach children how to take turns, how to play and how to use social routines such as saying hello or asking to play.
- Demonstrate chores or activities rather than relying on verbal explanations.
- Provide lots of repetition and practice.
- Accommodate the pace of learning to match all children's abilities.
- Monitor play behavior closely.



Executive function are those skills that help children control their thoughts and actions. They help children plan and prioritize tasks, pay attention and avoid distractions; remember information; and flexibly respond to different situations and rules. Executive function is often compared to air traffic control at a busy airport. Air traffic controllers coordinate planes' safe departures and landing from different runways by communicating with pilots, weather forecasters, navigators, etc. to guide their decisions. Early learning professionals guide children's navigation when, through relationships, they help them cope with stress; encourage creativity and active play; build on their skills to learn new information; and offer opportunities for repeated skill practice.

Center on the Developing Childat Harvard University (2011). Building the Brain's "Air Traffic Control" System: How Early Experiences Shape the Development of Executive Function: Working Paper No. 11.

ASampling of Foundational Practices

Environment and Materials

- Set up learning areas that encourage children to use materials creatively, in varying ways, to achieve a task.
- Include areas for group and individual play.
- Use though-provoking materials that have are not limited to a single right answer.
- Arrange locations where children can set aside projects to continue their work from day to day.
- Add props or additional materials to extend children's thinking and exploration.
- Set up situations that require or encourage children to work together.
- Include materials that appeal to all of the children's senses.

Instruction

- · Model interest and affection to children.
- Ask open-ended questions that stimulate children's problem solving and creativity.
- Encourage children to talk and share with each other about interests or findings.
- Ask children to make advance plans of their play strategy.
- Call group meetings to discuss a problem or situation that would benefit from a group decision.
- Plan experiences where children role play situations or act out stories.
- Ask children what they already know and what more they'd like to learn about specific topics.

Children's Books

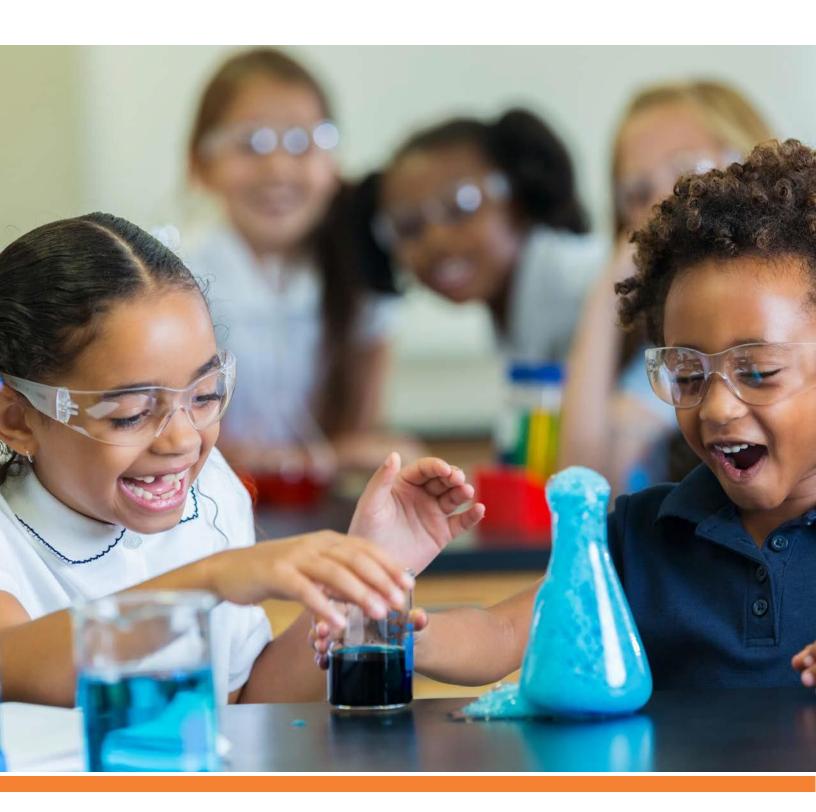
- Not a Box by Antoinette Portis
- The Wonder Bear by Tao Nyeu
- Mom, What's That? by Atlas Jordan
- If Chocolate Were Purple by Jen Barton
- Leaf by Stephen Michael King
- Big Words for Little People by Jamie Lee Curtis
- Toot and Puddle, You Are My Sunshine by HollyHobbie
- · The Jazz Fly series by Gollub
- Where the Wild Things Are by Maurice Sendak
- Pretend by Jennifer Placas
- · I Won't Give Up by David Kenney
- I Will Surprise my Friend! By Mo Willems
- Press Here by Herve Tullet
- Whose Knees Are These? by Jabari Asim
- · Giraffes Can't Dance by Giles Andreae
- · Clive and his Babies by Jessica Spanyol
- · Horrible Bear! by Ame Dyckman
- · Stuck by Oliver Jeffers

Adult Resources

- The Role of Play in Promoting Children's Positive Approaches to Learning. Marilou Hyson, PhD. https://www.researchconnections.org/files/
 - https://www.researchconnections.org/files/ childcare/pdf/PlayandApproachestoLearnin g- MarilouHyson-1.pdf
- Head Start Effective Practice Guide: Approaches to Learning.
 - https://eclkc.ohs.acf.hhs.gov/school-readiness/ effective-practice-guides/approaches-learning

Family Engagement

- Display children's work in familyaccessible areas.
- Send home information about the stages of play.
- Invite family members to help complete a longer-term or more complex project.
- Create a book or display about a special project or event.
- Post a "question of the day" for children and their family adults to ponder.



SCIENCE EXPLORATION AND KNOWLEDGE (SEK)



Exploring the World Around Me

Science is not just a set of facts for children to learn; it is a process or a way of thinking and understanding the world. This process begins with observations and moves through predictions, testing those predictions and then making sense of those observations. "Children acquire scientific knowledge by construction, not by instruction. (Kamii and Lee-Katz, 1983). When teachers encourage children's exploration and use of the scientific process, they promote the development of thinking and problem solving skills.

Rich science experiences also include mastery of science concepts in life science, physical thinking, earth and sky, engineering and technology. Investigation of these topics is best experienced through direct interaction with the environment in which children live and play. Professionals who pose open-ended questions or offer opportunities for children to explore their world spark new questions, new ideas, and new directions to explore. Both content and process are essential aspects of children's learning.

SEK 1 Science Concepts

SEK1a: Science

SEK1b: Biological Science SEK1c: Physical Science SEK1d: Earth and Space Science SEK1e: Environment

and Ecology

SEK 2 Technology

SEK2a: Use of Tools SEK2b: Media Literacy SEK2c: Digital Citizenship SEK2d: Computational Thinking

SEK 3 Engineering Processes

Did you know?

Children are natural engineers.

They like to explore and figure out how things work. Infants and toddlers shake objects or move them around. They may make towers with large blocks. Older toddlers and preschoolers may take things apart and put them back together or send cars and trucks down ramps to watch them move. They may plan and then carry out the construction of buildings with different kinds of blocks, and they might put together different types of materials to make sculptures or unique creations.

The engineering process engages children in activities that ask them to 1) ask; 2) imagine; 3) plan; 4) create; 5) improve. Does your learning environment include materials that encourage children to plan and create designs or solutions to problems? What experiences can you create to help children become budding scientists and engineers?



SEK1a: Scientific Inquiry: Children will gain knowledge through exploration and discovery.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
DEVELOPMENTAL INDICATORS	1al-1 Use senses to explore objects	1aYT-1 Use the five senses to observe and explore objects in the environment	1aOT-1 Use the senses to describe objects, people, or actions
	1al-2 Show interest in a variety of objects, materials and activities	1aYT-2 Notice that something happens as a result of an action	1aOT-2 Use observation and experimentation to answer questions
	1al-3 Handle and manipulate objects to learn about them	1aYT-3 Interact with materials and the environment to learn new ideas	1aOT-3 Ask questions to find out why
	1al-4 Repeat action to learn about its impact	1aYT-4 Repeat actions to achieve a desired effect	1aOT-4 Show understanding of cause and effect
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Drop a spoon, wait for adult to give it back, and drop again Explore toys and materials with mouth or hands Gaze intently at objects Move object from one hand to theother Shake objects 	 Touch, taste or smell a new object to learn aboutit Drop objects from different heights to see what happens Try different things with objects to see how they work Notice things that are happening in the environment 	 Use a specific toy or engage in an activity for an extended period of time. Use the senses to describe objects or action, "I hear an airplane." or "That smells yucky." Watch the way the rain falls on the window Ask questions about objects or events Use simple tools to explore objects Tell a friend, "Watch what happens when I drop this."
SAMPLING OF PROFESSIONALS' PRACTICES	 Place objects at varying distances and positions within infants' reach Rotate toys to encourage infants' exploration of new things Provide toys and objects of different textures, colors and patterns 	 Provide sensory table or area for children to pour or manipulate rice, soil, water Tell children to "look out the window to watch the rain" and describe what you see Talk about what's happening during a walk, "Look at that squirrel climbing up the tree." 	 Provide a science or exploratory area with a variety of natural materials such as leaves, rocks or shells; rotate the materials Ask open-ended questions to spark children's thinking, "What are those dark clouds telling us?" After a walk where children noticed rain puddles and worms, invite them to draw or sculpt what they saw, add books about worms, ask what else they want to know and help them research information about worms on a laptop orcomputer Include magnifying glasses, color paddles, collection jars

Exploration and Critical Thinking: Developing STEM Skills | SCIENCE EXPLORATION AND KNOWLEDGE (SEK)

SEK1a: Scientific Inquiry: Children will gain knowledge through exploration and discovery.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DEVELOPMENTAL INDICATORS	1aYP-1 Identify and differentiate the five senses	1aOP-1 Use the five senses to collect information
	1aYP-2 Make predictions based on past experiences	1aOP-2 Try new approaches when results differ from what is expected
DEVELOPN	1aYP-3 Participate in experiments to learn new information	1aOP-3 Form conclusions based on observable actions or results
	1aYP-4 Discuss potential cause and effect relationships	1aOP-4 Predict outcomes based on cause and effect, "If I,then I"
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Take a toy apart to see how it works or what is inside Tell a friend, "I think the tower might fall, it's really high." Put different types of objects in the water to see if they will sink or float Investigate and describe a toy using the senses. "I hear it rattling but it doesn't smell. It feels rough." Ask an adult why the lid is warped and doesn't fit on the box 	 Notice the puddles on the sidewalk and say, "It rained last night." Explain that the block tower fell because it was too high Turn the pieces of a puzzle around to fit Notice and describe the results of a science experiment. "The celery turned blue after we added the foodcoloring." Explain to an adult what might happen when ice is left out of the freezer Predict what will happen to the paint colors when they are mixed
SAMPLING OF PROFESSIONALS' PRACTICES	 Model a sense of wonder and excitement about nature Create project-based opportunities where children design tools or experiences over time Encourage children to use their sense to discover information by asking, "What do you see or hear? How does that feel? Does it have a smell?" Ask children to predict what might happen next Conduct simple experiments and ask children to record their findings through a drawing or dictated story 	 Rotate the items in the science area to encourage children's ongoing attention and exploration Ask children to predict what might happen before conducting science experiments, "What do you think might happen if I drop this cotton into the water?" Ask children to identify what they know about a topic and what they would like to learn. Provide the tools and materials for them to research or explore to find out more Provide opportunities for children to design and create projects over time, leaving them available from day to day Turn puzzle pieces around when they don't fit on the first try

SEK1b: Biological Science: Children will differentiate between living and non-living things and their characteristics.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
DEVELOPMENTAL INDICATORS	1bl-1 Show interest and curiosity in theworld	1bYT-1 Explore a variety of living and non-living things	1bOT-1 Explore the characteristics of living and non-living things
	1bl-2 Indicate basic needs through crying	1bYT-2 Verbalize needs through short phrases	1bOT-2 Show understanding that plants and animals have basic needs
EVELOPM	1bl-3 Explore and discover different body parts	1bYT-3 Show or use specific body parts when asked by adult	1bOT-3 Name body parts
<u> </u>	1bl-4 Respond to characteristics of living things	1bYT-4 Differentiate between adults and babies	1bOT-4 Observe plants' and animals' growthand change overtime
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Notice other children while on the playground or on a walk Notice objects and events in the indoor and outdoor environments Reach for people Startle at loud or angry voices Touch photos of animals and their babies in books Touch toes while lying on back Show interest in adults' games that identify body parts, like "This Little Piggy" 	 Watch fish swimming in a tank or birds at a bird feeder Stoop down to look at a dandelion Tell an adult, "More please." Point to body parts when asked Point to animal babies in a book 	 Kneel on the ground to watch an earthworm move in soil Plant a seed and watch its growth over time Look at a leaf or flower with a magnifying glass Go on a nature walk to collect a variety of leaves Name basic body parts Help to water flowers or feed fish Tell an adult, "That's the puppy." while reading a book
SAMPLING OF PROFESSIONALS' PRACTICES	 Include non-toxic plants or small pets in your environment, considering allergies Read books that show photos of living and non-living things Provide varied materials and objects for children to explore Name body parts while changing diapers or clothing Describe child's characteristics, "You've got such long fingers!" 	 Describe the feeding and care routines of pets as you conduct them Set up a birdfeeder outside near a window Play finger plays and sing songs that include body parts Name animals and their babies while reading or post photos of animals around the room Make animal sounds as you name the animal, "The cow says, moo." 	 Talk about what children are seeing during nature walks Add binoculars and magnifying glasses to your outside play equipment Plant seeds or a small garden and watch the plants grow and involve the children in watering and weeding Play games or sing songs that name or move body parts Include stuffed animals in the reading and dramatic play area Read <i>The Very Hungry Caterpillar</i> by Eric Carle

Exploration and Critical Thinking: Developing STEM Skills | SCIENCE EXPLORATION AND KNOWLEDGE (SEK)

SEK1b: Biological Science: Children will differentiate between living and non-living things and their characteristics.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
ICATORS	1bYP-1 Sort living and non-living things by one or more basic characteristics	1bOP-1 Describe differences between living and non-living things
DEVELOPMENTAL INDICATORS	1bYP-2 With adult support, describe how living things depend on other non-living and living things to survive	1bOP-2 Describe how living things interact with the environment and its conditions to survive
EVELOPN	1bYP-3 Explore the function of body parts	1bOP-3 Describe the functions of body parts
۵	1bYP-4 Explain how plants and animals change over time	1bOP-4 Describe the predictable patterns for life cycles of plants and animals
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Notice that the food and water for a pet needs to be replenished Tell a friend that plants need water to grow Notice a caterpillar eating and leaf and say, "Look, he's hungry." Play body movement games such as Hokey Pokey orrelayraces Tell an adult, "My legs are strong so I can run fast." Chart or make an observational drawing about the growth of a plant 	 Sort cards in a lotto or folder game by living and non-living Sort photos or pictures into animals that move in the sky, on land, or in the water Tell another child, "I have a bracelet on my wrist." or "I scraped my elbow." Pat head or rub tummy during a simplified Simon Says game Tell an adult, "We need to sleep so we get energy to play." Tell an adult, "Seeds grow into plants." or "Birds' eggs hatch into babies."
SAMPLING OF PROFESSIONALS' PRACTICES	 Talk about the different characteristics of birds, mammals, reptiles, "Reptiles have scales to help them live in dry places, fish use gills to breathe, birds fly with wings." Show children's baby pictures and current pictures and talk about the growth changes Provide games where children match different kinds of animal and their babies or the animal to their habitats Investigate the characteristics of rocks and shells on the internet 	 Describe the different habitats and habits of animals, "Bears hibernate, bats fly at night, frogs live on both land and water." Take a trip to a local zoo or farm Use sequence cards to demonstrate the stages of plant growth or eggs hatching Use books or the internet to talk about the way humans breathe; practice taking deep breaths and blowing out Display pictures or cards that children can sort into living or non-living

SEK1c: Physical Science: Children will demonstrate emerging understanding of matter and energy.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
ICATORS	1cl-1 Explore and discover the motion of objects	1cYT-1 Explore the ways in which objects move	1cOT-1 Explore different ways that familiar objects can move or be moved
DEVELOPMENTAL INDICATORS	1cl-2 Handle objects to learn about their characteristics or properties	1cYT-2 Begin to categorize objects according to their attributes	1cOT-2 Describe the physical attributes of objects
DEVELO		1cYT-3 Explore the properties of liquids and solids	1cOT-3 Categorize objects as liquid or solid
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Push the knob on a pop-up toy to make it open Press the button on a doll or stuffed animal to hear its sound Rock on a rocking horse or push a push toy to make it move Shake toys to watch what happens 	 Experiment with riding toys, making them go fast or slow Add objects to a wagon and try to pull it Make cars move around a track Notice differences in fabrics or materials, such as cotton balls are soft or ice feels cold Play with water, sand or soil 	 Notice that water flows through a sieve faster than sand Move a car along the floor or on a track or race it in the air Pick up a beach ball and say, "This is so big." Try to lift a box and say, "Too heavy." Make mud pies
SAMPLING OF PROFESSIONALS' PRACTICES	 Read books that have texture inserts and encourage children to feel Roll a ball to infant Provide toys that require infants to push buttons or press to make them open or make noise Include rattles and small toys that move or shake or make noise 	 Include a sensory table with pouring, sifting, and filling containers Offer toys and objects that move at different speeds and in different ways Ask children to lift different sized objects and talk about which one is heavier or bigger Describe children's actions, "You are pushing that truck across the room." Provide materials with different textures 	 Construct musical instruments with rubber bands or paper rolls and rice or beans Include sensory boxes that have objects with different textures in the science area Add a scale and objects of different weights to the science area Include cars and trucks of different sizes in the block area and outside Talk about the different attributes of milk or water and blocks or solids

Exploration and Critical Thinking: Developing STEM Skills | SCIENCE EXPLORATION AND KNOWLEDGE (SEK)

SEK1c: Physical Science: Children will demonstrate emerging understanding of matter and energy.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DEVELOPMENTAL INDICATORS	1cYP-1 Notice strategies that impact how balls, cars, and other objects can change speed	1cOP-1 Experiment with cars, balls, and other objects to determine which is faster
	1cYP-2 Sort and describe objects according to their physical properties, including size, shape, texture, and color	1cOP-2 Notice and explain changes in physical properties of objects as a result of outside influences
DEVELO	1cYP-3 Investigate and identify the differences between liquids and solids	1cOP-3 Describe characteristics of solids and liquids
	1cYP-4 Explore the properties of light and sound, with adult guidance	1cOP-4 Investigate the properties of light and sound
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Try to hit a ball with a stick or a bat Push cars or trucks down a ramp Touch an object inside a sensory bag and identify it as cotton or a pinecone Sort different nuts or leaves at the science table according to type or color Watch, over time, an ice cube melt and notice when it turns to water Bang on drums of different sizes and types to notice the differences in sound 	 Race cars down different sized ramps with a friend to see whose is fastest Use loose parts to put together objects Ask if the sliding board is too hot to slide down Use a stick like a lever to move things Predict which objects might float during an experiment Stir water into sand and talk about it will form a sandcastle Watch what happens with magnets Create shadows with flashlights
SAMPLING OF PROFESSIONALS' PRACTICES	 Provide ramps and inclines in the block area Conduct experiments with different size cars and ramps to see which comes first Put water, soil, ice, or sand in the sensory table, along with cups and funnels and shovels Add water and sand tables for outside play Ask children to reach into a bag with objects of different textures and sizes and guess what they are Ask children to identify different sounds 	 Conduct science experiments with light and sound, and sink and float Graph results of experiments Conduct cooking experiences that show what happens when water is heated or when ingredients are combined Add prisms, color paddles, and crystals to the science area

SEK1d: Earth and Space Science: Children will demonstrate emerging understanding of the earth and atmosphere.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
ATORS	1dl-1 Explore textures and sounds found in nature	1dYT-1 Use basic tools to explore soil and sand	1dOT-1 Explore the properties of soil and sand
DEVELOPMENTAL INDICATORS	1dl-2 Enjoy water play	1dYT-2 Engage in water play with tools such as cups and	1dOT-2 Begin to explore the properties of water through play
OPMENT	1dl-3 Show interest in the earth and sky	1dYT-3 Show interest or recognize objects that are in the sky	1dOT-3 Name objects in the sky: stars, sun, moon, clouds
DEVEL	1dl-4 Respond to changes in the temperature (weather)	1dYT-4 Recognize different weather types	1dOT-4 Match clothing needs to appropriate season or weather with adult assistance
		1dYT-5 Begin to differentiate day from night	1dOT-5 Draw pictures that represent day or night
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Touch grass or sand Attend to birds singing Respond to light and darkness and anticipate routines with both (for example, dark = nap) 	 Pack sand into a pail using hands ortools Point to a bird as it lands on a tree Look up at the sun and say, "sunhot" Talk about the changes in weather using simple vocabulary such as hot or cold Splash in the bathtub or pour water from bottles in the water table 	 Observe and discuss changes in day to day weather, "It's cold outside today." or "It's really cloudy, no sun today!" Play with soil and water, combining to make mud pies Point to a lake or pond, "I see water." Ask an adult, "Do I need to wear pants today or can I wear shorts?" Use dark paper and light crayons to draw a night picture or paint with soap flakes to make snow or clouds
SAMPLING OF PROFESSIONALS' PRACTICES	 Provide opportunities forchildren to grasp and move objects Introduce children to water play using small tubs and a few basic toys Point to and describe the sun or flowers growing during a walk Tell a baby, "It's getting cold outside, we need to wear coats today." Explain, as you prepare baby for nap, "I'm going to close the curtains so the dark room will help you sleep." 	 Conduct a very simple sink-float experiment, using 1 or 2 objects, and talk about the outcome Provide materials that children can mix and combine Conduct very simple cooking experiences, explaining, "I am mixing water with flour to make dough." allowing children to try to stir Describe the weather as children are getting dressed, "It's raining today. We will need our raincoats and umbrellas." or "It's raining today; we can't playoutside." Read books about day and night activities and characteristics, such as Good Night Moon by Margaret Wise Brown 	 Create opportunities for children to investigate natural changes in the environment, snow melting, water evaporating, or water and soil combining Sing "the Bear Went Over the Mountain" or "Jack and Jill" Encourage creative use of materials, "What else can we do with that block?" Dress a flannel board character for the weather during circle time Introduce children to science vocabulary, solid, liquid, mixture, reaction Talk about the things you do during the day and the things you do at night

Exploration and Critical Thinking: Developing STEM Skills | SCIENCE EXPLORATION AND KNOWLEDGE (SEK)

SEK1d: Earth and Space Science: Children will demonstrate emerging understanding of the earth and atmosphere.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DEVELOPMENTAL INDICATORS	1dYP-1 Describe the properties of earth materials, soil, and sand	1dOP-1 Compare and contrast the properties of natural materials, soil, and sand
	1dYP-2 Investigate the properties of water through experimentation	1dOP-2 Describe the properties and changes of water
	1dYP-3 Differentiate day and nighttime objects in the sky	1dOP-3 Explore the characteristics of the sun and shadows, moon, clouds and stars
DEVEL	1dYP-4 Describe changes in weather or seasons over time	1dOP-4 Explain how weather and its changes impact daily life
	1dYP-5 Describe daytime and nighttime activities	1dOP-5 Describe the day and night cycle
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Identify the different types of weather Notice that the leaves on the trees are turning colors Notice that the slide is hot on a warm and sunny day Describe how the features of the sky change from day to night, "Look, it's getting dark outside, I see the moon." Talk about the hill to climb during a walk or how high the mountain is in a picture Describe properties of rocks, soil and mud, "This feels hard; this feels gooey." Talk about the way snow melts when it's brought inside to warmth 	 Tell an adult, "It's getting cold outside. I need to wear my hat and mittens." or "I need my sunscreen when it's so hot and sunny." Tell another, "We can't go out to play today because it's raining." Compare the colors and textures of sand and soil Talk about the wind blowing the leaves off the trees Explain that we pick up litter to keep our neighborhood clean Notice the different sizes of shadows between adult and self during a walk
SAMPLING OF PROFESSIONALS' PRACTICES	 Include different types of natural materials for children to explore water, sand, or soil in the sensory table and shells, sticks, pinecones, or acorns in a science area Ask children to predict what might happen when water is added to sand or when an ice cube is left out on the table Provide flashlights, color paddles and prisms for children to explore Investigate the way flower petals change color when their stems are put into water with food coloring Read books about the moon and space; add space travel to the dramatic play area 	 Chart the phases of the moon Conduct a time study with an ice cube, measuring the amount of melting every few minutes Investigate what happens when water is dropped onto waxed paper Provide play dough, toothpicks and other materials for children to create stars, sun, moon or planets Make shaker bottles with water, oil and glitter or objects Take children outside to dig for different types of dirt or soil, compare and graph or chart the differences

SEK1e: Environment and Ecology: Children will demonstrate emerging understanding of their impact on taking care of the world.

	Du 0.00 martha mart		
	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
ATORS	1el-1 Demonstrate joy in being outside	1eYT-1 Show interest in nature	1eOT-1 Respond to changes in the natural environment
NTAL INDIC		1eYT-2 Show an understanding of trash or things that need to be discarded	1eOT-2 Participate in daily clean- up activities with adult direction
DEVELOPMENTAL INDICATORS			1eOT-3 Participate in simple activities to protect the environment
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Crawl or move around in the grass Look at birds, sky, flowers, animals during walks 	 Bend down to look at or pick a flower Look up to see or listen to birds Put familiar items in their proper place Take an item from an adult and put it into the trash 	 Put away bikes, helmets and other outside toys Sort trash and objects for recycling with adult help Participate in garden planting or care Re-use an object for another purpose Make simple sun catchers with waxed paper and tissue paper
SAMPLING OF PROFESSIONALS' PRACTICES	Take children for walks, describing what they hear and see Give and describe objects with different textures for babies to feel, such as flowers, rocks (watch carefully to make sure they don't put them in their mouths)	 Model environmentally-responsive behavior such as no litter, recycling Take children on a listening walk to look for or observe birds, flowers, squirrels Talk about what you're doing when you recycle; "I'm going to put this in the recycling bin so it can be repurposed." Use recycled materials for learning toys such as egg cartons for sorting or paper towel rolls for musical instruments 	 Create a wildlife or garden area with plants that attract bees or birds Model and explain how putting away outside toys protects them from the weather elements Provide separate recycling and trash cans that help children separate trash Make homemade play dough, paint or bubble soap, explaining how things can be made from home materials and don't need to be purchased Go for a walk to pick up litter Bring inside natural materials for children to explore

Exploration and Critical Thinking: Developing STEM Skills | SCIENCE EXPLORATION AND KNOWLEDGE (SEK)

SEK1e: Environment and Ecology: Children will demonstrate emerging understanding of their impact on taking care of the world.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DEVELOPMENTAL INDICATORS	1eYP-1 Recognize unique features in the environment	1eOP-1 Describe how changes to the environment occur
	1eYP-2 Participate in activities that keep the environment clean	1eOP-2 Discuss how actions positively and negatively impact the environment
	1eYP-3 Describe ways to protect the environment	1eOP-3 Demonstrate conservation as part of daily routines
	1eYP-4 Differentiate the habitats where species live	1eOP-4 Describe the features of habitats that species need for life
IG OF	Notice limbs that have blown down from a windstorm	Notice a rainbow and research how it happens on theinternet
MPLIN	 Talk about the way an adult mowed the lawn or planted flowers 	 Talk about what happens to fish if there is too much trash in the water
SA \$VAB	Sweep the sidewalk or rake leaves as part of	Help with sorting recycling into different categories
BSEF	environment clean-up	Turn over a piece of paper to color on both sides
EN'S O	 Help put the trash out Explain that fish need to live in water; ants crawl on the ground Participate in activities that demonstrate care for the environment Explain that fish live in water and birds like to fly in the sky 	 Remind another child to turn off the water after they wash hands, saying "We have to be careful not to wastewater."
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS		 Tell an adult that "Fish will die if they jump out of the water." or "Bats fly at night because that's when they can see best."
		 Tell how at least one plant or animal is important to the environment
		Sort animal cards by their habitat
OF SNS	Read books about Earth Day	Make a worm farm and record observations
8 E	 Remind children to turn off lights or equipment when not in use 	 Put a plastic cover or bag over a plant to make a mini green house
SAMPLII VABLE AC	Check toys to make sure they are in good repair	Take recycled cans or bottles to a recycling plant and use the money for a child-determined purchase
SAMPLII EN'S OBSERVABLE AC	Put out bins to sort recycling into paper, foil, plasticInclude natural materials for use during art	Save paper scraps for use in a collage or other art project
	Collect rainwater and use to waterplans	Make drums or other instruments from recycled materials
CHILDREN'		Read books about litter's impact on animals or the importance of taking care of the earth



SEK2a: Use of Tools: Children will use simple and more complex tools to accomplish a task.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
ICATORS	2al-1 Manipulate toys, often with a purpose	2aYT-1 Explore the use of simple tools to get results	2aOT-1 Use simple tools to build knowledge and obtain a result
DEVELOPMENTAL INDICATORS		2aYT-2 Explore simple technology tools	2aOT-2 Include technology tools or toys during play
DEVELOPA		2aYT-3 Observe the function of technology tools in the environment	2aOT-3 Identify different types of technology
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Crawl or climb on furniture to reach a desired toy or object Bang toys together or shake them to make noise Use spoon or cup 	 Hold a toy phone to ear Push a button a toy to hear the sound Hit the different buttons on a busy box to see what happens Pull a string to bring a toy closer Bang on tray with spoon to hear the sound it makes 	 Manipulate simple tools like crayon, fork and spoon, with purpose Use a toy phone to call someone Play the notes on a toy piano to make a song Choose the button on the busy box to watch a specific character appear Pretend to take pictures with a play camera
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Include toys that require action like pushing buttons, shaking to make noise Describe the reason you are performing a task, "I'm using this comb to smooth out your hair." Offer spoons or cups to hold or use during feeding 	 Describe what is happening when the child is performing an action, "You are making music when you tap thatdrum." Offer non-toxic and washable crayons and paper for children to practice drawing Provide toys that mimic technology such as pretend cell phones or tablets 	 Include a variety of basic tools forchildren's use Introduce play phones, microwaves, coffee makers, etc. in the dramatic play area Model the use of a camera and add toy cameras for play Ask children to push the button to find the hidden character Talk about and model the uses of specific tools

SEK2a: Use of Tools: Children will use simple and more complex tools to accomplish a task.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
ICATORS	2aYP-1 Use tools to solve problems	2aOP-1 Use or adapt appropriate tools and materials to create or solve problems
DEVELOPMENTAL INDICATORS	2aYP-2 Use a variety of simple technology tools with purpose	2aOP-2 Use technology tools to seek out information or an answer to a problem
DEVELOPA	2aYP-3 Talk about the ways in which specific technology tools are used	2aOP-3 Explain the purposes of specific technology tools
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Use a shovel to dig a hole Use markers or pencil to write a story Play a matching game on a tablet Call the doctor on a pretend cell phone Take pictures of a group of children with a camera Explain that a firefighter uses a hose to put out a fire Use the mouse of a computer 	 Use a stick to move a bug so it can be inspected Measure different sizes of cups to find out which one will fit in the small box Use a laptop or table to gain information about bears and hibernation or how to make muffins Ask Alexa, "What is the weather going to be today?" Move the cursor on a computer screen
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Ask questions about how specific tasks might be accomplished, "What tool do you think would help us reach that toy?" or "Which kind of art tools do you want to use to draw a picture?" Model the use of smart phone cameras and ask, "Can I take a picture of that building and send it to yourfamily?" Provide opportunities, with adult guidance, for children to use laptops or tablets to acquire information Talk about the tools needed for specific professions, "Doctors use stethoscopes to hear your heart." or "Carpenters use hammers and nails to build." 	 Provide varied types of tools in different learning areas: crayons, markers, pencils, stamps in the art area or pegs, laces, magnets inmanipulatives Use non-traditional tools like string to measurea table or blocks to determine height Include time for children to use laptops or tablets to find out more about a specific topic Post photos that show different types of technology and people using technological tools Use musical instruments and music for children to express feelings



SEK2b: Media Literacy: Children will demonstrate an understanding of the types of information they are receiving through media.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
DEVELOPMENTAL INDICATORS	Not yet an expectain best through hands- interaction with their technology under two View Appendix Six for ac on technology in ea	on exploration and world. The use of is discouraged. dditional guidance	2bOT-1 Begin to differentiate real and pretend 2bOT-2 Answer questions about whether events or ideas would really happen
SAMPLING OF OBSERVABLE ACTIONS			 Tell another while playing in the dramatic play area, "We can't really drink this juice." Wear a doctor's coat and stethoscope, "I am going to be the doctor." Ask an adult reader, "Can monkeys really jump like that?"
SAMPLING OF OBSERVABLE ACTIONS			 Preview books, songs and photos before they are shared with children to be prepared to ask and answer questions Ask questions about real and pretend, "Doyouthink there are really monsters that live under your bed?" Ask questions about realistic expectations, "Can you really jump all the way up to the sky?" or "Do you think cows can really jump over themoon?"

^{*}Assistive technology equipment may benefit children with disabilities who are approximately 18 months and older.

SEK2b: Media Literacy: Children will demonstrate an understanding of the types of information they are receiving through media.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DEVELOPMENTAL INDICATORS	2bYP-1 Identify real and pretend in stories or movies	2bOP-1 Differentiate between real or pretend objects or situations
	2bYP-2 Relate events or characters in a story to ones in real life	2bOP-2 Discuss if information is realistic or could actually happen
EVELOPMEN	2bYP-3 Identify the way technology tools can be used for both entertainment and to acquire information	2bOP-3 Describe the specific uses for technology tools
۵	2bYP-4 Predict what might be inside a package or a story based on pictures or appearance	2bOP-4 Identify differences between packaging and what's inside
	2bYP-5 Ask questions about a story to gain more information or clarity	2bOP-5 Discuss the ways one can find out more information
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Tell an adult after reading a story, "That happened to me." or "I can swim like that person." Use a laptop to play a game Draw a picture about a recent event or experience Use words like laptop, internet, log on, ipad, printer Look at a package and guess what type of toy is inside Feel the shape of a package to identify the type of object within Ask questions about why a character performed specific actions or what the photos in a book represent, "Why did that boy in the story laugh after he heard that song?" 	 Tell a friend, "We can use the laptop to learn about worms." Ask an adult, "Can I use the phone to take a picture?" Talk about whether the packaging accurately indicates what is inside Notice that the packaging represents a character differently than the actual character Explain to an adult, "I drew it with big eyes because he has super powers." Tell an adult, "I think I saw a picture about birds in the book we read last week." Ask, "Why did that story talk about that child being afraid?" or "Why did that man on TV say, stay tuned?"
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Ask probing questions during a book reading, "Do you think that could really happen?" Talk about the packaging, the pictures and wording on cereal or game boxes, "Do you think rabbits are really different colors?" Ask children why or how they represented a character or event in a drawing Ask what happened they they clicked on a tabor icon on the laptop Pause a story reading and ask children to guess or predict what might happen next 	 Ask children, "Where or how can we find out more information about that?" Ask children to predict what might be inside a box by looking at the packaging Encourage children to draw their own packaging design, "What would you draw on an ice cream box to show that it's both vanilla and chocolate?" Talk about the differences between reality and make-believe that children see on media Ask questions about information that was shared on a video, "Do you think that dogs really bark when they see cars go down the road?"



SEK2c: Digital Citizenship: Children will demonstrate safe use of technology.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
DEVELOPMENTAL	Not yet an expectation through hands-on interaction with their technology under two i Appendix Six for addi technology in ea	exploration and world. The use of is discouraged. View itional guidance on	2cOT-1 Use the computer or other digital media with adults' permission and guidance
SAMPLING OF OBSERVABLE ACTIONS			 Tap and swipe screens to get to next one Complete simple computer games with shapes or counting
SAMPLING OF OBSERVABLE ACTIONS			 Use digital terminology Model and remind children of the safe and appropriate ways to use equipment Partner children to findthe answer to a question Ask children for permission before posting one of their products Be critical about choosing apps and talk about your reasons When children are using digital equipment, talk about what they are doing or seeing; ask questions, while giving time for them to figure things out Create e-books about children's characteristics Create a media plan and involve children in its development Think out loud about the decisions you are making for posting, choosing apps, etc.

SEK2c: Digital Citizenship: Children will demonstrate safe use of technology.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DEVELOPMENTAL INDICATORS	2cYP-1 Follow rules for safe use of digital media	2cOP-1 Identify appropriate and inappropriate use of digital media
DEVELO	2cYP-2 Share use of technology to play a game or find out information	2cOP-2 Collaborate with others to create a product or investigate information
	2cYP-3 Demonstrate familiarity and understanding of the meaning of technology terms	2cOP-3 Use technology terms such as mouse, keyboard, printer as part of daily conversation
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Show awareness of specific keys on a keyboard such as the tab bar or enter Use basic digital terminology, "mouse, swipe, log-on, cursor" Partner with another child to play a computer game Look at and comment on photos that have been posted on social media With adult guidance, use an app to talk with another adult who is long distance 	 Ask to log onto the computer to find out information about a topic Work with a partner to find hidden pictures on a computer or iPad Ask a teacher, "Can Jamie and I look at those pictures of trains again?" Tell a friend, "You need to click the mouse to move the cursor." Tell an adult, "Keisha forgot to turn off the TV." or "I need to charge this phone."
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Use digital terminology Model and remind children of the safe and appropriate ways to use equipment Partner children to find the answer to a question Ask children for permission before posting one of their products Be critical about choosing apps and talk about your reasons When children are using digital equipment, talk about what they are doing or seeing; ask questions, while giving time for them to figure things out Create e-books about children's characteristics Create a media plan and involve children in its development Think out loud about the decisions you are making for posting, choosing apps, etc. 	 Use digital terminology Model and remind children of the safe and appropriate ways to use equipment Partner children to find the answer to a question Ask children for permission before posting one of their products Be critical about choosing apps and talk about your reasons When children are using digital equipment, talk about what they are doing or seeing; ask questions, while giving time for them to figure things out Create e-books about children's characteristics Create a media plan and involve children in its development Think out loud about the decisions you are making for posting, choosing apps, etc.



SEK2d: Computational Thinking: The child will use emerging technological skills, concepts, and behaviors to solve problems or complete projects.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
ATORS			2dOT-1 Follow adult-directed steps to solve a simple problem
DEVELOPMENTAL INDICATORS	Not yet an expectation through hands-on explo with their world. The use two is discouraged. Vi additional guidance or learni	ration and interaction e of technology under iew Appendix Six for n technology in early	2dOT-2 Identify similarities patterns in the way things are designed, how they look or what they represent, with adult guidance
SAMPLING OF OBSERVABLE ACTIONS			 Turn the puzzle piece around to fit after an adult says, "Try it a different way." Respond to, "What can we use to clean up this mess?" Follow an adult's guidance to, "First, lift up this tab, then push here." Ask an adult to help transform a robot Respond to an adult's question, "How do I make this go?"
SAMPLING OF OBSERVABLE ACTIONS			 Give simple 1 or 2 step directions, "Walk to the table and sit down." or "Get your mat from the shelf." Hide a toy and give clues to find it, "It's near the chair." or "Look up high." Talk about the similarities in two transformers, "They both change from cars to robots." Remind the children, "This truck works the same way as the red one. First you rev up the wheels, then you let it go."

^{*}Assistive technology equipment may benefit children with disabilities who are approximately 18 months and older.

SEK2d: Computational Thinking: The child will use emerging technological skills, concepts, and behaviors to solve problems or complete projects.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
ATORS	2dYP-1 Accept adult support to identify the steps of a problem solution	2dOP-1 Break down the steps of a problem or activity (Decomposition)
DEVELOPMENTAL INDICATORS	2dYP-2 Find patterns or similarities in the environment or in objects	2dOP-2 Extend and create design patterns (Pattern Recognition)
DEVELC	2dYP-3 Predict what comes next in a problem-solving situation (or the sequence of a problem)	2dOP-3 Attempt to solve a problem by working through the sequence of steps (Algorithms)
		2dOP-4 Assist teacher in sorting needed and unneeded information
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Tell another child, "We need to put on the big blocks first so the tower doesn't tip over." Tell the others at the play dough table, "We each need to give Gail a little so she can play." Notice, "All of the houses on this side of the street have red doors." Sort trucks by type, "These trucks carry things; these trucks go fast." With an adult at circle time, determine the steps to making applesauce or how they might keep the rabbit from getting out of its cage 	 Discuss the ways they might strengthen a box so it doesn't keep breaking Repeat the clapping pattern, 1 clap, 2 claps, 1 clap Create a fence of blocks around a building so that the trucks other children are using don't knock downthe building Help an adult determine the information they need to take to complete a task, "Help me figure out which things we need to put together this bike." Follow the sequence of steps to log-in and open a document on a laptop
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Allowenoughtimeforchildrentodetermine their own steps to completing a task Provide toys or activities that have more than one use or way to complete Encourage children to try again after a mistake, "What do you think happened? How could you do it differently?" Follow a simple map, "We are here. It is showing us to go this way." Lay out a collection of objects and ask children to sort by similarities, "Can you find all the ones that are the same shape?" or "Which ones can be used for drawing?" Ask children how they might solve a problem, "What can we do to make sure we don't over-feed the fish?" or "We have already closed the door and windows. What else can we do to warm up the room?" 	 Ask children to think of a solution for how they might move a large, heavy object from one place to another Pose challenging questions or ideas, "What would you do if" or "How can we" Ask children to find the similarities or differences in objects or pictures Ask for help in identifying the things that are needed to prepare for a picnic Draw visual representations of the steps needed to accomplish a task Talk about the ways in which children's drawings may differ even though they represent the same thing

SEK3: Engineering Processes: Children will use emerging understanding of design processes for problem solving.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
ICATORS	3I-1 Explore toys that move	3YT-1 Use simple machines in play	3OT-1 Explore the way simple machines operate during play
DEVELOPMENTAL INDICATORS	3I-1 Stack objects	3YT-2 Notice characteristics of structures	30T-2 Build structuresthat involve stability and motion
DEVELOPI			3OT-3 Create representations of structures
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Play with different toys that move or make noise Manipulate objects to make things happen Stack rings on a stacking tower Stack 1-2 blocks 	 Push a play shopping cart or lawn mower Ride on simple riding toys Use the string to pull a toy across theroom Make simple towers or buildings with blocks Say, "uh-oh" if the block creation falls 	 Watch cars or trucks go down a ramp Put gears together to see how they connect, with adult assistance Use blocks as a train track and move trains along the "track" Combine wood blocks and legos to make a house Draw a picture of children on the playground climbing apparatus
SAMPLING OF RVABLE ACTIONS	 Make available a variety of different toys that infants can hold and manipulate Demonstrate how to stack or put 	 Provide toys that need to be pushed or pull and sufficient space for children to move them Provide toys that can be ridden 	 Provide boards or tracks from which children can make ramps or inclines Offer toys that go together or
SA S OBSERVAB	rings onto a stacking tower	 Offer soft blocks or nesting cubes and boxes that can be stacked andre-stacked 	 intertwine to move Encourage children to use unique or non-traditional materials to make or add to a creation
CHILDREN'		 Describe what happens, "It looks like your tower was very tall; I wonder if that's why the blocks fell." 	 Provide different types of the same toy for children to combine, such as wood, foam and lego blocks
			 Encourage children to draw and describe representations of things happening in their environment, then write captions of their descriptions

Exploration and Critical Thinking: Developing STEM Skills | SCIENCE EXPLORATION AND KNOWLEDGE (SEK)

SEK3: Engineering Processes: Children will use emerging understanding of design processes for problem solving.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DEVELOPMENTAL INDICATORS	3YP-1 Explain how a machine operates to complete a task	30P-1 Use unique materials to create a simple machine
	3YP-2 Build structures that deliberately experiment with stability and motion	30P-2 Follow a visual plan to create a structure
DEVELOPA	3YP-3 Draw or illustrate objects or experiences based on observations or interactions	30P-3 Create detailed observational drawings that represent objects
	3YP-4 Follow a set of sequential instructions to arrive at an answer (coding)	30P-4 Follow directional cues to accomplish a task
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Use ramps to race cars Tell an adult that a bucket is needed to move water from one container to another Use blocks to make a bridge between two buildings or add people to the top of a high structure and make them jump off into a pile of soft blocks Watch an ant carry a leaf and draw a picture to show what happened Draw a picture of self playing ball Use a set of clues to find hidden toys, "Look near the chair, now under the table, pull off the blanket." 	 Create a telescope from a paper towel holder Use a stick as a lever to lift a worm onto a leaf Look at a simple illustration of a lego building and try to replicate it Draw detailed pictures of a toy or object that considers the color, size and small parts Carry a clipboard and pencil or crayon and draw an observation during a walk Use an adult's instruction to put the wheel back on a truck, "Turn it upside down, put the white side down, then push on the axle."
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Provide marble chasers or toys with ramps and inclines Pose questions about how things work or how things can be modified, "How can we make this bigger?" or "How can we move this heavy box?" Encourage children to try out their ideas and to modify them as needed Provide opportunities for children to record their observations of new things or to draw representations of specific events Conduct simple scavenger hunts, giving step by step clues for children to find something Provide simple maps to guide children's search for an object 	 Give step by step directions that result in a completed task Enlist children into helping to design maps or sets of directions for locating an object or participating in anevent Provide loose parts or different materials that can be used in unique ways Take children on observation walks, where they record, through drawing, something they've observed or experienced Provide toys or objects that can be taken apart and put back together
	an object	



Adaptations and Accommodations for Children with Unique Needs

Environment

- Have a sensory and/or light table in your room.
- Display real pictures of living and non-living things around your classroom or in your science center.
- Include a recycling center with pictures showing how to sort objects.
- Have items labeled with words/pictures, and include labels from children's native languages.

Daily Schedule and Routines

- During small group allow your students to explore various types of materials to engage their five senses.
- Simplify a complicated task by breaking it into smaller parts or reducing the number of steps.
- Allow for many opportunities for repetition and practice.
- Adjust the length of an activity to accommodate children's needs.
- Introduce new concepts early in the day when children are most alert.

Materials

- Use a variety of textures in the table such as dried beans, rice, shaving cream, gelatin, or mud.
- Have actual living and non-living objects for children to explore.
- Have visuals listed of rules on how to handle technology.
- Use pictures and stories to illustrate the life cycle of animals and plants.
- · Use touch screen devices or switches.
- Provide pictures of steps of the solution to a problem.

Instruction and Activities

- · Make learning as hands on as possible.
- Have visuals that correlate with your lessons.
- Use various ways to present lessons (i.e one on one, small group, with media, manipulatives, largegroup).
- Have visual supports and various ways students can answer during activities.
- · Use short and concise language.
- Use higher level questions, content, and opportunities to ask questions for advanced learners.
- Learn and use a few key terms from children's native languages.



Children use scientific thinking to discover and problem solve the ways in which materials can be used in different ways to create different things. Early learning programs support children's creativity when they have a good supply of loose parts on hand. Loose parts are materials that can be combined, moved, carried, or taken apart and put back together. They can be natural items like pinecones, leaves or pebbles or recycled objects like paper towel tubes, cardboard or wrapping paper. Loose parts may be toys that can be used on combined in different and unique ways. For example, blocks, paper and pencils, and pots and pans may be combined to create a restaurant.

A Sampling of Foundational Practices

Environment and Materials

- Rotate materials in the science area or sensory table.
- Use real materials for exploration and learning.
- Include a pet or fish for children to care for, being mindful of allergies or sensitivities.
- Bring in plants for children to care for.
- Use materials to stimulate children's senses.
- Plant a garden.
- · Bring natural materials indoors for learning.
- Add technology tools, ipads and tablets or cameras, to be used with adult support.

Instruction

- Use cooking experiences to convey scientific concepts.
- Use real materials or photos of real objects or activities to explain concepts.
- Encourage children's observation and recording of objects and activities through graphs and charts or drawings.
- Ask probing questions that stimulate children's thinking.
- Create children's projects that extend over days to encourage their in-depth exploration and problem solving.

Children's Books

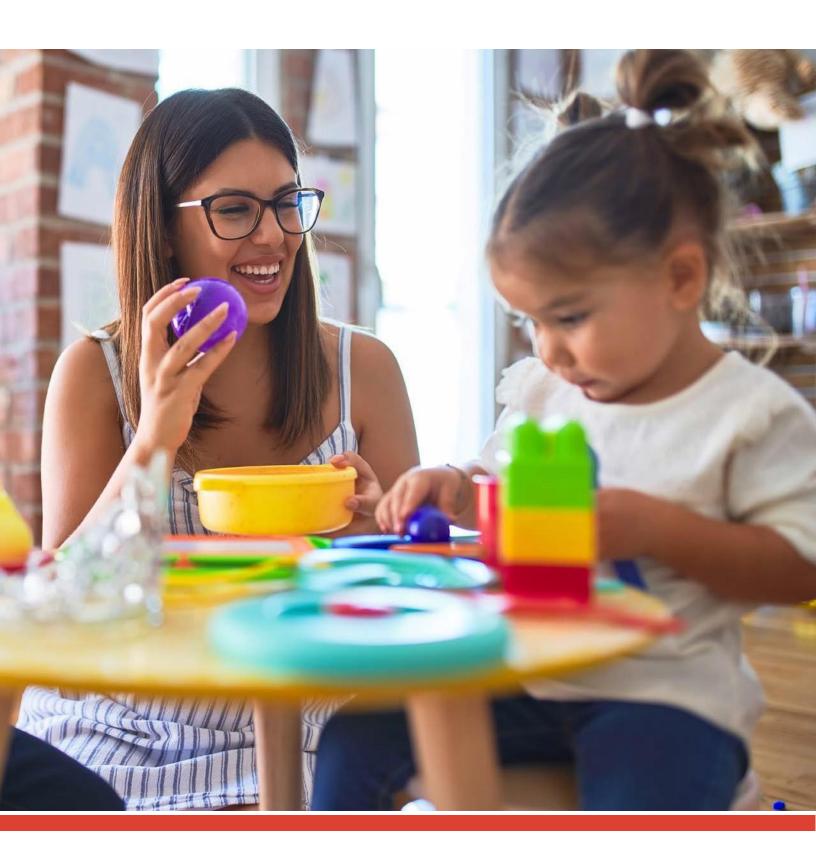
- In a Small, Small Pond by Denise Fleming
- The Listening Walk by Paul Showers
- I Spy in the Sky by Edward Gibbs
- Inch by Inch by Leo Lionni
- Mama Zooms by Jane Cowen-Fletcher
- What is A Scientist? by Barbara Lehn
- The Moon Book by Gail Gibbons
- Are you an Ant? by Judy Allen and Tudor Humphries
- · Roll, Slope, and Slide by Michael Dahl
- · Snail Trail by Ruth Brown
- · My Five Senses by Aliki
- Pete the Cat, Out of This World by James Dean
- Matter: Physical Science for Kids by Andi Diehn
- Baby Code by Sandra Horning
- · Baby Loves Gravity by Ruth Spiro
- · Black Bird, Yellow Sun by Steve Light
- · I Fall Down by Vicki Cobb
- Oscar and the Snail: A Book About Things That We Use by Geoff Waring
- Pop! A Book About Bubbles by Kimberly Brubaker Bradley
- All Around the Seasons by Barney Saltzberg

Adult Resources

- Worms, Shadows and Whirlpools: Science in the Early Childhood Classroom by Karen Worth and Susan Grollman
- Mudpies To Magnets by Williams, R.A., Rockwell, R.E., and Sherwood, E.
- Science is Simple: Over 250 Activities for Preschoolers by Peggy Ashbrook
- STEM in Early Learning Series by PDG TA. https://pdg.grads360.org/#program/ste m-in- early-childhood
- Making and Tinkering With STEM: Solving Design Challenges With Young Children by Cate Heroman

Family Engagement

- Provide information for families about screen time and the use of technology with young children.
- Invite families to help tend a garden and create a vegetable stand for families to use the produce.
- Schedule a family night event to look at the stars.
- Create "take home" kits with magnets and related books or water play activities. Invite families to record their experiences and share when they return the kit.



MATHEMATICAL THINKING (MAT)

Exploring, Processing, and Logical Reasoning



Math is everywhere! Children are learning math as they experience their world. They compare quantities, find patterns, navigate in space, and grapple with real problems during their daily routines and activities. They find the pattern of stripes on their shirt, count the steps as they climb or curl up to fit through a tunnel on the playground. They notice that a friend has more blocks and ask for more or they open boxes to find out what's inside.

Adults build children's mathematical thinking when they use everyday experiences for learning, pose questions to spark children's curiosity and interest, and offer opportunities for children to repeat and practice skills. Professionals who offer both informal and formal ways for children to learn math support skill mastery. They should intentionally include materials that encourage counting, sorting, and matching, help children recognize and find the solutions to simple problems during play, but also build specific activities that introduce math concepts and vocabulary.

Did you know?

Your attitude about math makes a big difference in the way young children experience mathematical concepts and skills.

Do you make math fun? Do you incorporate math learning into everyday experiences? If you had trouble with math or disliked it when you were in school, try to leave those negative feelings at the door and help children get excited about numbers, shapes, and patterns. Build on their curiosity and energy to help them develop the attitudes, knowledge and skills about math that will impact their learning for life.

MAT 1 Numbers and Quantity

MAT1a: Number Relationships

MAT1b: Counting and Number Sense

MAT 2 Algebraic Thinking MAT2a:

Operations MAT2b: Classification MAT2c:

Patterns

MAT 3 Spatial Reasoning and Geometry

MAT3a: Spatial Reasoning

MAT3b: Geometry

MAT 4 Measurement and Data Analysis

MAT4a: Measurement

MAT4b: Logical Reasoning

MAT1a: Number Relationships: Children will understand the concept of numbers, and the relationships between numbers and quantities.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
DEVELOPMENTAL INDICATORS	1al-1 Ask for "more" through gestures or respond to adults' questions about wanting more	1aYT-1 Use words that indicate understanding of quantity – more or all	1aOT-1 Use language to refer to amount and quantity, such as some, more, another, nothing (zero)
OPMENTAL I	1al-2 Give an adult two or more objects when asked for them by name	1aYT-2 Explore quantity through dumping and filling	1aOT-2 Compare 2 groups of objects and tell which has more
DEVELO	1al-3 Line up objects in one hand with another object in another hand	1aYT-3 Identify more or less with a small number of items without counting	1aOT-3 Subitize (immediately recognize without counting) up to two objects
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Reach for a second cracker so both hands are holding one Point to, reach for, or wiggle arms and legs in excitement to show interest inmore Observe number in songs and finger play 	 Ask "More milk" Say, "all gone" after finishing a snack Fill a bucket with sand and dump over andover Repeat the identified number after hearing adult say it Dump a box of blocks, put them back in and dump again 	 Ask for "another" cookie Add counting bears to a group and say, "I added some more." Look at a set of two objects and identify it as 2 without counting Point to a written numeral and ask, "What number is this?" Use simple markings or symbols to represent numbers Try to hold up three fingers to represent age while saying, "I'm three yearsold."
SAMPLING OF PROFESSIONALS' PRACTICES	 Describe an infant's actions, "You want another cracker." or "I see you're excited to get more milk." Sing songs and finger plays with numbers 	 Point to the numerals on the page as you read counting books Sing songs and finger plays that include numbers Post signs with numeralsin visible places Provide groups of materials with varying amounts of objects Use comparison words, "Jonah has more blocks." 	 Talk while doing math operations, "I need 3 pencils but I only have 1, I'll need to find 2 more." Play, "which is more" games where children need to guess which cup or container has more objects Write the number of children who can play in a learning area on signs

Exploration and Critical Thinking: Developing STEM Skills | MATHEMATICAL THINKING (MAT)

MAT1a: Number Relationships: Children will understand the concept of numbers, and the relationships between numbers and quantities.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DEVELOPMENTAL INDICATORS	1aYP-1 Understand that written numerals represent quantity, including zero (up to 5)	1aOP-1 Understand that written numerals represent quantities of objects (up to 10)
	1aYP-2 Compare groups of objects and determine which has more or less when asked	1aOP-2 Compare groups of objects and tell which is same or different, more, less, or fewer
DEVELC	1aYP-3 Subitize (immediately recognize without counting) the number of objects in a set of four objects	1aOP-3 Subitize (immediately recognize without counting) five or more objects
	1aYP-4 Identify some written numerals in the environment	1aOP-4 Identify written numerals from zero (0) up to 10
		1aOP-5 Match numerals with the correct number of objects, with assistance
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Match numeral puzzles that have a written numeral and the corresponding number of objects Sort objects into groups of 5 Look at a group of 4 objects and identify it as 4 without counting Hold up four fingers and say, "I'm four." Begin to differentiate written numerals from letters` Note the number of children who can play in a learning area by the posted sign 	 Put together a puzzle that uses the written numeral and corresponding number of objects up to 10 Look at a group of 5 objects and identify it as 5 without counting Read the numerals 1-10 Attempt to write numerals Count two different sets and tell which is more
SAMPLING OF PROFESSIONALS' PRACTICES	 Talk about the room arrangement, "I need more chairs at this table." Provide groups of similar objects that can be compared Hold up fingers and ask, "How many?" Poll children about a question, then make a graph that depicts the findings; "More children want to play in the block area than the art area." Use math puzzles and lotto games to match numerals and numbers of objects Arrange different groupings of numbers and ask children to identify the one with "3" or the one with "5" 	 Include objects with numerals, such as clocks, timers or calculators or thermometers in learning centers Play a game where children are asked to guess, "Howmany?" Play a simple game like Bingo, where children need torecognize numerals Provide puzzles and matching games that require children to sort and compare numbers of objects Introduce cooperative math games on the laptop or tablet

MAT1b: Counting and Number Sense: Children will connect number names to quantities.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
DEVELOPMENTAL INDICATORS	1bl-1 Show interest in adult's counting movements and songs	1bYT-1 Rote count, not always in sequence (1, 3, 2)	1bOT-1 Rote count up to 5 in sequence
			1bOT-2 Count backwards from 3 with assistance
DEVELOPMEI			1bOT-3 Place objects in one- to-one correspondence relationships during play
_			1bOT-4 Count out 1 or 2 objects when asked
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	Engage with adult who is singing or doing finger plays that include numbers	 Mimic child who is counting while dressing, "One sock, two socks" Count objects withadult, repeating the number Participate in finger plays and songs that include counting 	 Count out 3 crackers Rote count in correct sequence to 5 Hold up fingers while counting in a finger play Point to objects while counting objects up to 5 Starting at 3, count backwards to 1
SAMPLING OF PROFESSIONALS' PRACTICES	 Sing songs or act out finger plays that involve numbers, "1-2-3-4-5, once I caught a fish alive" Count children's body parts, "You've got two legs, 1-2." 	 Count with children as they get dressed, "one button, two buttons, three buttons!" Count steps Count the number of crackers as you lay them on a napkin Sing counting songs and rhymes 	 Include toys and objects in different learning centers that encourage counting Use songs and finger plays that include counting Count in different languages Count children out loud during transitions Ask children to help set the table, asking them to put a spoon next to each plate Play "how many" by holding your hand behind your back and bringing it out with a few fingers raised

MAT1b: Counting and Number Sense: Children will connect number names to quantities.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
CATORS	1bYP-1 Rote count up to 10 in sequence	1bOP-1 Rote count up to 20 in sequence
NTAL INDI	1bYP-2 Count backwards from 5	1bOP-2 Count backwards from 10 to 0
DEVELOPMENTAL INDICATORS	1bYP-3 Begin to demonstrate one-to-one correspondence up to 10 during daily routines	1bOP-3 Demonstrate one-to one correspondence when counting objects placed in a row (one to 15 and beyond)
	1bYP-4 Count out a specified number of objects up to 5	1bOP-4 Count out a specified number of objects up to 10
		1bOP-5 Understand that the last number represents how many objects are in a group
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Lay out small crackers on each corner of the napkin and one in the middle Rote count with accuracy up to 10 Count down a rocket ship takeoff, starting at 5 Count on a calendar how many days until a special event, with adult support Accurately count 10 blocks while pointing to each 	 Count the number of children who are present Match a cup to a napkin while setting the table Rote count with accuracy to 20 Count down until it's time to go outside, starting at 10 and ending with 0 (zero) Count out 10 counting cubes when asked Count 10 bears and then tell you, "There are 10 bears." Identify what's missing after adult removes an object from a collection
SAMPLING OF PROFESSIONALS' PRACTICES	 Display counting books and objects Ask children how many as part of their play, "How many blocks do you have?" Count the steps it takes to walk to the bathroom from the table Ask children to count out 5 crackers for their snack Count and verbalize the last number to show quantity, "1-2-3-4-5; I have 5 crayons." Lay out sets of 1-2-3-4-5 objects and count with child, "Let count these bears together to see how many we have." Count backwards with children before you start to read a story 	 Provide many opportunities to count for authentic reasons Count the number of children who are present Invite children to help you count heads while lining up to go outside Number the bottom of empty egg carton cups and ask children to put the correct number of chips in each egg cup Invite children to count steps with you as you move from one location to another Provide natural objects like rocks or acorns to count Ask children to count backwards as they await a task Ask children to count out 10 blocks

MAT2a: Operations: Children will develop an understanding of putting together, adding to, taking apart, and taking from.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
DICATORS	2al-1 Hold one object and reach for another at the same time	2aYT-1 Notice changes in quantity of objects or look for a missing object	2aOT-1 Demonstrate an understanding that "adding to" increases quantity
DEVELOPMENTAL INDICATORS			2aOT-2 With adult guidance, change the size of a set of objects by "adding to" or "subtracting from" during child-led play
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Hold a cracker and reachfor another Try to pick up a block while already holding another 	Notice that a block dropped and look forit Add one more to a group of objects when asked	 Remove or add objects when asked State, "I ate one apple slice, now I have one left." Tell an adult, "I need one more block to make this tower taller."
SAMPLING OF PROFESSIONALS' PRACTICES	Describe the action, "You would like another cracker? You already have one and now you want another."	 Ask children to help you count out objects Describe your actions or needs, "I have 3 apples, but there are 5 children, I need to get 2 more apples." 	 Call attention to changes in quantity, "You had 3 crackers, you ate one, now you have 2." Describe children's actions when they are adding, "You just added one more block to the tower." Tell a child, "This tower is too high, let's take away two blocks so it won't tip."

Exploration and Critical Thinking: Developing STEM Skills | MATHEMATICAL THINKING (MAT)

MAT2a: Operations: Children will develop an understanding of putting together, adding to, taking apart, and taking from.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
ICATORS	2aYP-1 Demonstrate an understanding of addition or subtraction concepts during play or daily life	2aOP-1 Use addition and subtraction concepts while playing with sets of objects (0-10).
DEVELOPMENTAL INDICATORS	2aYP-2 Notice the size of a set by combining or taking away with adult support	2aOP-2 Independently change size of sets by combining or taking away
DEVE	2aYP-3 Understand that each successive number is one more	2aOP-3 Understand that each successive number name refers to a quantity that is one larger
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Identify that DeShawn has 2 and that one more is needed to make 3 Respond to an adult's request, "There are 5 cups there. Let's take one away to make 4." Use fingers to count and show age Share play dough with another, "I have a lot, you can have some." Follow teacher direction to hop 2 spaces, then hop 3 more 	 Demonstrate sharing objects with another, "I have a lot, you can have one." Jump to the next numeral or space on a number line Look at 3 blocks and put in 2 more to make five Add blocks to a group, announcing the new number with each addition, "Here's one, now I'm adding one more to make two" Build a set of 5 objects, then divide it into 2 smaller sets
SAMPLING OF PROFESSIONALS' PRACTICES	 Use your fingers to show how addition or subtraction works Tell a child during dramatic play, "You paid me 2 dollars, but it costs 3 dollars. I need one more." Describe, "There are 10 children at this table and I have 7 cups, I will need to add 3 more cups so everyone has one." Talk out loud as you add more objects to a pile, "I had 3 blocks, I'm going to add another. Now I have 4." 	 Model word problems such as "We have 1 ball and 2 people. What can we do?" Play simple board games like Candy Land or Go Fish Use pattern cards or boards that depict addition: 4 green blocks in a row, then 2 yellow blocks to add Read books about adding or subtracting to teach the concepts Use and define math vocabulary "Addition is adding something to a group."

MAT2b: Sets: Children will classify and organize objects according to properties and attributes.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
DEVELOPMENTAL INDICATORS	2bl-1 Explore the characteristics of objects	2bYT-1 Match two identical objects	2bOT-1 Match two similar objects with one attribute
	2bl-2 Identify likes and dislikes in foods, sounds, and toys	2bYT-2 Sort objects by one attribute with adult assistance	2bOT-2 Sort objects by one characteristic during childled play
DEVELOPI	2bl-3 Touch and explore objects of different sizes and textures	2bYT-3 Compare simple objects	2bOT-3 Order objects according to size or shape
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Transfer objects from one hand to the other, looking at their attributes Show preference for specific toys Touch objects with different textures and feels Reach for a familiar toy 	 Gather the cubes from a basket of toys Put shapes into the appropriate opening on a shape sorter Match different size containers with their lids Bring the other sock to an adult when requested Notice the similarities and differences in counting bears 	 Match socks of the same color Separate all the red cubes from a collection of multi-colored cubes Notice that two objects are the same, "This car looks just like this one!" Select an object after hearing its attribute, "Can you find the red car?" Sort simple puzzle pieces Line up 3 bears according to size
SAMPLING OF PROFESSIONALS' PRACTICES	 Encourage children to seek out or try newtoys Introduce children to new adults in the company of familiar adults Include objects of different sizes, shapes and textures for children to manipulate Talk about the way objectslook and feel, "This blanket is very soft; this block is hard." 	 Talk as you clean up, "I'm going to put away all of the dolls." Provide pairs of objects and multiples of materials for matching Prompt children to look for similarities in objects, "Can you find the cup that looks like this one?" Provide shape sorters and other materials designed to promote matching 	 Encourage children to separate similar objects from a collection, "Let's find all the round ones." Ask children to sort objects according to one attribute, "Put all of the red ones here and all of the blue ones over here." Provide pairs of different objects for children to sort sorting and classifying Model and describe sorting, "This one is a circle. I'll put it in this pile. This one is a square; it's different from a circle. I'll put it here."

Exploration and Critical Thinking: Developing STEM Skills | MATHEMATICAL THINKING (MAT)

MAT2b: Sets: Children will classify and organize objects according to properties and attributes.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
IICATORS	2bYP-1 Match many objects according to one attribute	2bOP-1 Match objects according to two or more attributes
DEVELOPMENTAL INDICATORS	2bYP-2 Sort and place a group of objects with one attribute	2bOP-2 Sort and place in a series objects according to more than attribute
	2bYP-3 Order up to 5 objects according to an attribute	2bOP-3 Put up to 10 objects in order according to an attribute
		2bOP-4 Demonstrate knowledge that the same set can be sorted in different ways
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Separate and line up all the red cubes Select a toy or object when adult describes the attributes, "Can you find the car with the red and black wheels?" Sort the edge and inside pieces of a puzzle Arrange a group of crayons by color Independently sort blocks by shape while playing in the block area 	 Separate the large red cubes and put them in a group Line up a group of counting cubes by color and shape Describe more than one attribute of an object, "This car has a red stripe and black wheels." Match forks and spoons from a collection of silverware Sort the same collection in different ways, such as by color, then by use, then by size Clean-up and return blocks and other materials to the correct container or shelf Sort buttons by shape, then regroup them and sort by another attribute such as color or size
SAMPLING OF PROFESSIONALS' PRACTICES	 Provide a variety of manipulatives, objects and other materials for sorting and classifying Ask children to sort objects by function, such as those for eating, those for writing Use routines for children to put objects into groups, "How many boys are here today and how many girls?" Play sorting games during transitions, "All those who are wearing shoes, line up. Now, all those who are wearing sneakers line up." 	 Ask children to sort objects, then tell you which has most Use "not" language to help children sort by one attribute, "This group of bears is red; this group is NOT red." Expand one-word answers by modeling complete sentences, "Yes, there are 5 girls here." Use clean up as an the for sorting: "Put all the square blocks on this shelf and all the long ones on this shelf." "Put the play dishes on the shelf and the play pots and pans in the stove."

MAT2c: Patterns: Children will recognize simple patterns in daily life and play experiences.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
DEVELOPMENTAL INDICATORS	2cl-1 Respond with regularity to a daily routine	2cYT-1 Begin to predict events in the daily schedule	2cOT-1 Identify what comes next in the daily schedule or steps within a daily routine
	2cl-2 Explore objects with different characteristics	2cYT-2 Notice the same characteristics in different objects	2cOT-2 Recognize a simple pattern in the environment
DEVELOPI			2cOT-3 Repeat a simple 2-part pattern, clap-clap or clapsnap
			2cOT-4 Understand the concept of "first"
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Put head down on an adult's shoulder after being fed a bottle Lift legs to help adult change a diaper Kick legs in anticipation of eating when put in the high chair 	 Sit down on the rug for circle when the music starts Show interest in the pattern or shape of objects when adult shows and talks about them, "See how this is round; it looks like a circle." Point to nose when adult says, "Here's my nose, where's your nose?" Repeat the word "blue" when adult names 2 objects of the same color Tell a child, "You have a dog and I have a dog." 	 Tell an adult, "I just washed my hands and now I need a towel to dry them." Ask, "We just washed our hands, is it time for snack now?" Notice that all the coats are hung up on hooks Tell an adult, "The garden has a row of red flowers, then a row of yellow ones." Follow the adult's movement pattern, Clap-stamp, clapstamp Say, "I'm first in line" or "I'm going to eat my carrots first."
SAMPLING OF PROFESSIONALS' PRACTICES	 Keep regular routines and try to avoid sudden changes Describe the steps of a routine, "First we talk off your wet diaper, then we wash your bottom, then we put on a fresh, new diaper." Describe the differences in objects, "Here are your pink socks and these are your blue ones." 	 Describe the sequence of routines as you perform them with children, "First we put on socks, then your shoes!" Ask child, "What happens next? We've washed hands, now what do we do?" Read stories that have patterns of words or phrases Describe characteristics of objects, "Feel this soft, white sock." Call attention to similarities in objects, "This block is blue and so is this one." 	 Remind children of the sequence of events or routine Read books with patterns Provide beads, buttons or counting bears that are 2 colors or 2 sizes and ask children to sort String beads on a necklace, naming them circle, square, circle, squareHelp child find the next bead in the sequence Call attention to patterns in clothing; "You both have stripes on your shirts!" Describe a sequence of events using ordinals like, first, second and last

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DEVELOPMENTAL INDICATORS	2cYP-1 Recognize that the daily schedule repeats and is the same each day	2cOP-1 Identify differences in the daily schedule or routine
	2cYP-2 Notice a missing or different element in a pattern	2cOP-2 Identify a pattern, and duplicate or extend
	2cYP-3 Create with adult support a simple A-B pattern (blue car, red car, blue car)	2cOP-3 Create a more complex pattern that includes different attributes
	2cYP-4 Identify first and last	2cOP-4 Identify more complex ordinals, such as second, third, or next,
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Tell a new friend, "We always wash our hands before snack and then we sit down on the carpet." Draw the same object in different colors or different sizes Notice that the stripes on one person's shirt are different than the stripes on someone else's shirt Duplicate a pattern of red bear, blue bear, red bear, blue bear Talk about who's first, second, etc. when children line up Point out the patterns of houses on the block 	 Ask about a change in the daily routine, "Why aren't we going outside now?" Clap out a pattern of fast, fast, slow, slow Look at a pattern of different colored and shapes blocks and duplicate Create a pattern from a collection of objects Notice that towers of blocks being built get taller – the first one has 2 blocks, the next one has 3 blocks, etc.
SAMPLING OF PROFESSIONALS' PRACTICES	 Use a picture schedule to remind children of the daily schedule Identify names or words that start with the same letter Call attention to the patterns that are within books Ask children to help you remember the steps of an activity Clap a sequence with more than 2 parts: clap fast, clap fast, clap slow Duplicate a pattern with one different part; ask children, "What's different about this pattern?" Call attention to the children who are first and last in line, "Luis is the engine and Maya is the caboose." 	 Remind children about a change in the daily schedule; "Tomorrow we have a visitor coming so we won't go outside in the morning." Ask what comes next in a pattern, "Here is blue, red, blue, redwhat comes next?" Invite children to re-create the patterns they've identified in books Provide groups of objects that are organized in different ways Call attention to patterns in the environment, "Look how each of these doors has square windows!" Line up a group of stuffed animals and ask, "Which one is first?"

MAT 3: SPATIAL REASONING AND GEOMETRY

MAT3a: Spatial Reasoning: Children will explore and describe the spatial relationships between objects, their environment, and themselves.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
DEVELOPMENTAL INDICATORS	3al-1 Watch how objects move	3aYT-1 Move objects in different ways to understand how they work	3aOT-1 Manipulate objects by moving them in different ways and directions
	3al-2 Explore how to make objects move or fit together	3aYT-2 Deliberately move objects to make them fit in spaces	3aOT-2 Stack and build with objects intentionally to create something new
	3al-3 Explore space with body by rolling, crawling or climbing	3aYT-3 Move body in different ways	3aOT-3 Move body to show understanding of basic directionality
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Pull off a blanket to play peekaboo Put a block inside a bucket Try to put the lid on a container Look for an object that has fallen Crawl over pillows and try to climb onto chairs or stools 	 Shake or tap objects to see if they move Manipulate nesting boxes or cups Climb into a large cardboard box Stack blocks to make a small tower Move or dance to different types of music Roll a ball and watch it go 	 Move a car along a track or moveit through the air Roll or throw a ball Put together simple puzzles Stack blocks to make a house Jump 3 times or clap 2 times according to an adults' instruction
SAMPLING OF PROFESSIONALS' PRACTICES	 Offer objects that nest inside one another or stack according to size Show how a small box fits into a larger one Arrange the space to encourage children to safely climb or crawl Include cars or trucks or objects that move 	 Put out different sized boxes for children to climb in and out of Include trucks and cars of different types and sizes that move in different ways Play simple movement games and songs Add different types of stacking toys Include different types of balls for rolling and gentle throwing 	 Use prepositions that describe position, "Cameron, pick up the cup that fell under the table." or Jared, you are sitting next to Sarah." Sing Head, Shoulders, Knees and Toes Play simple relay races that ask children to move in different ways, "Hop like a bunny, fly like a bird." Include materials that fit together like puzzles or blocks

Exploration and Critical Thinking: Developing STEM Skills | MATHEMATICAL THINKING (MAT)

MAI 3

MAT3a: Spatial Reasoning: Children will explore and describe the spatial relationships between objects, their environment, and themselves.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DEVELOPMENTAL INDICATORS	3aYP-1 Manipulate objects by moving them to solve problems	3aOP-1 Visualize a spatial transformation
	3aYP-2 Manipulate objects to make them fit together, or inside another, or to create something new	3aOP-2 Describe the way in which objects fit together or verbally share plans with how to fit objects together
	3aYP-3 Follow basic directions about directionality and positioning self in relation to objects	3aOP-3 Move body in different ways independently or following directions in response to music or song
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Play a modified version of Simon Says, "Touch your head, nowtouch your arms" Tell an adult, "I am putting bear next to the dog." Sit next to another child, stating, "I'm sitting next to Elijah" Answer the question, "Where do we hang our coats?" Find the hidden object from a description, "It's under the table." Participate in an obstacle course 	 Cut paper in half or flip it upside down and notice the change Follow or give simple directions, "Can you pick up the pencil that fell?" Tell an adult, "I'm going to put my picture on the window sill to dry." Attempt to identify which way to turn, left or right Clean up toys by putting them back in the original container Play "Going on a Bear Hunt" Play "Freeze", stopping movement whenever the music stops
SAMPLING OF PROFESSIONALS' PRACTICES	 Make obstacle courses for children that ask them to go in, around, over and through Provide toys that need to be put together Extend spatial understanding by adding on descriptive phrases, "We keep our coats on the hooks inside our cubbies that are near the front door." Play movement games that ask children to stand up, sit down, put hands on head, feet, etc. Create scavenger hunts or play hide-and-seek types of games 	 Map out the obstacle course as children go through Use direction words to tell a story Use left and right to describe position Ask children to crawl to a location Note, "Our tower needs a block here, can you think of one that would fit best?" Play songs or movement games that ask children to move their bodies in different ways Include puzzles or manipulative toys that require children to move them around to fit

MAT3b: Shapes: Children will explore, visualize, and analyze shapes and shape attributes.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
DEVELOPMENTAL INDICATORS	3bl-1 Explore objects of different 2 dimensional (2D) and 3 dimensional (3D) shapes	3bYT-1 Match 2D and 3D shapes	3bOT-1 Recognize and name shapes: circle, triangle square, cone, sphere 3bOT-2 Notice basic shapes in the environment
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	Touch and look at different shaped blocks or objects	 Find another circle when asked by adult Manipulate or touch objects of different shapes Match shapes in a shape sorter 	 Name the shapes on a shape puzzle while putting it together Find a circle-shaped or square object when asked Acknowledge that a ball is round Point to a triangle-shaped roof after reading about triangles in a book
SAMPLING OF PROFESSIONALS' PRACTICES	Provide different types of shaped objects and describe them as children play	 Identify the shapes of blocks, toys or foods, "I'm going to eat this square cracker." Show children basic shapes and help them to find another that looks the same, "Let's find another circle." Provide different types of toys and objects that are shapebased, like wood blocks, puzzles, shape sorters 	 Describe the shapes of food or objects in the environment, "We are eating circle crackers." "The paper towels are shaped like squares." Take shape walks to look for shapes in the neighborhood. "Look at that house; it's a square." "The sun is round like a circle." Either individually or in pairs, hand children a shape and ask them to find something like it in theroom

MAT3b: Shapes: Children will explore, visualize, and analyze shapes and shape attributes.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
CATORS	3bYP-1 Recognize and name more complex 2-D and 3-D shapes: oval, rectangle, sphere, cone	3bOP-1 Identify and classify 2-D and 3-D shapes by their attributes
DEVELOPMENTAL INDICATORS	3bYP-2 Identify and name shapes in play	3bOP-2 Visualize shapes by description and find them in the environment
DEVELO	3bYP-3 Combine shapes to make new shapes	3bOP-3 Complete complex shape puzzles
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Notice that 2 squares put together, make a rectangle Tell an adult, "That cloud looks just like an oval." Negotiate shape stickers with a friend, "I'm going to take the star sticker; you take the moon." Use different sizes of block to build a house or barn Go on a shape hunt during a walk to find triangles, circles, or square Put together tangrams or geo-boards 	 Describe the number of sides in a triangle or square. Identify that circles are round, they have no sides Notice the different shapes of road signs; stop sign is octagonal, yield sign is a triangle Use blocks to build a pyramid or solid square Put shapes together to make a design
SAMPLING OF PROFESSIONALS' PRACTICES	 Demonstrate how 2 squares put together make a rectangle Describe the attributes of shapes, "The rectangle has 4 sides: 2 long and 2 short." Provide different types of blocks or building toys Name and describe more complex shapes, "The moon is a crescent; a rectangle is longer than a square." 	 Talk about the characteristics of shapes Encourage children to use unit blocks to build creations and call attention to the shape(s) Provide shape blocks that can be sorted by the number of sides Graph the number of blocks that are circle, square, triangle, Create a class shape book by taking photos of shapes within the environment

MAT 4: MEASUREMENT AND DATA ANALYSIS

MAT4a: Measurement and Time: Children will explore and communicate about distance, weight, length, height, and time.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
ATORS	4al-1 Engage with adult in measurement games	4aYT-1 Use basic size words such as big, little	4aOT-1 Describe the length, weight, and height of objects
NTAL INDIC	4al-2 Play with toys of various shapes and sizes	4aYT-2 Explore measuring tools	4aOT-2 Pretend to use measurement tools in play
DEVELOPMENTAL INDICATORS		4aYT-3 Explore and identify, with adult support, the characteristics of objects	4aOT-3 Make simple comparisons about two objects' size
LING OF ACTIONS	Lift arms to play "so big"Play with blocks of different sizes and types	State, "big dog"Use a measuring tape in play, not necessarily for the	 Tell a friend, I'm taller than you." Look at a chair and say, "That is reallybig."
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS		correct purpose • Attempt to lift a big or heavy box	 Describe, "The bathtub has a lot of water in it." Use the measuring tape in the block area to measure the length of the blocks Hold two crackers and identify which is biggest
SAMPLING OF PROFESSIONALS' PRACTICES	 Play games that use size, "So Big" or "This Little Piggy" Provide toys of different sizes and weights for infants to explore 	 Describe the attributes of objects, "That box looks really heavy." Provide different types of measuring tools in the block or dramatic play area Model the use of a measurement tool Talk about time, "It took us so long to get there." 	 Compare objects by an attribute, "That leaf is bigger than this leaf." Provide objects that can be sorted into different attributes for comparison, such as blocks or counting cubes Include different measuring tools in different learning areas Use a timer to indicate the beginning or end of an activity

MAT4a: Measurement and Time: Children will explore and communicate about distance, weight, length, height, and time.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
ATORS	4aYP-1 Order objects by an attribute	4aOP-1 Order objects in a series according to size
DEVELOPMENTAL INDICATORS	4aYP-2 Use a variety of standard and non-standard tools to measure, with assistance	4aOP-2 Use a variety of techniques with standard and non-standard tools to measure and compare objects
DEVELOPME	4aYP-3 Compare objects based on more than one attribute	4aOP-3 Compare objects by two or more attributes
	4aYP-4 Demonstrate an awareness of simple concepts of time that occur within daily life and routines	4aOP-4 Show a beginning awareness of the concept of time as a sequence of events
		4aOP-5 Use beginning skills of estimation in solving everyday measurement problems
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Separate in a group all of the blue bears and all of the yellow bears Use small blocks to measure the length of a string Look at two cups and predict which holds more Compare several pretzel sticks to find the one that is longest and shortest Independently pick out a book to read after lunch (before nap) 	 Line up different sized blocks according to size Measure a table with string, a ruler or hands First, measure a box's length, then it's depth Look at a jar of crayons and guess "how many" Think about how much string is needed to go around a pumpkin Describe how many cubes would be needed to measure a child's foot Explain the order of a daily routine, "First we eat breakfast, then we play in learning centers, then we go outside."
SAMPLING OF PROFESSIONALS' PRACTICES	 Ask children to line up objects according to attribute, "Can you put all of the red dinosaurs in a row?" Help children think of different ways to measure an object, "How can we figure out how long this is?" Read <i>The Three Little Pigs</i>, then ask children to act it out. Ask children to predict which holds more and then find out Use vocabulary that indicates time: "We will do that in 15 minutes." 	 Provide different sizes of the same object and ask children to put them in order Ask children to fill different sized boxes with bead or small blocks to find out which holds more Read "Inch by Inch" by Leo Lionni and then measure objects to determine how many inches Ask children, "When do you think you'll be ready to share that toy? How many minutes?" Ask questions that require children to consider or predict how many

MAT4b: Logical Thinking, Reasoning, and Data Analysis: Child uses logical thinking and reasoning to solve meaningful problems and inform decisions.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
CATORS	4bl-1 Explore objects in the natural world to observe reaction	4bYT-1 Observe and imitate others to solve a problem	4bOT-1 Try multiple approaches to solve a problem
DEVELOPMENTAL INDICATORS	4bl-2 Seek objects that have disappeared or are out of reach	4bYT-2 Act on objects to gather information	4bOT-2 Take things apart and put back together
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Move objects from one hand to the other or shake them to see what happens Crawl towards a ball that rolled out of reach or pull a toy's string to bring it closer Pull off a blanket while playing peekaboo 	 Watch another child dump toys, then imitate the action Throw a ball to watch it bounce Stack blocks, then knock them down Open a box to remove an object hidden within 	 Build simple block buildings, knock them down and rebuild Put the bolts and screws onto a take apartcar Focus intently on stringing beads or putting pegs into a board Try different ways to reach an object that is too high
SAMPLING OF PROFESSIONALS' PRACTICES	 Offer toys that produce a response to action Place interesting toys just out of reach Provide nesting toys 	 Put items in small containers for children to open and remove Hide objects that children search for and find Talk about what others are doing, "Look at Miss Jen. She's putting that lid on top of the box." Provide toys that can be sorted in different ways 	 Ask, "How do you think we might reach that toy?" Remind children of the solution that worked previously, "Remember how we turned it upside down to get the ball out?" Provide legos or other blocks that can be put together and taken apart

Exploration and Critical Thinking: Developing STEM Skills | MATHEMATICAL THINKING (MAT)

MAT4b: Logical Thinking, Reasoning, and Data Analysis: Child uses logical thinking and reasoning to solve meaningful problems and inform decisions.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DEVELOPMENTAL INDICATORS	4bYP-1 Plan ways to solve problems with adult support	4bOP-1 Use trial and error to reach a solution to a problem
	4bYP-2 Ask or why, who, what, where questions	4bOP-2 Gather data to answer questions to problems
DEVELOPI	4bYP-3 With adult help, draw a conclusion based on data	4bOP-3 Make a prediction based on data
	4bYP-4 Participate in creating charts or graphs to represent data collection	4bOP-4 Interpret a chart or graph to explain data findings
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Ask why the blue car goes faster than the red one Ask a friend, "What's going to happen when we mix blue and red?" Comparetworamp heights and determine which one will make a car go faster Count a group of children to determine whether there are more boys or girls Help an adult create a graph about how many children like apples better than oranges by making marks beside orange/apple as children announce their preference 	 Observe children racing cars down different-sized ramps and note with hash marks which cars or ramps are faster Look at different-colored paintings to determine how many preferred red or blue Read a graph to discover how many children like peanut butter sandwiches plain or with jelly Develop a question for data collection, such as "What color are everyone's eyes?" and then determine a way to find the answer Predict whether more children are wearing sneakers or shoes
SAMPLING OF PROFESSIONALS' PRACTICES	 Help children explore graphing by arranging objects on the floor for them to sort and arrange Provide interesting materials that children can sort and classify to discover an answer Ask children who has more or the least of a certain attribute or characteristic 	 Ask children to look at two jars of buttons and predict which as more, then count to determine if theywere correct Invite children to conduct surveys to find out an answer to a question Help the children use the survey responses to create a representation of the answer Model analysis of a graph



Adaptations and Accommodations for Children with Unique Needs

Environment

- Use real items to help children understand mathematical concepts.
- Include classroom-made books with photos of children performing mathematical functions such as going in and out, counting, building with blocks, etc.
- Limit the number of children who may play in specific learning areas, posting the number.
- Adapt the length of activities based on the needs of the child.
- Present activities at varying levels so all children can reach and access them

Daily Schedule and Routines

- Simplify a complicated task by breaking it into smaller parts or reducing the number of steps.
- Address difficult concepts early in the day while children are fresh.
- Keep activities with a lot of cognitive demands short.
- Use pictures/visual aids throughout daily activities.
- Model and demonstrate math skills during routine activities, counting stairs, talking about the colors of clothing, pairing socks.
- Role play the way to solve math problems.

Materials

- Use real objects to count (i.e. money, buttons, Legos, balls).
- Ask daily questions that engage children's problem solving.
- Provide raised/textured objects and larger- sized manipulatives.
- Provide multiple types of sorting materials such as counting bears, shapes, blocks, counters and egg cartons, muffin tins, etc.
- Use "finished baskets" to let children know when their task is completed.

Instruction and Activities

- Teach basic concepts like more/less, big/ small, shapes, etc.
- Relate abstract concepts to things the child already knows.
- Use quick and short language.
- Use a multi-sensory approach that involves listening and hearing, seeing, touching and moving.
- Vary types of questions to accommodate children's differing abilities.
- Use math vocabulary/terms in your everyday language.



Young children who do well in math do well in school. And, those early foundational skills make a difference! When early childhood professionals support children's learning of counting, patterns, and measurement skills, they are laying the foundation for later mastery of more challenging, mathematical skills all the way through high school. In fact, research tells us that children's early math achievement is a bigger predictor of school success than reading! Add math into daily routines and play experiences to help them succeed in school!

A Sampling of Foundational Practices

Environment and Materials

- Include materials that involve math concepts in all activity areas.
- Include finger plays and counting in circle time.
- Make available games such as Candy Land, Guess Who or dice games.
- Limit the number of children who may play in specific learning areas, posting the number.
- Display the number name, symbol and number of dots to indicate numbers.
- Provide multiple types of sorting materials such as counting bears, shapes, blocks, counters and egg cartons, muffin tins, etc.

Instruction

- Incorporate mathematical questions during during routines or activities. "I wonder how many steps it will take to get to the snack table."
- Extend children's thinking about math problems while participating in their children's block or dramatic play.
- Use mathematical vocabulary with children.
- Develop scavenger hunts or active play strategies for children to find or use shapes or numbers in the environment.
- Talk about the patterns that occur in routines, materials, or events.

Children's Books

- Ten Minutes Till Bedtime by Peggy Rathmann
- Albert Adds Up by Eleanor May and Deborah Melmon
- Anno's Counting Book by Mitsumasa Anno
- Color Zoo by Lois Ehlert
- Fish Eyes by Lois Ehlert
- Changes, Changes by Pat Hutchins
- Chicka Chicka 1,2,3 Bill Martin, Jr.
- Push, Pull, Empty, Full Tana Hoben
- · Ten Apples on Top Dr. Seuss
- Miss Spider's Tea Party and Counting Book
- By Pamela Duncan Edwards
- Ten Little Ladybugs by Melanie Earth
- · First the Egg by Laura Seeger
- · Math Fabels by Greg Tang
- · Crash! Boom! A Math Tale by Robin Harris
- The Doorbell Rang, by Pat Hutchins
- · Inch by Inch by Leo Lionni
- The Napping House by Don and Audrey Wood
- I Went Walking by Sue Williams
- Shapes, Shapes by Tana Hoban
- Tangled: A Story about Shapes by Anne Miranda and Eric Comstock
- Inside Outside Upside Down by Stan and Jan Berenstain

Adult Resources

- Erikson Institute Early Math Collaborative: https://earlymath.erikson.edu
- MakingMathMeaningful(NAEYC) https://www.naeyc.org/resources/topics/ math
- Early Math: Zero to Three https://www.zerotothree.org/resources/299help- your-child-develop-early-math-skills
- Big Questions for Young Minds https://www.naeyc.org/resources/pubs/b ooks/ big-questions-young-minds
- Where's the Math? Books, Games, and Routines to Spark Children's Thinking https://www.naeyc.org/resources/pubs/books/wheres-the-math

Family Engagement

- Create a family space that offers resources on helping children build math skills.
- Send home the words to finger plays and songs that support math learning.
- Post a mathematical question of the week on a family bulletin board that encourages family members to work together to solve.



SECTION 3

Communication

Language and Literacy	147
Creative Arts	171



LANGUAGE AND LITERACY (LLT)

Understanding and Expressing by Speaking, Listening, Reading, and Writing



Children are born with the capacity to communicate with others. Language helps them form new relationships, develop social skills, and gather new information. Young children learn that language can be used to express their thoughts, feelings, and ideas and to understand others' thoughts, feelings and ideas. They learn to respond to adults with facial expressions, body movements, and eye contact and progress to babbling, then to verbalizing and eventually to engaging in conversations. Emergent literacy or learning to read and write, builds on those early relationships and experiences. Very young children view pictures in books, begin to hold or carry them and progress to pointing to pictures and turning pages. As children grow, they begin listening to and selecting books and show interest in writing. As children use books and other print materials, they learn book-handling skills, the fundamentals of reading and acquire the tools to express themselves through writing or drawing.

LLT 1 Oral Language

LLT1a: Receptive Language LLT1b: Expressive Language LLT1c: Social Rules of Language

LLT 2 Emergent Reading

LLT2a: Comprehension

LLT2b: Phonological Awareness LLT2c: Alphabet Knowledge

LLT2d: Print Awareness and Book Handling

LLT 3 Emergent Writing

Did you know?

You can extend children's thinking through the questions you ask.

When you use open-ended questioning, you stretch children's curiosity and ability to analyze or problem solve. Since there are no right or wrong (or yes/no) responses with openended questions, children's ideas are affirmed and they learn there can be more than one solution to an answer.

There are different types of open-ended questions:

Knowledge questions
(What did it taste like?")
Comprehension questions
("How do know that?")
Application questions
("How can we find out?")
Analysis questions
("Why do you think...")
Evaluation questions
("What's a different way...")
Creating questions
("How do you think you can do that?")

Which of these do you think is open-ended?

"How did you get that to work?" or "Does it work now?"

"How do they look different?" or "Do they look the same?"

"What do you think will happen next?" or "Do you know what happened next?

From Bloom's Taxonomy

LLT1a: Receptive Language: Children will gain information by understanding the meaning of words and gestures.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	BY 36 months (3 years), most OLDER TODDLERS will
ICATORS	1al-1 Respond to facial expressions and tones of voice	1aYT-1 Show understanding by complying with simple commands	1aOT-1 Understand and follow simple 1-step directions
DEVELOPMENTAL INDICATORS	1al-2 Recognize the spoken name of familiar objects	1aYT-2 Point to characters or objects in a story when asked	1aOT-2 Respond to repeated words and phrases with gestures and body movements
DEVELOP	1al-3 Turn head in response to hearing name called	1aYT-3 Respond with gestures to requests	1aOT-3 Respond to yes/no questions and recognize action words
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Look at the doll when adult says, "Here's your doll." Respond with tears or discomfort from a stern voice or command Turn head when called by name Look for familiar person when named 	 Wave good-bye when asked Clap during shared finger play Pick up nearby ball when asked Point to picture of dog on page when reading with adult 	 Get blanket or pick up a toy when asked Respond to adult who says, "Give me your hand." or "Reach for the sky." Shake head when asked, "Do you want more milk?"
SAMPLING OF PROFESSIONALS' PRACTICES	 Call child by name Make eye contact Describe actions during daily routines Play social games like peekaboo Exaggerate facial expressions and tones Identify child's emotions 	 Talk to child throughout day, describing actions and experiences Add new words or vocabulary when describing events or objects Point to pictures in books while reading to child Sing simple finger plays and action songs like "Where is Thumbkin?" Praise children when they follow directions 	 Give simple directions while modeling the action, "Get your blanket." Ask questions and wait for response Hold eye contact while talking with child at eye level Engage in sing-song and word games Ask open-ended questions and model correct responses as needed Describe children's feelings and actions as they proceed through the day Read and re-read favorite books

LLT1a: Receptive Language: Children will gain information by understanding the meaning of words and gestures.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
ICATORS	1aYP-1 Understand and follow two-step directions	1aOP-1 Understand and follow multi-step directions
DEVELOPMENTAL INDICATORS	1aYP-2 Listen attentively to stories and answer simple questions about the plot or characters	1aOP-2 Recall the events described in a story
DEVELOP	1aYP-3 Respond to what and where questions	1aOP-3 Respond to questions and extend answer to convey new, but related, thought
	1aYP-4 Listen attentively and participate in discussions in back and forth exchange	1aOP-4 Attend to conversations and group discussions and respond on topic
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Follow a 2-step direction like, "Pick up the crayons and put them in the box." Answer, "What happened to the hungry caterpillar when he ate all the food?" Show adult the location of the shoe when asked, "Where did we put your shoes?" Talk to adult about a picture or new toy, answering more than one question 	 Comply with a set of directions, "Hop to the carpet, find your spot, and sit down." Use felt pieces to retell a simple story (may make up parts of story) Say, "I have a peanut butter sandwich today because Mom ran out of bologna." Pay attention to group discussion about the ladybug on the sidewalk and share thought or opinion about its size or color
SAMPLING OF PROFESSIONALS' PRACTICES	 Expand children's answers by adding extending questions, "You found a hat in the toy box. Do you want to put it on? Who does it make you look like? How does it fit?" Ask children simple questions about what happens in a book, "What happened when the dog ran away?" Use new vocabulary when describing an action or object, "I am hungrystarvingravenous" Read books about different cultures or families 	 Give simple instructions during transitions that ask for more than one action Provide puppets and felt story pieces for children to re-tell stories Engage in conversations during mealtimes or wait times Use teachable moments to bring children's attention to a new idea or event Read and re-read books to expand comprehension by adding new vocabulary or ideas as you read





Toward the end of each age cluster and given level of English language development, and with sensory and interactive supports, dual language learners will process in English and non-verbally demonstrate understanding of:

		Language Criteria	Ages 2.5–3.5 (30–42 mos.)	Ages 3.5–4.5 (43–54 mos.)
At all levels of language home language	Level 5 Bridging	Linguistic Complexity Language Usage	 Series of simple sentences related to familiar stories or events An idea with one to two details; one-step direction related to daily routines Short and compound sentences related to daily routines, familiar people, songs, and stories General and some specific vocabulary associated with familiar environments and stories 	Series of extended sentences related to familiar stories, learning activities, or events Related ideas; two-step directions related to daily routines Compound and some complex sentences related to familiar stories and learning activities Specific vocabulary associated with stories, learning activities, and various environments
and English language development: - influence and reinforce each other; and - mediate understanding,	Level 3 Developing	Linguistic Complexity Language Usage	 Related phrases and simple sentences An idea with one detail Short sentences related to daily routines, familiar people, songs, and stories Repetitive phrasal patterns related to daily routines and familiar stories General vocabulary related to daily routines and familiar stories 	Multiple related simple sentences; wh-questions An idea with two details Short and some compound sentences related to familiar stories and learning activities Sentence patterns related to familiar stories and learning activities General and some specific vocabulary related to daily routines, familiar stories, and learning activities
construction of meaning, and demonstration of knowledge.	Level 1 Entering	Linguistic Complexity Language Usage	 Words and repetitive phrases related to daily routines An idea within simple questions or statements related to self, familiar people, or daily routines Repetitive phrases associated with daily routines Yes/no questions related to self, familiar people, and/ or daily routines Words associated with familiar environments 	Words and phrases related to daily routines An idea within simple questions or statements related to familiar environments Repetitive phrases and simple statements associated with daily routines Yes/no questions related to self, familiar people, and/or daily routines Words and expressions associated with familiar environments
			age development, dual language learners typically understand mo me language and/or gestures to communicate their needs, wants	

...within sociocultural contexts for language use.

Figure D: Early English Language Development Performance Definitions – Receptive, Ages 4.5–5.5



Toward the end of each age cluster and given level of English language development, and with sensory and interactive supports, dual language learners will process in English and non-verbally demonstrate understanding of:

			Language Criteria	Ages 4.5–5.5 (55–66 Months)
į	At all levels of language development, home language	Level 5 Bridging	Linguistic Complexity Language Usage	 Sentences/questions of varying richness and complexity related to familiar stories, learning activities, or events Expanded related ideas; two to three step directions and some new directions related to daily routines Complex sentences and language patterns related to familiar stories and instructional activities Specific and some technical vocabulary associated with various environments and learning activities
HOME LANGUAGE	and English language development: - influence and reinforce each other; and - mediate understanding,	Level 3 Developing	Linguistic Complexity Language Usage	 Multiple related extended sentences Related ideas Compound and some complex sentences related to familiar stories and learning activities Sentence patterns related to specific learning activities and stories General and some specific vocabulary associated with familiar environments and learning activities
! ! ! !	construction of meaning, and demonstration of knowledge.	Level 1 Entering	Linguistic Complexity Language Usage	 Words and longer phrases related to daily routines and learning activities An idea within simple questions or statements related to familiar environments Repetitive phrases and simple statements associated with daily routines Yes/no questions related to self, familiar people, and/or daily routines Vocabulary associated with familiar environments and learning activities
				nguage development, dual language learners typically understand more words than they are able to produce.

...within sociocultural contexts for language use.

Children may be non-verbal in English and rely primarily on their home language and/or gestures to communicate their needs, wants, and ideas.



LLT1b: Expressive Language: Children will use words and gestures to express their thoughts, feelings and needs to others.

	By	y 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	BY 36 months (3 years), most OLDER TODDLERS will
TORS	1bl-1	Coo/gurgle/babble/use jargon in vocal play	1bYT-1 Combine gestures and words to communicate a thought	1bOT-1 Use phrases and sentences of 2-3 words
DEVELOPMENTAL INDICATORS	1bl-2	Communicate needs and feelings through non- verbal actions or basic sign language	1bYT-2 Name familiar people and objects	1bOT-2 Repeat parts of songs
VELOPME	1bl-3	Use sounds to indicate needs or wants	1bYT-3 Answer yes/no questions	1bOT-3 Answer simple questions
DE	1bl-4	Mimic adult speech intonations	1bYT-5 Point to an object or person	1bOT-4 Use descriptive words when speaking
			1bYT-4 Speak about 10 -50 words	1bOT-5 Have a vocabulary of about 200 words
			1bYT-6 Use appropriate vocal inflection when using true words and jargon	1bOT-6 Use simple questions to ask for things or gain information
				1bOT-7 Speech is becoming more clear, familiar adults understand
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	ImitaSay 1Indica	le to get attention te different sounds or 2words ate need for more by ning and moving body	 Make animal, environmental, and nonsense sounds in play Put 2 words together, "more cookie" Add consonants at the beginning of words Reach for something while saying, "more" or "mine" Respond to "Are you hungry?" with "yes" Point to person or object to learn the name 	 Name objects when asking forthem Describe things with 2-3 word phrases, "big book" Sing Twinkle Twinkle LittleStar Tell an adult, "I'm making a house." when asked Use some adjectives and adverbs to describe objects, "big dog" or "sad doll" Ask an adult, "Why is she crying?" Add "s" at the end of words to indicate plurals and possession Share an opinion, "I like playing with play dough."
SAMPLING OF PROFESSIONALS' PRACTICES	exter • Verba "You youw	ge children by repeating and ding their sounds alize child's gestures such as, are pointing to the milk. Do rant more?" ribe what you're seeing and	 Engage in lap-reading with children every day Use gestures that match actions such as lift arms when saying, "so big" Label objects, actions and events to expand vocabulary Praise children's attempts to say or use newwords 	 Do your thinking out loud, "I wonder what that person is looking at." Use descriptive language to talk about events or objects Ask open-ended questions that need more than a one-word response Model appropriate grammar Ask children to describe a painting or what they did on the playground

LLT1b: Expressive Language: Children will use words and gestures to express their thoughts, feelings, and needs to others.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
ATORS	1bYP-1 Use phrases and sentences of 4-5 words	1bOP-1 Combine 5-8 words together into sentences
DEVELOPMENTAL INDICATORS	1bYP-2 Imitate songs and finger plays	1bOP-2 Engage in storytelling and pretend play, using oral language
VELOPMEN	1bYP-3 Respond to questions with detail	1bOP-3 Answer questions with detailed and more abstract words and ideas
DE	1bYP-4 Use common form of verbs and plurals most of the time (saw, men, were)	1bOP-4 Use mostly grammatically complex sentence structures
	1bYP-5 Have a vocabulary of about 500 words	1bOP-5 Have a vocabulary of over 1000 words
	1bYP-6 Use questions to ask for things or gain information.	1bOP-6 Ask specific questions to understand and solve problems.
	1bYP-7 Produce developmentally appropriate phonemes/ sounds in words using mostly clear speech	1bOP-7 Produce four to five word phrases using clear and understandable speech
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Talk about activities at school or home Sing "Wheels on the Bus" using motions Tell an adult, "I can put on my own coat." Say to a friend, "I'm using green." Ask, "When is snack?" Tell an adult, "I'm drawing my bedroom. Here's my bed and my chair." Tell an adult, "I went to the doctor." Point to the dinosaur in a book and say, "That's a tyrannosaurus." 	 Describe activities, "I went to the park and played on the swings." Enjoy playing rhyme games, "sat, pat, rat, mat" Describe in detail the play in the dramatic play area, "I am a police officer and I'm going to arrest the bad guys." Respond to an adult's question about favorite foods, "I like pizza with lots of cheese, but I don't like mushrooms on it." Tell an adult, "I have no idea!" Ask, "How did that sock end up under that chair?" Use varied adjectives to describe things, "That ball is humongous."
SAMPLING OF PROFESSIONALS' PRACTICES	 Ask why and how questions Use, "Iwonder" Encourage children to talk with one another Ask children about their drawings or products Correctly restate mis-pronounced words Use interactive reading techniques to involve children in thestory Introduce new sounds and words through songs, finger plays, and stories 	 Restate children's words or sentences using new, more advanced vocabulary Define new words that may be introduced in stories Use turn and talk to your partner during circle time, providing time for children to talk with one another about an idea Ask questions that encourage children to elaborate their answers Include informational texts that encourage children to find out more



Figure E: Early English Language Development Performance Definitions – Expressive, Ages 2.5–4.5



Toward the end of each age cluster and given level of English language development, and with sensory and interactive supports, dual language learners will express in English:

			Language Criteria	Ages 2.5–3.5 (30–42 mos.)	Ages 3.5–4.5 (43–54 mos.)
HOME LANGUAGE	At all levels of language development,	Level 5 Bridging	Linguistic Complexity Language Usage	 Multiple phrases and some familiar 3+ word sentences Single ideas Emerging comprehensibility of familiar phrases and short sentences General and a few specific vocabulary associated with familiar environments 	Variety of original sentences of 3–5+words Approximations of related ideas Comprehensible sentences that may contain nouns, verbs, modifiers, and pronouns Specific and a few technical vocabulary associated with various environments
	development, home language and English language development: - influence and reinforce each other; and - mediate understanding, construction of meaning, and demonstration of knowledge.	Level 3 Developing	Linguistic Complexity Language Usage	 Phrases with a few familiar three-wordsentences Approximations of single ideas Familiar phrases with emerging comprehensibility Short repetitive language patterns used in familiar fingerplays, songs, and stories General vocabulary associated with familiar environments 	Short sentences of three to four words that combine formulaic phrases with some new words and phrases Approximations of ideas Short sentences with emerging comprehensibility Repetitive language patterns used in fingerplays, songs, stories, or learning activities General and a few specific vocabulary associated with familiar environments; common expressions
		Level 1 Entering	Linguistic Complexity Language Usage	 Words and short formulaic phrases One-word utterances to convey entire message or idea Single words associated with daily routines and familiar stories Repetitive phrases 	Words and formulaic phrases One-totwo-word utterances to convey entire message or idea Familiar words and expressions associated with daily routines Repetitive and formulaic phrases General vocabulary related to familiar environments
٠				anguage development, dual language learners typically ur and rely primarily on their home language and/or gestures t	

...within sociocultural contexts for language use.

Figure F: Early English Language Development Performance Definitions – Expressive, Ages 4.5–5.5



Toward the end of each age cluster and given level of English language development, and with sensory and interactive supports, dual language learners will express in English:

			Language Criteria	Ages 4.5–5.5 (55–66 Months)
	At all levels of language development,	Level 5 Bridging	Linguistic Complexity Language Usage	 Variety of short and expanded sentences of 4–6+ words Related ideas Comprehensible sentences that may contain specific grammatical forms (e.g., present progressive + verb, past tense, plurals, possessives, and articles) Specific and some technical vocabulary associated with various environments and learning activities
HOME LANGUAGE	home language and English language development: - influence and reinforce each other; and - mediate	Level 3 Developing	Linguistic Complexity Language Usage	 Short sentences of three to four words that combine formulaic phrases with new words and some expanded sentences Approximations of related ideas Short and some expanded sentences with emerging comprehensibility Multiple repetitive language patterns used in stories, songs, and learning activities General and some specific vocabulary associated with familiar environments and learning activities
-	understanding, construction of meaning, and demonstration of knowledge.	Level 1 Entering	Linguistic Complexity Language Usage	 Words and longer formulaic phrases One- to two-word utterances to convey entire message or idea Words and expressions associated with daily routines and familiar stories Repetitive and formulaic phrases General vocabulary related to familiar environments and learning activities

At the very beginning stages of English language development, dual language learners typically understand more words than they are able to produce. Children may be non-verbal in English and rely primarily on their home language and/or gestures to communicate their needs, wants, and ideas.

...within sociocultural contexts for language use.



LLT1c: Social Rules of Language: Children will use, adapt, and follow the rules of language.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	BY 36 months (3 years), most OLDER TODDLERS will
DEVELOPMENTAL INDICATORS	1cl-1 Respond differently to different tones and voices	1cYT-1 Respond to others' communications with gestures, facial expressions and body movement	1cOT-1 Use pauses and prompts to maintain a conversation
EVELOPMENTA	1cl-2 Use eye contact to engage in joint attention	1cYT-2 Pay attention to a speaker by pausing physical activity or shifting gaze to speaker	1cOT-2 Listen and pay attention to speaker by using eye contact and by asking questions
۵	1cl-3 Engage in vocal play turn- taking with others	1cYT-3 Initiate and engage in communications with others, either vocally or nonverbally	1cOT-3 Take turns in conversation by initiating and sustaining a simple conversation for at least 2 turns
SAMPLING OF S OBSERVABLE ACTIONS	 Repeat, "da-da" after adults says it Show attention by looking at adult when being spoken to Smile when laughter is expressed by others; show distress when there are loud sounds or voices 	 Pause play to listen to an adult when called by name Wait to see if adult understands and repeats if needed Ask a two-word question, "Where's dog?" 	 Repeat the question "why" multiple times Ask and answer a question about "what" Look at an adult or peer while talking Stop and make eye contact when
CHILDREN' S			 an adult says, "Look at me." Chat with a peer, asking and responding to a question, "I made a dog, what did you make?" Say "please" and "thank you" Answer a question during circle time
SAMPLING OF PROFESSIONALS' PRACTICES	 Talk to baby, describing what is being done or happening Make eye contact when speaking Say words or nonsense sounds and pause to see if they will be repeated 	 Encourage children to talk with one another Provide words for children if they are unsure how to express themselves Demonstrate how to engage in turn-taking conversation Use eye contact when conversing 	 Provide opportunities forchildren to engage in conversations with adults and peers Model the use of correct vocabulary and speech patterns Model polite responses, such as "please" and "thank you" Show interest in children's conversations, asking questions and responding as appropriate

LLT1c: Social Rules of Language: Children will use, adapt, and follow the rules of language.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DEVELOPMENTAL INDICATORS	1cYP-1 Use nonverbal cues during conversations according to personal cultural norms (physical proximity, eye contact)	1cOP-1 Listen and respond on topic with individuals and during group conversations
EVELOPMENTA	1cYP-2 Use socially acceptable communication rules (volume, tone, turn-taking)	1cOP-2 Use language to communicate with others during familiar and unfamiliar social situations
۵	1cYP-3 Engage in turn-taking conversation for at least 4 exchanges	1cOP-3 Initiate conversations and stay on topic during at least 5 turn-taking exchanges
	1cYP-4 Know to use simpler language and tone with younger children	1cOP-4 Demonstrate conversational rules of language
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Use an inside voice when appropriate Walk up to a friend to ask a question instead of shouting across the room Hold a conversation with an adult, asking and responding to questions, "I have a new dog." Her name is Spot. She's black and white. She barks really loud." Talk to baby sister in a sing song voice, "You are such a biggirl." 	 Take turns during conversation without interrupting Participate during a circle time discussion Answer questions about a story, "I think the bear is going to hide in the cave." Introduce self to a new friend, "Hi, my name is Sammy, what's yours?" Participate in an elaborate dramatic play scenario with another, describing what they're going to do
SAMPLING OF PROFESSIONALS' PRACTICES	 Model the rules of turn-taking, listening, and responding Show children how to ask questions to get more information Model the use of quiet voices, eye contact, and one-on-one conversations 	 Show acceptance of different points of view Provide opportunities for children to share opinions and ideas with each other Set up dramatic play situations that encourage children to interact Model the use of questions and responses to gain more information



LLT2a: Comprehension: Children will demonstrate emerging understanding of both the written and spoken word.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	BY 36 months (3 years), most OLDER TODDLERS will
ATORS	2al-1 Attend to stories that have been read previously	2aYT-1 With prompting and support, make sounds that relate to pictures in books	2aOT-1 Answer simple questions about the story
DEVELOPMENTAL INDICATORS	2al-2 Show interest in pictures in books	2aYT-2 Show preference for familiar stories	2aOT-2 Participate in shared reading experiences by asking questions and making comments
DEVELOI		2aYT-3 Point to pictures of objects or characters when asked	2aOT-3 Retell some events in a familiar story with
		2aYT-4 Point to a picture and look to adult to label it	2aOT-4 Use words to describe or name pictures when reading
			2aOT-5 Recite simple phrases or words from a story
			2aOT-6 Attend when an adult describes a new word or concept
SAMPLING OF CHILDREN'S OBSERVABLE		 Repeat the sound, "beep beep" as part of a story read aloud Point to a picture of a horse and say, "neigh" Point to the dog in a story when adult asks, "Where is thedog?" Look at adult and point to the picture of a chicken, waiting for a response Bring the same book to an adult to read 2 or 3 days in a row 	 Listen to adult's description of an idea or word and for clarification Answer, "Who is that?" with "It's me!" Answer a question about a story, "What's that cow doing?" "It's jumping!" Remember that the caterpillar eats a lollipop in "The Very Hungry Caterpillar" Laugh at the dinosaur who is eating ice cream in a book Remember what's coming on the next page
SAMPLING OF PROFESSIONALS' PRACTICES	 Re-read books often, calling attention to familiar objects Talk about the pictures on each page, calling attention to characteristics that might be familiar, "Look at that baby's nose. You have a nose." Give time for child to look at each page, turning pages slowly Set the stage for the next page, "I wonder what we'll see on the next page." 	 Keep reading time short and repeat it several times during theday Ask simple questions about what is being read Read books that talk about feelings or common objects or people Describe pictures or posters Read letters or words as you write them 	 Read the same book often, pausing to ask what might happen next Use I wonder statements, "I wonder why the boy did that?" Point to pictures as you describe a new word or idea Pause during a repetitive verse and allow children to finish the sentence Create opportunities for children to act out parts of a story, prompting them with the sequence

Communication | LANGUAGE AND LITERACY (LLT)

LLT2a: Comprehension: Children will demonstrate emerging understanding of both the written and spoken word.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
IICATORS	2aYP-1 Use pictures to predict content	2aOP-1 Identify characters and setting in a story
DEVELOPMENTAL INDICATORS	2aYP-2 Use storybook language, forms and conventions (once upon a time, that's the end)	2aOP-2 Use title, pictures, and prior knowledge to predict story content
DEVELO	2aYP-3 Retell or act out a familiar story with prompting	2aOP-3 Retell or act out a story in the correct sequence
	2aYP-4 Share likes and dislikes about a book	2aOP-4 Make connections between stories and real- life experiences
	2aYP-5 Listen to and discuss informational text and literature	2aOP-5 Answer questions about the characters and events in a story
	2aYP-6 Relate to concept or new word	2aOP-6 Generalize idea to another situation
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Tell another, "I like to eat ice cream too" after hearing about a character eating ice cream Talk about what might happen to a character who's driving too fast, "He's going to get a ticket." Say, "I'm happy when that boy finds his teddy bear." Act out a story in the dramatic play area Tell an adult, "I can ride my bike really fast just like Amir." Pretend-read a book to a friend 	 Use flannel board pieces to retell a story Answer questions about a story as the adult reads Anticipate what might come next Identify the characters in a story Use vocabulary like character or setting Tell a fact learned about dogs after reading about them Seek out another book about a topic to learn more Participate in a read aloud book reading by repeating sounds or actions throughout the story Tell an adult, "I have a striped shirt like the girl in the story."
SAMPLING OF PROFESSIONALS' PRACTICES	 During a second or third reading, seek reminders from children, "I forget what happens next." Call attention to new words or vocabulary "Huge, that's another word for big." Make your own book Ask what happens at the beginning, middle, end 	 Introduce books before reading, "The author is, the title is" Ask children to predict what the story might be about by looking at the cover Stop in the middle of a story and ask, "Why do you think she did that?" Ask child to predict, "What do you think will happen next?" Talk about a story's similarity to something in real life, "That girl was scared, what makes you scared?" Assign character roles to children and ask them to act them out as you read

LLT2b: Phonological Awareness: Children will begin to recognize and associate words with sounds in spoken language.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	BY 36 months (3 years), most OLDER TODDLERS will
ICATORS	2bl-1 Listen to simple nursery rhymes, chants, and songs	2bYT-1 Participate in familiar nursery rhymes, chants and sounds	2bOT-1 Imitate sounds in nursery rhymes and songs
DEVELOPMENTAL INDICATORS	2bl-2 Experiment with sounds	2bYT-2 Play with different sounds, using them for different purposes	2bOT-2 Engage in word play with adults, such as using nonsense words or beginning rhymes
DEVELO			2bOT-3 Distinguish between words that sound alike
			2bOT-4 Fill in words of familiar songs and finger plays
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Take turns making sounds and repeating them with others Coo and babble Listen to an adult who is singing 	 Repeat fun sounds in a song, e-i-e-i-o Tell someone that a cow says "mooo" Repeat a word or sound after adult says it 	 Recognize that some words start with the same sound, "ball and bike start with b" Act out the motions to songs, "the wipers on the bus go swish, swish, swish" Identify that hat and rat sound the same Tell the last word in a familiar book when adult pauses, Silly Sally went to "town"
SAMPLING OF PROFESSIONALS' PRACTICES	 Sing simple nursery rhymes and songs Repeat baby's nonsense sounds back, wait for baby to repeat, do it again Change the beginning or ending of nonsense words as you say them, "goo, goo, goo, boo, boo, boo" 	 Recite finger plays and nursery rhymes Change the beginning or ending sound of a word Read books with words that rhyme Encourage children to make animal sounds, "grrrr" 	 Recite nursery rhymes Call attention to words that rhyme, "bat – cat", they sound alike or rhyme" Clap the words while reciting a nursery rhyme Read rhyming books, calling attention to the words that rhyme Talk about the letters in a child's name and the sounds they make

Communication | LANGUAGE AND LITERACY (LLT)

 $\textbf{LLT2b: Phonological Awareness:} \ Children \ will \ begin \ to \ recognize \ and \ associate \ words \ with$ sounds in spoken language.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
CATORS	2bYP-1 Listen and match rhythm, volume and pitch of rhymes, songs and chants	2bOP-1 Identify whether or not two words start or end with the same sound
DEVELOPMENTAL INDICATORS	2bYP-2 Decide whether or not words rhyme	2bOP-2 Produce rhyming words
DEVELO	2bYP-3 Substitute different beginning sounds in words	2bOP-3 Isolate and match the initial sounds in words with adult guidance
	2bYP-4 Segment sentences into individual words with adult guidance	2bOP-4 Segment words into syllables
	2bYP-5 Segment compound words with modeling and guidance	2bOP-5 Identify words as separate units in a sentence
		2bOP-6 Blend sounds with adult guidance
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Use a quiet voice for a whisper part of a song Tell an adult that "up" and "cup" rhyme, but "up" and "down" do not Clap out the words in a song or sentence, with adult help Identify the parts of compound words, "hotdog", "play—ground" 	 Respond to an adult's question, "Do dog and doll start with the same sound?" Produce a series of rhyming words: ball, tall, call, fall, hall Clap out the syllables of a word with adult guidance Identify the beginning and ending sound in words Find or point to objects that start with a specified letter
SAMPLING OF PROFESSIONALS' PRACTICES	 Call attention to words that rhyme Call attention to the starting sounds of words and how 2 words may start with the same sound Clap the beats for syllables in words, "straw-ber-ry" Clap out syllables of a word and count them as you do so Call attention to words that start with the same sound as the child's name Describe the sound that letters make, "bbB" 	 Play "I Spy" something that starts withs" Break apart words – base-ball, pan-cake Ask children to finish the sentence with a rhyme or change the rhyme Identify words that end with the same sound Play matching games where children match picture and beginning sound Make rhyming word lists Show how to segment a word into different sounds, p-a-t



LLT2c: Alphabet Knowledge: Children will demonstrate an emerging understanding that letters and letter sounds represent the sounds of spoken language.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	BY 36 months (3 years), most OLDER TODDLERS will
DEVELOPMENTAL INDICATORS	show interest in the in their name bu	ation. Toddlers may e alphabetor letters t recognition and pically begins at ge or later.	2cOT-1 Understand that letters can be individually named 2cOT-2 Recognize the first or some letters in name 2cOT-3 Recognize logos or symbols in environmental print
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS			 Recognize the first letter of name on a sign or in a book Notice that a friend's name starts with the same letter Point out the golden arches as McDonalds or the brown truck as a UPS vehicle Sing the alphabet song with most of the letters in the correct order
SAMPLING OF FROFESSIONALS' PRACTICES			 Label items that belong to children Point to and name letters as you read books, signs, other printed material Spell out the letters in children's names as you write them on their papers or read them on printed material Label items around the room

Communication | LANGUAGE AND LITERACY (LLT)

LLT2c: Alphabet Knowledge: Children will demonstrate an emerging understanding that letters and letter sounds represent the sounds of spoken language.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
ATORS	2cYP-1 Identify some alphabet letter names, especially those in name	2cOP-1 Recognize about half of the upper and lower case letters of the alphabet
AL INDIC	2cYP-2 Point out own name in print	2cOP-2 Associate some letters of the alphabet with their specific sounds
DEVELOPMENTAL INDICATORS	2cYP-3 Recognize words that start with the same letter as name or familiar word	2cOP-3 Identify words that start with the same letter as their name
DEV		2cOP-4 Visually discriminate letter shapes and formations
		2cOP-5 Sort letters and find words that contain specified letters
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Identify the letters, E-L-E-N-A when reading name Say, "I see an M – that's the same as in my name." Point to name on the helper chart Tell an adult, "There are 2 Ts on that sign." 	 Differentiate between "A" and "a "when reading name Find the letter B after hearing the b.b.b sound Tell an adult, "Catthat starts with the same letter as my name." Pick out all of the As from a group of letters on the table Distinguish between b and d Find all of the Cs in a sentence or sign Point to and name most of the letters on a posted alphabet chart
SAMPLING OF PROFESSIONALS' PRACTICES	 Provide foam or wooden alphabet letters for sorting Talk about the similarities of letter forms Label objects around the room Point out the titles of books and authors before reading Follow along with your hand and announce letters as you write on a message board Point to the letters as you sing the alphabet song 	 Provide visual games and cues to help children distinguish the difference in letter shapes Play lotto or bingo games with the alphabet Post the alphabet in the writing area Create word cards with commonly used words Create sign-in charts or opportunities for children to write name Play "find that letter" games with printed material

LLT2d: Print Awareness and Book Handling: Child will construct meaning from and appreciation of print.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	BY 36 months (3 years), most OLDER TODDLERS will
ATORS	2dl-1 Show interest in books by touching, mouthing	2dYT-1 Select and ask for adult to read books	2dOT-1 Select familiar books to begin to self-read
NTAL INDIC,	2dl-2 Attend to shared book reading	2dYT-2 Touch or identify pictures in books when asked	2dOT-2 With help, discriminate words from pictures on a page
DEVELOPMENTAL INDICATORS	2dl-3 Imitate adults' reading by pointing to pictures and trying to turn pages	2dYT-3 Hold book and turn pages with adult assistance	2dOT-3 Hold book with two hands and turns pages
			2dOT-4 Recognize familiar environmental print
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	Hold book and try to turn pages Sit on adult's lap and look at pictures in a book Seek out a book to read from the toy shelf	 Take a book to an adult to read Choose familiar and favorite books to read multiple times Point to the object or character in a book when asked Point to a picture in a book and pause for adult to name it Turn pages, sometimes 2-3 at a time, and flip back and forth 	 Select a favorite book and begin to self-read familiar passages Read to a doll or stuffed animal Repeat common phrases in a book or finish the sentence or rhyme Hold book with confidence and skill Identify a common logo (like McDonald's) when driving or walking past
SAMPLING OF PROFESSIONALS' PRACTICES	 Provide hardback, washable and cloth books in different areas around the room or house Encourage child to turn pages Name objects or characters in books while pointing to them 	 Read favorite books repeated times upon request Point to the words and the pictures as you read Invite child to hold book and turn the pages while you read together Talk about the correct way to hold and treat a book Label objects and areas around theroom 	 Point out the letters and words on pages as you read Talk about the different parts of a book Pause to allow child to finish a phrase or rhyme in a book, "chicka chicka boom" Read the words on buildings or vehicles as you go past; identify common logos or signs

Communication | LANGUAGE AND LITERACY (LLT)

LLT2d: Print Awareness and Book Handling: Child will construct meaning from and appreciation of print.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
ATORS	2dYP-1 Attend to different kinds of book genres	2dOP-1 Select different kinds of literature
NTAL INDIC	2dYP-2 Recognize that print represents written words and has meaning	2dOP-2 Show beginning understanding of word and sentence structure
DEVELOPMENTAL INDICATORS	2dYP-3 Hold book right side up and turn pages from right to left	2dOP-3 Hold book correctly and read from beginning to end
	2dYP-4 Show awareness of the function of environmental print	2dOP-4 Read some environmental print
	2dYP-5 Know where to begin reading a story; point to title	2dOP-5 Track words from left to right, top to bottom, page to page
		2dOP-6 Know that books have titles, authors, and illustrators
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Tell the adult, "I will read to you." Ask, "What does this say?" Pretend to read maps in the block area to find a way home or a cookbook in the housekeeping area to make dinner Point to and read, together with adult, the title of a story Recognize that the book is upside down Read others' names or familiar signs 	 Ask, "Who is the author or illustrator?" Seek out a book on dinosaurs to find out which one was the largest Identify the name of a store from looking at the logo on a shopping bag Recognize the superhero logo or name on a T-shirt Read along with an adult during morning message Turn pages with skill State, "the end" when reaching the end of a story
SAMPLING OF PROFESSIONALS' PRACTICES	 Encourage the child to read the pages of a familiar book to you Provide different types of print in different play areas Talk about the different parts of a book using vocabulary like the author, cover, introduction Post meaningful print around the room Read different genres of books to children 	 Make class books about events and display them around the room Post a word wall with familiar words for children to read Use a "morning message" time that captures important information to share Offer different genres of literature, including poetry, informational text, fiction

LLT3: Emergent Writing: Children will demonstrate emerging understanding of writing as a way to communicate.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
DEVELOPMENTAL INDICATORS	3I-1 Grasp and manipulate object when placed in hand	3YT-1 Use full hand grasp (palmar grasp) to hold crayon	3OT-1 Begin to grasp writing tool with thumb and fingers
		3YT-2 Make random scribbles on paper	30T-2 Scribble with intent to represent something observed and/or convey a message
			3OT-3 Make repeated marks on paper to represent lines and circles
			3OT-4 Show interest in writing for a purpose
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	Hold spoon with fist grasp Reach for and hold a crayon	 Make mark on paper withcrayon Show interest in coloring for a short period of time Use a clothespin to pick up cotton balls Scribble with finger paint Make markings or stamps on paper with bingo markers 	 Tell another what a scribbled picture represents Use crayon or pencil to make markings that are meant to represent letters Ask an adult, "What are you writing?" Practice "writing" in sand or water
SAMPLING OF PROFESSIONALS' PRACTICES	Give baby opportunities to grasp tools	 Provide different writing or drawing tools such as chunky crayons or washable markers Offer washable stampers and bingo markers Praise children's attempts using descriptive language, "You are working really hard to make marks on that paper." Add other materials that strengthen children's grip like clothespins and cotton or playdough Post children's attempts for them to view 	 Model writing, describing your efforts, "I need to make my shopping list." Encourage children to draw or write at different times during the day Post alphabets where child can see and try to replicate Provide materials such as playdough to strengthen muscles needed for writing Demonstrate how children can "write" in sand or water Ask children, "Tell me what you're writing." or "Let's write a note to Dad about your day."

LLT 3: EMERGENT WRITING

LLT3: Emergent Writing: Children will demonstrate emerging understanding of writing as a way to communicate.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DEVELOPMENTAL INDICATORS	3YP-1 Use a 3-finger grasp	30P-1 Use a dominant hand for writing
	3YP-1 Create letter-like symbols to represent a word or idea	30P-2 Use writing for a variety of purposes
	3YP-1 Write some letters	30P-3 Write some letters of the alphabet, including name
	3YP-1 Experiment with a variety of writing tools and materials	30P-4 Begin to use inventive spelling using a letter to represent a word
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Print letters in name Finger paint shapes, lines and letters Sign in using some letters in name or markings Pretend to write a shopping list while playing in the dramatic play area Use different types of writing tools Dictate a description of a picture for an adult to write Pretend to write a letter to a family member Practice making letters or words on a laptop 	 Draw a picture and "write" a description underneath Make letters out of play dough Ask, "Can you show me how to write dog?" Write name on drawings or dictation Use a journal to "write" down thoughts and ideas, even if they are scribble or pictures Use a laptop to make words or to write "stories"
SAMPLING OF PROFESSIONALS' PRACTICES	 Put writing tools and materials such as tablets to make lists or sales checks in dramatic play area Set up a writing area with paper and different types of writing implements such as pencils, crayons, markers or chalk Display alphabet and common words for children to replicate Model writing throughout the day Make available computers or tablets for children to practice Ask children, "What should we write about?" 	 Provide journals for children to record their ideas Put common word cards in the writing area for children to replicate Encourage child to practice name-writing Write name on top of a paper and encourage child to copy underneath Invite child to sound out write the letters that make up a word, even if they are not accurate Encourage children to practice typing letters or words on a computer or tablet

167



Adaptations and Accommodations for Children with Unique Needs

Environment

- Provide at least 2-3 books at each learning center that support the activity at that center.
- Use visual, tactile and sign language alphabets when creating materials for posting or labeling.
- Make name symbols that may be a combination of a picture or photo, letters or Braille.
- Use name and photo cards to help children recognize and identify their name in print.
- Offer different surfaces for writing such as slanted and/or vertical surfaces like easels.
- Provide opportunities for children to explore writing in a variety of materials, such as sand, corn meal, shaving cream and paint.

Daily Schedule and Routines

- Use peers as language models.
- Encourage and welcome support personnel such as speech therapists to model instructional strategies and problem solving.
- Provide physical guidance and support for children having difficulty with communication.
- Stagger story times with small numbers of children in eachgroup.
- Teach children a few basic words in sign language to use with familiar songs and phrases.
- · Read aloud at least two books every day.
- Pair DLL children with buddies to guide their adherence to the daily schedule.

Materials

- Provide puppets/pictures as props when using finger plays and songs.
- Offer a wide variety of tools to develop fine motor and handwriting skills such as large pencils, large crayons, large brushes, markers, finger paints, chalk, etc.
- Make books from photo albums or modify books with tabs for easy handling and page turning.
- Include books with texture or Braille, audio books, or popup pictures.
- Use pictures, signs, and symbols that occur naturally in children's environments as visual cues.

Instruction and Activities

- Use simple commands with as few words as possible.
- · Repeat instructions or directions frequently
- Speak clearly to children and model good speech.
- Directly give children facts, verbal labels, and other information.
- Offer higher level books and activities for advanced learners.
- · Pair children for reading activities.
- Use vocabulary and phrases in children's native languages to introduce new ideas.
- Place squirmy children near an adult for reading times.



The joy of reading begins with babies who learn to associate the joy of snuggling and listening to soothing voices with the fun of reading. As they mature, they listen more closely to sounds and words and look at the pictures more intently. Toddlers show interest in turning pages and pointing to pictures or repeating words. When adults ask questions and talk about the pictures or ideas of a story, toddlers build vocabulary and acquire information about book handling skills. Preschoolers, who participate in shared reading experiences, enjoy the same benefits of relationship-building as they learn about the world around them and stimulate their imaginations, build vocabulary and reading skills.

A Sampling of Foundational Practices

Environment and Materials

- Stock library area with books of different types, nonfiction, poetry, fiction, and rotate them regularly.
- Display print through labeled areas, signs, helper charts, schedules,
- Include print materials in different learning areas, such as cookbooks in the housekeeping area or maps in the block area.
- Create a writing area with different types of paper and writing tools, envelopes and a mailbox.
- Include magnetic letters, letter stamps, letter blocks for experimentation, alphabet charts, letter or shape stencils.
- Add clipboards, chalkboards, blank books for journal writing.
- Display flannel boards and flannel pieces for story-telling.

Instruction

- Model language by talking with children, describing their actions and experiences.
- Use or introduce new words to describe the same object, such as big, huge, enormous, large.
- Introduce children to terms like author, illustrator, title, cover and book conventions: reading from right to left and top to bottom.
- Repeat readings of the same book.
- Talk about print with children, "This word has a B. That's the same letter in Bill's name".
- Playrhyming games.
- Use a child sign-in process for preschoolers.

Children's Books

- · The Word Collector by Peter H. Reynolds
- Big Words for Little People by Jamie Lee Curtis
- · Chicka Chicka Boom Boom By Bill Martin, Jr.
- Sheep in a Jeep By Nancy E. Shaw
- · In The Tall, Tall Grass By Denise Fleming
- Silly Sally by Audrey Wood
- · Jump Frog Jump by Robert Kaplan
- We're Going on a Bear Hunt by Michael Rosen
- · The Grouchy Ladybug by Eric Carle
- Mr. Brown Can Moo! Can You? Dr. Seuss
- No. David! David Shannon
- The Click, Clack, Moo: Cows That Type by Doreen Cronin
- Alphabet City by Steven T Johnson
- Dear Tyrannosaurus Rex by LisaMcClatchy
- What's the Big Idea, Molly? by Valeri Gorbachev
- Look by Jeff Mack

Adult Resources

- Developing Early Literacy: A Report by the National Early Literacy Panel
- What Works: An Introductory Teacher Guide for Early Language and Emergent Literacy Instruction
- Early Language and Literacy Online Modules, PDG TA, https://pdg.grads360.org/#program/e arly- learning-language-and-literacyseries

Family Engagement

- Invite family members to be volunteer readers, asking them to select and read a favorite story.
- Start a monthly Family Book Club where families come together to read and listen to books and complete related activities.
- Create take home bags that include a book and suggested follow-up activities.
- Send home poems, finger plays or rhyme games that have been used in your early learning program.





CREATIVE ARTS (CRA)

Expressing Feelings and Ideas through Art, Music, Movement and Drama

Creative Art experiences encompass visual arts, music, movement and dance, and drama. They provide children with opportunities to express themselves through the exploration of materials, movement, emotions, and acting (Dodge, 2010; Copple & Bredekamp, 2009; Mraz et al., 2016). Creative art experiences encourage children to use their imaginations as they try out new ideas, solve problems, and learn about feelings and emotions. When children actively engage in creative arts, they are building skills across all developmental domains such as: physical, social and emotional, language and literacy. Providing space, materials, and interactions that promote the development of children's creativity and individuality are critical factors to consider when planning creative art experiences that support the development of the whole child.

CRA 1 Visual Arts

CRA 2 Music

CRA 3 Movement & Dance

CRA 4 Drama & Acting

Did you know?

Process-oriented experiences promote creativity, strengthen children's interests and extend their learning.

Process art refers to a "journey" that children take as they create pictures, dance or act out a story. Instead of focusing on the end product, children use their own ideas and feelings to create. There are no right or wrong ways to complete a task and every child's creation looks different. These open-ended experiences focus on discovery and the exploration of techniques and materials instead of the final outcome. Invite children to dance in response to the way music makes them feel. Suggest they create drawings or representations of objects or persons with different types of supplies including crayons, tissue paper and glue, or varied paper types and textures. Talk about their products; why they chose specific materials or why they moved in a specific way.



CRA1: Visual Arts: Children will demonstrate an emerging understanding and enjoyment of the use of visual arts as a form of self-expression.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
DEVELOPMENTAL INDICATORS	1I-1 Show interestin visual stimuli	1YT-1 Explore art materials	10T-1 Use a variety of different types of visual art materials
	1I-2 Attend to bright and contrasting colors	1YT-2 Respond to visual arts such as photos in books and communicate preferences	10T-2 Demonstrate preference for favorite colors
	1I-3 Hold, touch and experience different textures	1YT-3 Explore the differences in art materials, textures, and processes	10T-3 Use different types of materials and tools to mold and create products
	1I-4 Use fingers, hands, and mouth to explore mediums	1YT-4 Make marks with crayons, markers, and paints	10T-4 Describe shapes or marks as a product or idea
			10T-4 Label ideas or objects within own drawing
			10T-6 Communicate preference for one piece of art over another
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Gaze at mobile, picture or photo Look up to ceiling to watch a ceiling fan go around Attend to bright colors or shapes Initiate touch of a book with texture inserts Rub fingers or hands over different textures Explore applesauce or pudding on highchair tray by moving it with fingers 	 Begin to show interest in paints and crayons, trying them out for a very brief time Point to pictures in books or on the wall Show preferences in pictures by returning to the same one repeatedly Hold a crayon in fist, poke it onto paper to make random marks Feel the difference in textures or materials by holding, rubbing, or touching them Pound and pat play dough 	 Ask to use crayons or paint Show enjoyment when finger painting with snow or paint Participate in art activities as part of the daily routine Tell another, "I want the red chair or the red carpet square." Make balls or snakes with play dough Name the objects or characters, "I made a dog." or "That's me." Look at two different paintings and choose a favorite
SAMPLING OF PROFESSIONALS' PRACTICES	 Provide pictures and photos in locations where baby can view them Describe pictures and photos as you hold child up to them to view Talk with children about the feel of different textures, "This blanket feels so soft." Put a small amount of applesauce or non-toxic paint on the highchair tray for baby to touch and move fingers through it 	 Provide crayons or paints for use with adult supervision Post pictures and paintings and talk about them, describing the colors and shapes Make or provide texture books with different fabrics such as cotton, corduroy, cardboard, foil, sandpaper Provide non-toxic or edible play dough for pounding or rolling Call attention to the artwork in books 	 Make available different types of non-toxic drawing materials, crayons, washable markers or finger paint Provide play dough and tools for childrento roll, pound and mold Describe the characteristics of pictures and photos in books Ask child to, "Tell me about your picture." Honorchildren's preferences for color, "Youpainted everything red!" Ask children to explain what they like about certain photos or pictures

CRA1: Visual Arts: Children will demonstrate an emerging understanding and enjoyment of the use of visual arts as a form of self-expression.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DEVELOPMENTAL INDICATORS	1YP-1 Use a variety of different types of art materials to create an end product	10P-1 Use a variety of art materials to represent an idea, feeling, or object
	1YP-2 Explore the favorite color through art representation	10P-2 Explore variations of the same color and other colors
EVELOPMEN	1YP-3 Describe general features of artwork: color, shape, texture, lines	10P-3 Create an end product that integrates color, shape, texture and lines
ā	1YP-4 Create art that expresses individual creativity	10P-4 Create artistic works through an open-ended process that reflect thoughts, feelings, experiences, or knowledge
	1YP-5 Discuss own artistic creations	10P-5 Discuss own artistic creations and those of others
	1YP-6 Comment on another's artwork when asked a specific question about the work	10P-6 Show appreciation for different art forms and the creative work of others
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Combine pipe cleaners and play dough to make a figure Create a collage incorporating different types of materials Experiment with different types of sculpting or drawing tools Make intentional designs within paintings and drawings Explain or describe a drawing in detail, "This is my Mom and she's holding a flower." Look at a friend's drawing and say, "I like your picture." 	 Experiment with color by combining colors or exerting different pressure to make dark or light shades Plan and complete a creation, "I'm going to make a picture of my family." Model work after visual representations, "I made a cat like the picture in that book." Describe the characteristics of a creation or artwork Remark at a picture or photo in a book. "There are a lot of trees in that picture" or "The bear in that picture ispurple."
SAMPLING OF PROFESSIONALS' PRACTICES	 Offer readily available diverse, open-ended materials for children to put together into unique constructions Talk about children's creations, asking them to describe what they've made Model the way you comment about others' creations, "Look at all the red circles you made." Display children's artwork at their eye level Encourage children to make a creation to represent an activity or feeling Write a description of the child's artwork on the creation 	 Include observational drawings in your routines or opportunities for children to observe, then draw objects or events they see Display different types of art such as painting, photographs, sculptures throughout the facility Ask open-ended questions to prompt children to think about their creations and give descriptions of their ideas and perspectives Talk about art techniques in illustrations or photographs during read-aloud experiences, Encourage peer-to-peer and small group discussions of children's creations and visual art materials



CRA2: Music: Children will demonstrate an emerging understanding and appreciation of music as a form of self-expression.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
CATORS	2I-1 Imitate adult sounds by babbling or making other vocalizations	2YT-1 Imitate sounds and movements to favorite songs or music	20T-1 Use sounds/words or their bodies to imitate sounds, beat orrhythm
DEVELOPMENTAL INDICATORS	2I-2 Make sounds with toys or objects, creating instruments	2YT-2 Use musical toys to intentionally produce sounds or music	20T-2 Use rhythm instruments to experiment with rhythm and sound
DEVELOPI	2I-3 Show interest and respond to different songs and chants	2YT-3 Recognize and associate a particular song or sound with a particular meaning	2OT-3 Participate in simple songs and fingerplays
			20T-4 Respond to change in tone or melody
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Repeat sounds while listening to a song Bang blocks together or shake a rattle to make sounds Gaze attentively at adult while listening to a simple fingerplay Delight in and repeat new sounds such as lip smacking or squeals 	 Repeat the "e-i-e-i-o" sounds while listening to Old McDonald Push the button or switch on a musical toy to hear the sound it makes Begin to clean-up when the adult sings the clean-up song Put head down when a lullaby song is played Change volume of sounds, singing or talking louder or softer 	 Sing along to finger plays, using simple hand movements Sway to the sound of quiet music Participate in a parade with musical instruments Dance or move body to music Use a drum or triangle to represent a sound in a book Tap a drum, then tap a box to hear the differences insounds Hum a tune Ask an adult, "Can we sing Twinkle, Twinkle?"
SAMPLING OF PROFESSIONALS' PRACTICES	 Play different types ofmusic Hold baby and sway or dance to music Sing or recite finger plays during routines like diaper changing Make different sounds, wait for child to repeat, then repeat again Provide simple musical instruments such as a drum or rattle Demonstrate how to bang 2 blocks or objects together to make sound, then wait for baby to try 	 Sing rhyming songs and pause so children can add the last word Sing songs together that change volume or speed Announce routines or transitions with song or music Provide musical instruments to play Sing songs or finger plays that have to do with different events Send home the words to favorite songs so families can sing them at home too 	 Include singing and music in your everyday routine Change wording in, "Where is mommy?" or "Where is my crayon?" (instead of Thumbkin) Encourage children to move to instrumental music to the sound Provide scarves or rhythm sticks to move or play along to music Honor children's requests for favorite songs or give them choices Invite children to draw to the rhythm of music

CRA2: Music: Children will demonstrate an emerging understanding and appreciation of music as a form of self-expression.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DEVELOPMENTAL INDICATORS	2YP-1 Listen to different types of music (jazz, classical, country lullaby, etc.)	20P-1 Describe differences in music types
	2YP-2 Identify musical instruments by sight and sound	20P-2 Use musical instruments to make or replicate songs and sounds
DEVELOPN	2YP-3 Repeat a short melody	20P-3 Create and sing nonsense rhymes and songs
	2YP-4 Identify changes in tempo or tone when listening to music	20P-4 Replicate changes in tempo
		20P-5 Describe preferences for music types or instruments
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Manipulate and experiment with instruments to match beat or rhythm Participate in musical games like Hokey Pokey or If You're Happy and You Know It Make different sounds with voice, practicing high and low, loud, and soft Request favorite songs Repeat a rhythm after adult models; adult claps 3 times and pauses; children clap 3 times Listen to a new song and repeat part of it Move body in time to different kinds of music 	 Note the difference between a song that is loud and fast and one that is very slow Move scarves or hands or body to the music, paying attention to fast and slow Use a musical instrument to replicate a chain of notes or sounds State, "I like the drum best because it makes a loud sound." Finish the end of a nonsense song Create songs and rhymes of their own individually or withpeers Change the speed of maracas shaking according to the music Demonstrate an interest in various genres of music
SAMPLING OF PROFESSIONALS' PRACTICES	 Introduce children to varied songs and forms of music during routines and activities Include diverse musical instruments Ask children to use instruments or objects to represent sounds or words, such as clap hands whenever they hear the word, "jump" Involve children in action songs that encourage different movements Play rhythm games for transitions or wait times Demonstrate dances and songs from different cultures 	 Provide opportunities for children to create their own instruments Invite musicians and community partners to introduce children to a diversified variety of genres, instruments, and musicians Incorporate songs and lullabies from various cultures Use rhythm sticks or clapping to parse out syllables of words Sing silly songs or rhyming songs that children can finish or modify Add scarves, ribbons, bean bags or rhythm sticks to music



CRA3: Movement and Dance: Children will demonstrate growing interest and control in using rhythmic movements for self-expression.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
ATORS	3I-1 Respond to music by moving body	3YT-1 Spontaneously move body in response to music or sounds	3OT-1 Move body in different ways to different music and sounds
TAL INDICA	3I-2 Indicate enjoyment of music through body movements	3YT-2 Respond in creative ways when hearing music	3OT-2 Move and dance to favorite songs and music
DEVELOPMENTAL INDICATORS		3YT-3 Attempt tomove body according to instructions in a song	3OT-3 Follow simple movement directions while listening to music
_			3OT-4 Explore different ways to move with or without music
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Move body back and forth when hearing music Watch others move to music Bounce when listening to an action song 	 Sway back and forth to a lullaby Bounce or shake body when listening to an action song Intentionally fall down during Ring Around the Rosy Attempt to follow movements in Teddy Bear, Teddy Bear Turn Around Spontaneously move and dance around when music is played 	 Move body in different ways Move quickly to a fast-paced song and attempt to move slowly during a slow song Ask an adult to play or dance to a favorite song Clap or show pleasure when dance music is played Raise hands high and then lower hands when asked as part of a song Participate in Head Shoulders Knees and Toes, but may be inaccurate in movements
SAMPLING OF PROFESSIONALS' PRACTICES	 Gently move baby's body parts to different types of music Notice baby's movements in response to music, "You are bouncing to that song." Dance or sway while holding baby 	 Identify children's movements as they make them, "You are swaying gently to that sweet song." Play different types of music and model how to dance or move in response Use music and movement to announce transition times Introduce children to simple movement games such as Row Row Row Your Boat or Shake Your Sillies Out 	 Tell children to move like a tiger or fly like an airplane to the snack table Introduce children to movement songs like The Freeze or Dinosaur Stomp Give children feathers to move as they listen to music Describe and model children's movements as they move to music, "Now we are raising our hands high, now we put them down low."

CRA3: Movement and Dance: Children will demonstrate growing interest and control in using rhythmic movements for self-expression.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
ATORS	3YP-1 Move body to match different types of tempos and rhythms	30P-1 Use varied movement elements in response to music (high/low, fast/slow, up/down) etc.
DEVELOPMENTAL INDICATORS	3YP-2 Express feelings through dance or movement	30P-2 Use creative movement to express concepts or ideas
	3YP-3 Participate in guided movement games or songs	30P-3 Follow choreographed movement sequences
u	3YP-4 Make up simple dances or movement sequences	30P-4 Translate ideas into movement
	3YP-5 Indicate preferences for certain kinds of movement songs or music	30P-5 Watch with enjoyment when others dance or move creatively
		30P-6 Attempt or participate in dances from around the world
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Move scarves or body to reflect the tone or tempo of music Jump or move actively during fast-paced music and change body movements when music slows Follow the movement directions in a song Move body in response to an adult's request "Move like a snake or fly like a bird." Request a specific movement or action song, "Can we listen to Baby Shark?" 	 Hop, jump, raise hands high or low, clap, etc. in response to music Move to represent an idea from a story Move body to make the letters of the alphabet Repeat a teacher's demonstrated steps to master a dance or movement sequence Move body in different ways to respond to music, "This music sounds sad, can you move like the music sounds?" Play Hokey Pokey or Go in and Out the Window Tell another child, "You are a good dancer."
SAMPLING OF PROFESSIONALS' PRACTICES	 Ask children to close their eyes and move in response to what they're hearing Organize a marching band with children playing instruments and moving to match music Introduce the parachute to children, asking them to lift it high and low, move it fast and slow Provide scarves or ribbons or other props for children to move as they listen to music 	 Organize relay races during outdoor play where children move like crabs or jump like bunnies to get from one place to another Play different types of music and ask children to respond through moving their bodies Play songs and music that direct children to perform in certain ways, "Shake My Sillies Out" Play games like musical chairs without directing anyone to be "out" if they don't get a chair



CRA4: Drama & Acting: Children will demonstrate an emerging appreciation for the use of drama for self-expression.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
DEVELOPMENTAL INDICATORS	4I-1 Imitate familiar actions, behaviors or sounds of others	4YT-1 Experiment with voice inflections and sounds to indicate something else	4OT-1 Pretend to be a person or an animal through movement, language, and/ or sounds
OPMENTAL I		4YT-2 Role play familiar events and routines, everyday situations during play	4OT-2 Create dramatic play scenarios based on real-life experiences
DEVELO		4YT-3 Use hats, pocketbooks, clothes for dress-up and simple role playing	4OT-3 Use random objects to represent other object during play (e.g., block becomes a cell phone)
			4OT-4 Participate in pretend play with other children
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Watch an adult shake a spoon, then imitate Push a button on a toy to make it work Show interest in dolls or stuffed animals 	 Pretend to feed self a bottle or call someone on the phone Makeanimalsoundwhen holding a stuffed animal Choose a special outfit or article of clothing from dress-ups to wear Walk around the room with adult shoes and hats Hold a doll or put doll to bed 	 Rock a doll baby to sleep Tell teddy bear to drink his milk, holding a cup to his mouth Move like different animals such as slither like a snake, fly like a bird, etc. Begin to stir a pot next to a child who is cooking in the housekeeping area Use blocks or other materials to represent objects, "I made a car." Put on dress-up clothes and state, "I'm the doctor."
SAMPLING OF PROFESSIONALS' PRACTICES	 Provide dolls or stuffed animals for babies to hold Pretend to talk on the phone or eat or make exaggerated movements to demonstrate ideas Introduce finger plays Wear finger puppets and encourage baby to reach and feel them 	 Use puppets to represent actions or ideas Use expression when reading stories, acting out movements or ideas within the story Provide simple dress up clothes like hats, purses, and shoes Make animals sounds and movements and wait for child to repeat Provide dolls or stuffed animals for children to hold or use to act out 	 Put real-life objects in the dramatic play area Provide play food, dishes, and pots and pans Add doll clothes and doll furniture for children to explore Sing songs that ask children to mimic or act out motions, "The itsybitsyspider" Ask children to move in certain ways when they're moving from one place to another, "Hop like bunnies to the table." Use puppets to tell a story

CRA4: Drama & Acting: Children will demonstrate an emerging appreciation for the use of drama for self-expression.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DEVELOPMENTAL INDICATORS	4YP-1 Create various facial expressions and voice inflections when in character	4OP-1 Use various facial expressions and voice inflections when playing a character
	4YP-2 Put together a set of pretend behaviors to represent an action or event	40P-1 Participate in dramatic play activities to express ideas and feelings
DEVELC	4YP-3 Use materials in creative and imaginative ways as part of dramatic play	40P-1 Initiate role-playing experiences and playing with props and costumes
	4YP-4 Demonstrate an awareness of audience (e.g., ask others to watch performance)	40P-1 Demonstrate an interest in dramatizations of others through actions, stories, and puppetry
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Tell other children, "You be the mommy and I'll be the child and we'll go to the store." Act out movements within songs such as jump up like a jack in the box or roll over like the bear Use a scarf as a hat or a piece of fabric as a cape Use dolls or stuffed animals to act out scenarios Ask others if they want to play store Act out real life scenarios such as going through a drive-through, ordering food, paying, then receiving the food Tell an adult, "Watch me while I hop like a bunny." Growl like a bear or chirp like a bird 	 Identify emotions behind actions, "That girl in the story is sad." Assign parts to others during play, "You can be the doctor and I will be the sick dog." Ask to set up a play scenario after reading a story, "Can we make this area into an ice creamstore?" Use body parts to represent different objects or ideas Act out family situations or experiences Incorporate props and costumes into play, such as a clipboard and stethoscope for a doctor's office Ask questions and make suggestions to extend play-acting
SAMPLING OF PROFESSIONALS' PRACTICES	 Rotate materials and equipment in the dramatic play area to encourage children's creative play about different real life experiences Join in children's play in the dramatic play area and ask questions to extend their thinking Model behaviors while joining in children's pretend play, "Let's wash our hands before we eat lunch." Include objects and clothing from children's cultures in the dress-up area Sing songs or tell stories that encourage children to pretend Add props to the block area, such as cars, people or signal lights and signs 	 Encourage children to act out parts of stories while reading them, "I'll huff and puff and blow your house in." Use the dramatic play area to represent community businesses such as a hair salon, grocery store, veterinarian, pet shop Rotate materials in the block area to reflect construction that may be occurring nearby Ask children to identify their dramatic play area scenario and to research the types of materials to be included Ask children to help re-tell a story with expression and movement Create dress-up bags where children can use the materials inside to act out a scenario



Adaptations and Accommodations for Children with Unique Needs

Environment

- Provide a quiet space for children who choose not to participate in teacherdirected art experiences.
- Design the room to allow for children to move around freely during dance or movement experiences.
- Rotate materials to maintain interest.
- Modify music and movement activities for children with limited movement abilities.
- Play soft music from different cultures as children go about their day.

Daily Schedule and Routines

- Make creative movement and dance a regular part of children's routines and transitions.
- Adjust the length of time for activities, allowing for children to continue the development of creative ideas or projects from day to day.
- Build in opportunities for non-verbal children to express feelings or ideas through art, song, or music.
- Incorporate music, instruments, and dances from children's cultures.
- Create a calm sequence of activities by using music.

Materials

- Provide a variety of art materials, such as paints, modeling materials, crayons, markers, chalk and pencils that encourage experimentation.
- Offer adapted materials (large crayons/ brushes, adapted scissors, etc.).
- Include instruments that are physically easy to use (blocks, tambourines, etc.).
- Use a picture board, sign language, computerorotherelectronic device may help children express themselves.
- Provide instruments for limited fine motor and/or mobility, such as wrist bells.

Instruction and Activities

- Focus on the creative process instead of product, praising all types of accomplishments.
- Use activities that relate to other things children are learning.
- Provide alternate movements for finger plays, dances, etc. to help physically challenged children move or dance.
- Beaware that some children may be sensitive to unfamiliar textures, sounds, smells, etc.
- Break dance or movement activities into small steps, modifying the sequence to accommodate differing abilities and interests.



Dramatic play offers children learning opportunities by acting out real life situations. It offers an outlet for children to explore their own feelings or ideas and naturally resolve potential conflicts with their peers. Rotate the props in your dramatic play area periodically to attract children's new and creative play. Have you put our materials for a taco stand or pizza shop? Have you included puppets or props to make a puppet theater?

A Sampling of Foundational Practices

Environment and Materials

- Create a dedicated area for art and music.
- Provide room for children to dance or actively move around and include scarves, feathers, ribbons or ribbon sticks.
- Have a place where children may store unfinished artwork to continue at a later time.
- Add spaces and materials where children canpretend.
- Include varied art materials that are replenished daily and offer children opportunities to individually create: paper, paint, markers, crayons, tissue paper, feathers, glue, etc.
- Rotate materials in the dramatic play area, making scenarios according to children's interests: pet store, grocery store, doctor's office, ice cream parlor, etc.
- Add books about art, music, dance or movement to different learning areas.

Instruction

- Schedule or include creative experiences daily.
- Encourage process or open-ended experiences where there are no right or wrong answers.
- Play different types of soft music as background during the day or during rest time.
- Encourage children's imaginative thinking, "What could we do to..." or "How do you think we might..."
- Design the schedule to allow for children to complete art activities in small groups rather than all together.
- Plan for outdoor creative experiences by taking easels outside or playing music as children run or dance.
- Design opportunities for children to act out their favorite stories, creating costumes and props.

Children's Books

- Mouse Paint Ellen Stohl Walsh
- Little Blue, Little Yellow by Leo Lionni
- Mix It Up! by Hervé Tullet
- Blue Chicken by Deborah Freeman
- Giraffes Can't Dance by Giles Andreae and Guy Parker-Rees
- Elephants Cannot Dance! (An Elephant and Piggie Book) by Mo Willems
- · Bark, George by Jules Feiffer
- · From Head to Toe. Eric Carle
- · Huff and Puff by Claudia Rueda
- Like a Windy Day by Frank Asch and Devin Asch
- We're Going on a Bear Hunt by Michael Rose and Helen Oxenbury
- Go Shape Go by Denise Fleming
- · Many Colored Days by Dr. Seuss
- The Hat by Jan Brett
- · The Little Red Hen by Paul Galdone

Adult Resources

- Sierra, Judy. Flannel Board Storytelling Book. New York: H. W. Wilson, 1987
- Champlin, Connie. Storytelling with Puppets. 2d ed. Chicago: American Library Assn., 1998.
- Kohl, Maryanne F. Making Make Believe: Hands on Projects for Play and Pretend
- NAEYC: Expressing Creativity in Preschool
- NAEYC. (2019). Serious Fun: How Guided Play Extends Children's Learning. (M. L. Masterson, & H. Bohart, Eds.) Washington, DC, US: NAEYC.

Family Engagement

- Invite family members to share their cultural music, stories, dances.
- Create art shows where children's artwork is displayed; invite families to attend and include snacks and networking time.
- Produce a list of needed throwaway
 materials that families can contribute such
 as egg cartons, paper towel rolls, crayon
 stubs, etc.



SECTION



Physical Development and Health



Physical Development and Health 185



PHYSICAL DEVELOPMENT AND HEALTH (PDH)



Growing Strong, Healthy and Resilient

Physical or motor development occurs in all areas of learning. Motor skills support children in fully exploring their environment and interacting with people and things. Research shows children's physical skills also impact children's learning and school readiness. As children demonstrate balance, coordination, and strength, they are showing that they have the necessary skills to do things such as sit still and pay attention, balance in a chair, hold a pencil, or track their eyes on a line.

Gross Motor skills, sometimes called large muscle skills, refer to moving the whole body and the larger muscles of the body, such as those in the arms, legs, and core. Infants' physical development involves gaining control of the head, neck, and torso to help them sit, creep, crawl, and stand properly. As they mature into toddlers, they develop the strength and coordination to walk, throw, and stretch. Preschoolers gain even greater control over their body, contributing to their increasing confidence and their ability to engage in social play.

Fine Motor skills, or small muscle skills, involve the use of small muscles such as those in the wrist and hand. Children use their eyes, mouth, hands, and feet to learn to control and coordination of small, specialized motions such as picking up objects, fastening clothes, drawing and painting, and completing puzzles or small block buildings.

Did you know?

Young children are able to focus and pay better attention during and after physical activity.

Provide tummy time for babies to help them build strength through movement. Schedule both structured and unstructured play activities for toddlers and preschoolers that allow them to engage in light, moderate and vigorous levels of movement. Structured activities like organized games or tumbling and jumping, as well as providing opportunities for children to experience short bursts of activity throughout the day promote brain development and bone health. Include both indoor and outdoor play every day.

Add it up! Young children should be active for about 3 hours each day.

PDH 1 Motor Development

PDH1a: Gross Motor Development PDH1b: Fine Motor Development

PDH 2 Healthy Living

PDH2a: Healthy Habits PDH2b: Safety



PDH1a: Gross Motor Development: Children will demonstrate increasing body awareness, control, strength, and coordination of large muscles.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
INDICATORS	1al-1 Demonstrate control and strength of basic body movements such as rolling, reaching and pulling up to standing	1aYT-1 Show coordination and control of large muscle movements by throwing or kicking a large ball	1aOT-1 Use strength and control of large muscles to throw a large ball or to climb on playground equipment
DEVELOPMENTAL INDICATORS	1al-2 Show increasing stability in non-locomotor skills through reaching, stretching and turning over	1aYT-2 Demonstrate non- locomotor body movements such as shaking, wiggling, and turning	1aOT-2 Participate in non- locomotor or activities that require stability such as swaying, stretching and twisting
	1al-3 Master beginning movement skills such as creeping, crawling, scooting	1aYT-3 Show control of simple body movements and postures such as walking or climbing stairs with help	1aOT-3 Demonstrate increasing control of more complex body movements and postures such as climbing, running, moving in/out/ under objects
	1al-4 Show beginning body awareness by exploring new positions and movements	1aYT-4 Show awareness of where their body is in relation to other objects and people in the environment	1aOT-4 Demonstrate body and spatial awareness by negotiating and moving around objects and people
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Pull self up from sitting to standing Stand, holding onto a table and scoot around Kick legs and wiggle arms Stretch to pick up a toy that's out of reach 	 Push a riding toy to make it go (no pedals) Walk up stairs with support, placing one or both feet on step Climb and use age appropriate playground equipment Roll ball back and forth to an adult 	 Move body parts to an action song, "shake my sillies out" Throw and catch a large ball with some accuracy Participate in simple exercises Climb on sliding board ladders or playground equipment Participate in a simple obstacle course that goes over, under and through Crawl under a chair to reach for a toy
SAMPLING OF PROFESSIONALS' PRACTICES	 Show joy when child tries a new task Provide wedges or pillows or safe props for child to crawl and climb Put toy or object just out of reach and encourage a child to reach for it Exercise child's arms and legs, up and down, in and out Smile and laugh when playing "so big" 	 Provide riding toys Roll ball back and forth to child Create safe areas for climbing Stabilize shelves and furniture to avoid tipping or falling Provide push toys Play "chase" and ask children to catch you Create simple bowling games with empty milk cartons or plastic soda bottles and a soft ball 	 Play movement games like "Hokey Pokey" or "If You're Happy and You Know It" Play catch with large bouncing balls Start out each morning with an exercise routine Allow for outdoor play as weather permits Create obstacle courses or relays that ask children to climb over, crawl through or jump around objects

PDH1a: Gross Motor Development: Children will demonstrate increasing body awareness, control, strength, and coordination of large muscles.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
AL INDICATORS	1aYP-1 Use arms and legs in a coordinated manner to jump, pedal a bike, bounce a ball	1aOP-1 Coordinate movements with accuracy such as throwing, catching, or kicking a ball
DEVELOPMENTAL INDICATORS	1aYP-2 Gain increasing stability through practicing movements such as balancing, bending, shaking, flexing, and turning	1aOP-2 Demonstrate stability in body movements by walking on balance beam, twisting and turning, curling, and stretching
	1aYP-3 Gain control of simple traveling skills such as galloping, running or hopping	1aOP-3 Show increasing levels of proficiency in traveling or movement skills: walking, climbing, running, jumping, hopping, skipping, marching, and galloping
	1aYP-4 Understand the position or orientation of their bodies to other objects and people	1aOP-4 Move with an awareness of personal space
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Participate in relays that include running, hopping, flying Bounce a large ball back and forth to another Balance on a balance beam Dance with a partner Participate in simple exercises like knee bends or sit-ups Pedal a bicycle 	 Hop on one foot Gallop andskip Move through an obstacle course Participate in action songs like the "Freeze" or "Hokey Pokey" Climb the ladder of a sliding board with ease Play catch with accuracy using a large ball Ride bike Pump legs while swinging
SAMPLING OF PROFESSIONALS' PRACTICES	 Play Red Rover or other movement games Provide different kinds of balls such as large bouncing balls, nerf balls, soccer balls, etc. Play music that encourages fast and slow movements or dancing Provide riding toys with pedals Ask children to jump to the table or hop to the carpet 	 Have a marching band Play count and move games that ask children to make a specific number of hops, jumps, etc. Help children practice pumping to swing independently Put out mats for tumbling Play kick ball with children Add more complex movements to relay races such as walk backward, gallop or skip



PDH1b: Fine Motor Development: Children will demonstrate increasing strength, control, and coordination of their small muscles.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
DEVELOPMENTAL INDICATORS	1bl-1 Examine objects and transfer them from one hand to another	1bYT-1 Use eye-hand coordination to manipulate objects, feed self, or fill containers	1bOT-1 Show moderate control of hand-eye coordination by stringing large beads, putting together simple puzzles, or using simple shape sorters
DEVELOPMEN	1bl-1 Grasp object using the whole hand	1bYT-2 Pick up small objects with index finger and thumb	1bOT-2 Use tools that require finger and hand control such as a large paintbrush or shovel
	1bl-1 Use hand to pat or shake objects	1bYT-3 Stack 2-3 blocks or objects	1bOT-3 Stack small blocks or put large pegs in pegboard
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Hold bottle Put spoon to mouth Move objects from one hand to another Pick up cracker or cheerio with fingers Put small objects into a bigger box or container Hold 2 objects in one hand 	 Put together 3-4 piece puzzles with knobs Turn pages of a book with help Build a 2-block tower Hold a crayon with a fist-grip and make marks on paper Place large pegs on a pegboard Stack rings Remove own socks and shoes 	 Turn pages of a book Stack one inch blocks into a tower Use fork and spoon with control Put together simple puzzles String large beads Make snips with scissors Stir a cake mix Open and close a container Brush teeth with adult support Turn a doorknob or handle Pull up a large zipper
SAMPLING OF PROFESSIONALS' PRACTICES	 Offer bottle to hold while holding child Put out foods like cheerios or crackers on baby's highchair tray Provide opportunities for babies to fill and dump small objects into larger ones Offer baby more than one object at the same time Provide pop up toys or action cubes that require pushing or pressing 	 Encourage children child to hold a board book and try to turn pages Provide toddler-size lego blocks and model how to make a tower Provide stacking rings or peg boards Put out large crayons and paper and encourage children to make marks on paper Provide simple puzzles with knobs Allow time for children to remove their own clothes before bath With supervision, give children golf tees to push into styrofoam Invite children to match shapes with holes in shape sorters 	 Put out playdough and tools so children can pound, roll, squeeze Provide opportunities for children to paint with brushes or with hands Encourage children to pour or fill containers in the bathtub or water table Ask child to turn the pages of books while reading Provide legos or wood blocks for stacking Give children finger foods for snack, such as cheerios, cheese cubes Offer paper and safety scissors for children to snip While cooking, invite children to stir or pour an ingredient into a bowl

Physical Development and Health | PHYSICAL DEVELOPMENT (PDH)

PDH1b: Fine Motor Development: Children will demonstrate increasing strength, control and coordination of their small muscles.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DEVELOPMENTAL INDICATORS	1bYP-1 Show control of hand-eye coordination by stringing small beads or pushing keys on a keyboard	1bOP-1 Use precise control to accomplish tasks such as fastening clothes or pouring liquid from one container to another
DEVELOPMEN	1bYP-2 Use simple tools that combine dexterity, strength, and control such as markers or silverware	1bOP-2 Show increasing coordination and control of tools that require strength and dexterity such as hole punch or stapler
	1bYP-3 Move puzzle pieces in different ways to fit, or mold with play dough	1bOP-3 Build structures with small blocks or fit small objects into small holes
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 String one-inch wood beads Use lacing cards Put together 12-24 piece puzzles Fasten shoes with Velcro ties Build a tower with legos or bristle blocks Cut a straight line with scissors Unbutton large buttons Spoon out peaches or pour milk with adult support Wipe the table with a sponge or cloth 	 Take the cap off a marker Hold pencil with pincer grasp Copy simple shapes Move paper while cutting on a line Use a hole punch Zip jacket Spread butter or jelly on bread Use a computer mouse Spin a game spinner
SAMPLING OF PROFESSIONALS' PRACTICES	 Give children napkins and silverware to set the table Give children opportunities to dish out own food or pour own milk Give children tweezers or clothes pin to pick up small objects Put out cereal loops or pasta to make necklaces Provide opportunities for children to set and clear the table after snack Use pipe cleaners and small beads Use plastic canvas with large holes and yarn for sewing 	 Play a board game that involves rolling dice or moving a token Give children a hole punch and paper Put out mini-marshmallows and toothpicks Give children clothes pins and clothes to hang (mittens or socks) Provide opportunities for children to count out their crackers or pretzels Put out pipe cleaners and a colander and invite children to push pipe cleaners through the holes Offer pencils, crayons, and markers





PDH2a: Healthy Habits: Children will show increasing independence in performing self-care tasks.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
ICATORS	2al-1 Tolerate hands and face being washed teeth being brushed	2aYT-1 Cooperate for hand and face washing and tooth brushing	2aOT-1 Attempt to wash own hands and face and begins self-tooth brushing
JTAL INDI	2al-2 Fuss to indicate a wet or soiled diaper	2aYT-2 Begin to communicate toileting needs	2aOT-2 Attempt toileting with adult help
DEVELOPMENTAL INDICATORS	2al-3 Cooperate in dressing activities such as raising arm to put on shirt	2aYT-3 Show interest in self- dressing	2aOT-3 Begin to dress and undress self by pulling up pants, removing socks and shoes
_	2al-4 Showengagement while adult exercises arms, legs and body in a variety of ways	2aYT-4 Interact with adults in a variety of physical activities	2aOT-4 Participate in physical activity that engages the arms and legs
	2al-5 Participate in feeding routines	2aYT-5 Use utensils and cup to self-feed	2aOT-5 Show increasing proficiency in self-feeding
	2al-6 Try newfoods	2aYT-6 Show interest in new foods as they are presented	2aOT-6 Show preferences for foods
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Tolerate face and hands being cleaned after a messy meal Lift arms and legs to help with dressing Indicate a messy diaper by fussing Cooperate while adult exercises legs and arms out and in, up and down Spit out new foods until they've been tried multiple times Grab spoon from adult 	 Stick out hands and arms for hand washing Attempt to put on socks and shoes Hide behind a chair or sit under the table to move bowels "Dance" and move to action songs like the "Hokey Pokey" or "Shake My Sillies Out" Self-feed finger foods Try new foods with interest Pick up toys with adult reminders and support 	 Remove socks, shoes, and jacket Play "Row, Row, Row Your Boat" or "I'm a Little Teapot" Use toothbrush with adult support Attempt to wash face with a washcloth Occasionally use the potty or show interest Hang up a coat on hook Set table with silverware with adult support Prefer apples one week and oranges the next
SAMPLING OF PROFESSIONALS' PRACTICES	 Name foods while children are eating Talk to children while you are wiping their faces and hands with a warm cloth Play exercise games such as "so big" Exercise baby's legs and arms while diaper changing (move them out, then in, up, then down) Provide spoon for infant to hold during feeding Introduce new foods multiple times 	 Establish a mealtime routine Sing songs about routines, "It's time to brush our teeth, It's time to brush ourteeth" Talk about bathroom behaviors and encourage children's interest in using the toilet Describe foods as you eat Involve children in active movement games or songs Allow time for children to try to put on their own socks and shoes, applauding their efforts 	 Model healthy eating habits by sitting with children during meals Talk about favorite foods and the food groups Schedule frequent bathroom breaks Praise children's attempts to use the bathroom Allow time for children to practice self-dressing Introduce balls, riding toys and other equipment for outdoor play Transition with action, "Fly like airplanes to your cubby."

Physical Development and Health | PHYSICAL DEVELOPMENT (PDH)

PDH2a: Healthy Habits: Children will show increasing independence in performing self-care tasks.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DEVELOPMENTAL INDICATORS	2aYP-1 Wash hands and face and toothbrushes with adult guidance	2aOP-1 Wash hands and face and toothbrushes independently
	2aYP-2 Use bathroom for toileting needs with adult help	2aOP-2 Complete toileting independently
	2aYP-3 Manage most dressing activities with adult support	2aOP-3 Independently dress and undress self
	2aYP-4 Engage in physical activity that requires strength and stamina for at least brief periods.	2aOP-4 Engage in physical activities of increasing levels of intensity for sustained periods of time
	2aYP-5 Feed self independently; begin to pour and spread	2aOP-5 Open food items independently; cut with plastic knife
	2aYP-6 Differentiate between healthy and non-healthy foods	2aOP-6 Classify foods by their food groups
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Independently wash hands with water and soap Use toilet with adult support Put on pants and shirt Pick out own clothing, with adult support Try to clean up a spill Ask to pour own milk or juice Participate in relay races Unzip and remove jacket Tell an adult that carrots are good for you 	 Cough and sneeze into elbow Explain that rest and sleep help keep you healthy Run in place or attempt sit-ups Explain the importance of handwashing and toothbrushing Take off clothes and put on pajamas Use the bathroom independently Set the table Talk about how certain foods keep you healthy, "Carrots help to make me strong." Explain, "Apples are a fruit and broccoli is a vegetable."
SAMPLING OF PROFESSIONALS' PRACTICES	 Include dress-up dolls that have zippers, ties and snaps for children's practice Show children how to put on jackets or coats using the jacket flip method Provide a dramatic play area with cooking props Talk about the way in which some foods help you stay healthy, "Vegetables help you grow muscles." Explain the importance of exercise for good health Conduct simple exercises during group time Help children learn the steps of handwashing 	 Allow time for children to put on their own coats and hats before going outside Do simple cooking activities with children, talking about food groups as you prepare Put stools by the sink to support children's independent handwashing and count with them to help them thoroughly wash Remind children "Cover your mouth" Describe the way in which specific habits keep us healthy Conduct relay races or movement games during outdoor play



PDH2b: Safety: Children will demonstrate increasing awareness of safe habits, safety rules, and personal safety.

	By 9-12 months, most INFANTS will	By 18-24 months, most YOUNG TODDLERS will	By 36 months (3 years), most OLDER TODDLERS will
ICATORS	2bl-1 Show discomfort when feeling unstable	2bYT-1 Accept redirection from adult about safe behaviors	2bOT-1 Differentiate between harmful and safe situations
NTAL IND	2bl-2 Depend on adult for safety	2bYT-2 Rely on adult to follow safety rules	2bOT-2 Use adult support to follow basic safety rules
DEVELOPMENTAL INDICATORS	2bl-3 Show separation and stranger anxiety	2bYT-3 Show strong response to separation from familiar adult	2bOT-3 Differentiate between familiar people and strangers
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Cling to adult while being held Fuss if held in an awkward position Attempt to crawl or climb on unsafe surfaces until adult intervenes Cry and reach for familiar adult when a new person approaches 	 Heed warnings from adults, such as "No, no, it's hot." Stop unsafe behavior when redirected or removed from situation Look to adult to determine if behavior is safe or allowable Cry or throw a tantrum when familiar adult leaves 	 Follow simple rules such as "Use a quiet voice" or "Walk" with assistance and reminders Heed basic directions about safe vs. harmful, such as "Get down, that's toohigh." Hold an adult's hand to cross the street Approach unfamiliar people but look to familiar adult for assurance
SAMPLING OF PROFESSIONALS' PRACTICES	 Hold child securely in positions that feel safe to child Permit children to explore climbing or exploration of materials but stay close by to ensure their safety Reassure infant when unfamiliar adult comesnear Use gentle and soothing language when familiar adult leaves 	 Provide pictures of familiar adults Use simple explanations to describe what's safe and not safe Comfort children when they show strong emotions after hearing "no". "I know you want to play with that." or "It makes you sad when you can't have that toy." Use redirection, "Let's play with this bear." to help children move away from an unsafe behavior 	 Post and review a few simple safety rules Talk about safety in positive terms, "We walk inside and look both ways before you cross a street." Describe unsafe behavior and safe alternatives: "When you climb on that chair, I'm worried you could fall. Chairs are for sitting." Stay nearby when a child is unsure about a new adult

PDH2b: Safety: Children will demonstrate increasing awareness of safe habits, safety rules, and personal safety.

	By 48 months (4 years), most YOUNG PRESCHOOLERS will	By 60 months (5 years), most OLDER PRESCHOOLERS will
DEVELOPMENTAL INDICATORS	2bYP-1 Exhibit increasing independence in following personal safety practices and routines	2bOP-1 Avoid and alert others to danger, such as keeping a safe distance from swings
	2bYP-2 Identify and follow basic safety rules with adult reminders	2bOP2 Articulate basic safety rules and explain why they are necessary
	2bYP-3 Seek out trusted adults when feeling unsafe	2bOP-3 Explain how others help keep us safe
Δ	2bYP-4 Identify body parts that are "no touch"	2bOP-4 Explain what to do if someone attempts to touch private body parts
		2bOP-5 Recognize signs and symbols that indicate danger
SAMPLING OF CHILDREN'S OBSERVABLE ACTIONS	 Participate in a fire drill and practice "stop, drop, androll" Get down from a high spot when asked by adult Slow bike down to avoid a crash with another Explain what to do if you find matches on the ground Tell why you need to stop at the corner Identify a body's private parts as those that a bathing suit covers 	 Remind adult to buckle safety belt State and comply "Stop, look, and listen before you cross thestreet." Explain that police officers are our friends Remind others to wear bike helmets Describe purpose of stop sign or light Identify Mr. Yuk's (poison control icon) intent Explain that no one touches others' private parts
SAMPLING OF PROFESSIONALS' PRACTICES	 Hold safety drills regularly Remind children of safety rules before they engage in newactivities Read books about children being safe Review different situations where children are acting safely or unsafely and talk about the consequences Remind children to tell an adult if they see something unsafe or feel uncomfortable 	 Invite police officers to visit and explain ways to stay safe Talk about bike safety and the importance of wearing helmets Read books about personal safety Talk about poisons and Mr. Yuk Ask children to help you formulate a list of safety rules Ask children to identify alternative solutions to unsafe situations



Adaptations and Accommodations for Children with Unique Needs

Environment

- Provide enough space for children with physical limitations to maneuver around the environment.
- Make sure that the play space and activities are safe for all children.
- Use tape or signs to denote boundaries.
- Use picture cue cards to demonstrate routines such as handwashing or tablesetting.
- Include unbreakable mirrors and encourage children to identify body parts and physical characteristics that make them unique.

Daily Schedule and Routines

- Pace activities, offering active, then quiet experiences.
- Incorporate a resting time after vigorous physical activity to allow time for stimulation levels to decrease.
- Build movement activities into routines, regular activities, and transitions.
- Allow extra time, as needed, for children's physical or timed activities.
- Encourage children to complete activities in pairs.
- Give ELL students a peer partner to help them learn routines and schedules.

Materials

- Provide a variety of small motor materials such as puzzles, lacing, sorting and stringing.
- Modify equipment for easier manipulation; add Velcro to materials; use scoops and balled socks; add pencil grips or glue small knobs to puzzle pieces.
- Use balls with sound to assist tracking.
- Use pictures and manipulatives to illustrate foods, as well as real foods when appropriate.

Instruction and Activities

- Accommodate less-mobile children by giving them specific roles such as traffic director or weather watcher or alternate activities.
- Engage children in short bursts of active play throughout the day.
- Teach concepts one at a time, breaking into small steps.
- Provide for any food allergies and for any feeding or swallowing issues before starting anyfood-related activities.



Cooking with young children is a great way to introduce them to healthy eating habits, and at the same, help them develop physical and cognitive skills. A simple cooking experience for older toddlers and preschoolers can encourage children to try new foods and begin to differentiate between healthy and non-healthy foods. Stirring a pot or pouring flour into a bowl strengthens fine motor skills; "reading" a recipe or hearing new words like teaspoon or whip builds vocabulary; measuring ingredients, setting the timer, or adding "one more" supports math skills; and science concepts arise when ingredients blend into others or children watch water boil. Try a simple food experience and watch those skills grow!

A Sampling of Foundational Practices

Environment and Materials

- Create safe areas, inside and outside, where children can be run, jump, and climb.
- Add soft materials where young children can safely climb, roll and bounce.
- Include manipulatives or materials that encourage children to use their hands and fingers, such as rattles and stacking toys, shape sorters, puzzles, blocks, stringing beads.
- Offer a variety of materials and toys that child can turn, push, poke, pull, shake, grasp, put together and pull apart.
- Include toys where children can practice buttoning, zipping, and snapping.
- Make movement fun with scarves, musical instrument, rhythm sticks can make movement fun.

Instruction

- Schedule structured and free opportunities for active play.
- Play active movement games such as ring around the rosie or head, shoulders, knees and toes.
- Use fingerplays and songs where children move their hands and fingers.
- Engage children in short bursts of active play throughout the day.
- · Introduce children to new foods.
- Teach children about the importance of staying healthy.
- Make handwashing part of the regular routine.

Children's Books

- Pete the Cat: Firefighter Pete by James Dean
- Duck on a Bike by David Shannon
- · Spot Loves Sports by Eric Hill
- · Get Up and Go by Nancy Carlson
- Harold's Purple Crayon
- Gregory the Terrible Eater by
- Bread Bread Bread by Ann Morris
- Wiggle, Giggle, Shake by Rae Pika
- Never Talk to Strangers by Irma Joyce and GeorgeBuckett
- Five Little Monkeys Jumping on the Bed by Eileen Christelow
- The Very Hungry Caterpillar by Eric Carle
- Eating the Alphabet board book by Lois Ehlert
- · I Can Do It by Sarah Albee
- · All By Myself! by MercerMayer
- · Me and My Amazing Body by Joan Sweeney
- · The Busy Body Book by Lizzy Rockwell
- The Pigeon Needs a Bath by Mo Willems

Adult Resources

- Moving and Learning: A Physical Education Curriculum by Rae Pica
- Kids Health:

https://classroom.kidshealth.org/index.jsp?Grade=cc&Section=hhfl

 Talk About Touch Personal Safety Curriculum

https://www.cfchildren.org/wp-content/uploads/ resources/previous-programs/talking-about-touching/tatPreKTeachers.pdf

- Caring for our Children https://nrckids.org/CFOC
- Color Me Healthy: https://www.colormehealthy.com

Family Engagement

- Review information about children's health and habits at least annually.
- Plan educational programs that help families learn about childhood illnesses and their treatments.
- Plan family "challenges" where children and their adults participate in home-school exercise programs.
- Help families create safety evacuation routes for home practice.



CROSS WALKS

Contents

Crosswalk to Head Start Early Learning Outcomes Framework	199
Crosswalk to Department of Human Resources' Early Learning Guidelines	207
Crosswalk to Family Engagement Standards and Guidelines	223
Crosswalk to Alabama Courses of Study	231



CROSSWALK

Alabama Standards for Early Learning and Development (ASELD) and Head Start Early Learning Outcomes Framework, Ages Birth to Five



HEAD START Approaches to Learning	ALABAMA STANDARDS FOR EARLY LEARNING AND DEVELOPMENT Approaches to Play and Learning (APL): Developing Skills and Attitudes for Success
Goal P-ATL 1. Child manages emotions with increasing independence	SED2a: Children will identify, manage, and express their feelings.
Goal P-ATL 2. Child follows classroom rules and routines with increasing independence.	SST1b: Children will develop a sense of belonging to a group and follow its rules.
GoalP-ATL3. Child appropriately handles and takes care of classroom materials	SST1b: Children will develop a sense of belonging to a group and follow its rules.
Goal P-ATL 4. Child manages actions, words, and behavior with increasing independence.	SED1b: Children will develop confidence in their own abilities with support of others.
GoalP-ATL5. Child demonstrates an increasing ability to control impulses.	SED2b: Children will begin to self-regulate.
Goal P-ATL 6. Child maintains focus and sustains attention with minimal adult support.	APL2a: Children will develop the ability to focus their attention and concentrate to complete tasks.
Goal P-ATL 7. Child persists in tasks.	APL2a: Children will develop the ability to focus their attention and concentrate to complete tasks.
Goal P-ATL 9. Child demonstrates flexibility in thinking and behavior.	APL3b: Children will demonstrate a willingness to take risks and try new things.
Goal P-ATL 10. Child demonstrates initiative and independence.	APL3a: Children will show eagerness, imagination, and creativity as they try new tasks.
Goal P-ATL 11. Child shows interest in and curiosity about the world around them.	APL3a: Children will show eagerness, imagination, and creativity as they try new tasks.
Goal P-ATL 12. Child expresses creativity in thinking and communication.	APL3a: Children will show eagerness, imagination, and creativity as they try new tasks.
	CRA1: Children will demonstrate an increasing understanding and enjoyment of the use of visual arts as a form of self-expression.
	CRA2: Children will demonstrate an increasing understanding and appreciation of music as a form of self-expression.
	CRA3: Children will demonstrate growing interest and control in using rhythmic movements for self-expression.
	CRA4: Children will demonstrate an increasing appreciation for the use of drama for self-expression.
Goal P-ATL 13. Child uses imagination in play and interactions with others.	APL1a: Children will use their imaginations to learn about the world around them.



HEAD START Social and Emotional Development	ALABAMA STANDARDS FOR EARLY LEARNING AND DEVELOPMENT Social Emotional Development (SED): Myself, MyFeelings, and MyRelationships
Goal P-SE 1. Child engages in and maintains positive relationships and interactions with adults.	SED3a: Children form relationships and interact positively with adults who consistently respond to their needs.
Goal P-SE 2. Child engages in prosocial and cooperative behavior with adults.	SED3a: Children form relationships and interact positively with adults who consistently respond to their needs.
Goal P-SE 3. Child engages in and maintains positive interactions and relationships with other children.	SED3b: Children develop ways to interact and build relationships with peers.
Goal P-SE 4. Child engages in cooperative play with otherchildren.	APL1b: Children will learn to work and play together to achieve a common goal.
Goal P-SE 5. Child uses basic problem- solving skills to resolve conflicts with other children.	SED2b: Children will begin to self-regulate.
Goal P-SE 6. Child expresses a broad range of emotions and recognizes these emotions in self and others.	SED2a: Children identify, manage, and express their feelings.
Goal P-SE 7. Child expresses care and concern toward others.	SED2a: Children identify, manage, and express their feelings.
Goal P-SE 8. Child manages emotions with increasing independence.	SED2a: Children will identify, manage express their feelings.
Goal P-SE 9. Child recognizes self as a unique individual having own abilities, characteristics, emotions, and interests.	SED1a: Children will demonstrate an emerging personal identity through awareness of own personal characteristics and abilities.
Goal P-SE 10. Child expresses confidence in own skills and positive feelings about self.	SED1b: Children develop confidence in their own abilities.
Goal P-SE 11. Child has sense of belonging to family, community, and other groups.	SST1a: Children will develop a sense of belonging to a family group, articulate family members' roles, and identify how families are alike and different.
	SST1b: Children build a sense of belonging to a group and follow its rules.



HEAD START Language and Communication; Literacy	ALABAMA STANDARDS FOR EARLY LEARNING AND DEVELOPMENT Language and Literacy (LLT): Understanding and expressing by listening, speaking, reading and writing
Goal P-LC 1. Child attends to communication and language from others.	LLT1a: Children will gain information by understanding the meaning of words and gestures.
Goal P-LC 2. Child understands and responds to increasingly complex communication and language from others.	LLT1a: Children will gain information by understanding the meaning of words and gestures.
Goal P-LC 3. Child varies the amount of information provided to meet the demands of the situation.	LLT1c: Children will use, adapt, and follow the rules of language.
Goal P-LC4. Child understands, follows, and uses appropriate social and conversational rules.	LLT1c: Children will use, adapt, and follow the rules of language.
Goal P-LC 5. Child expresses self in increasingly long, detailed, and sophisticated ways.	LLT1b: Children will use words and gestures to express their thoughts, feelings and needs to others.
Goal P-LC 6. Child understands and uses a wide variety of words for a variety of purposes.	LLT1b: Children will use words and gestures to express their thoughts, feelings and needs to others.
Goal P-LC 7. Child shows understanding of word categories and relationships among words.	LLT1b: Children will use words and gestures to express their thoughts, feelings and needs to others.
Goal P-LIT 1. Child demonstrates awareness that spoken language is composed of smaller segments of sound.	LLT2b: Children will begin to recognize and word with sounds in spoken language.
Goal P-LIT 2. Child demonstrates an understanding of how print is used (functions of print) and the rules that govern how print works (conventions of print).	LLT2d: Children will construct meaning and appreciation of print.
Goal P-LIT 3. Child identifies letters of the alphabet and produces correct sounds associated with letters.	LLT2c: Children begin to recognize that letters and letter sounds represent the sounds of spoken language.
Goal P-LIT 4. Child demonstrates an understanding of narrative structure through storytelling/ re-telling.	LLT2a: Children will demonstrate understanding of both the written and spoken word.
Goal P-LIT 5. Child asks and answers questions about a book that was read aloud.	LLT2a: Children will demonstrate understanding of both the written and spoken word.
Goal P-LIT 6. Child writes for a variety of purposes using increasingly sophisticated marks.	LLT3: Children demonstrate beginning understanding of writing as a way to communicate and that their marks on paper convey a message.



HEAD START Mathematics Development	ALABAMA STANDARDS FOR EARLY LEARNING AND DEVELOPMENT Mathematical Thinking (MAT): Exploring, Processing and Logical Reasoning
Goal P-MATH 1. Child knows number names and the count sequence.	MAT1b: Children will connect number names to quantities.
GoalP-MATH2. Child recognizes the number of objects in a small set.	MAT1a: Children will understand the concept of numbers, and the relationships between numbers and quantities.
Goal P-MATH 3. Child understands the relationship between numbers and quantities.	MAT1a: Children will understand the concept of numbers, and the relationships between numbers and quantities.
Goal P-MATH 4. Child compares numbers.	MAT1a: Children will understand the concept of numbers, and the relationships between numbers and quantities.
Goal P-MATH 5. Child associates a quantity with written numerals up to 5 and begins to write numbers.	MAT1a: Children will understand the concept of numbers, and the relationships between numbers and quantities.
GoalP-MATH6. Child understands addition as adding to and understands subtraction as taking away.	MAT2a: Children will develop understanding of putting together or adding to and taking apart and taking from.
Goal P-MATH 7. Child understands simple patterns.	MAT2c: Children will recognize simple patterns in daily life and play experiences.
Goal P-MATH 8. Child measures objects by their various attributes using standard and non-standard measurement. Uses differences in attributes to make comparisons.	MAT4: Children will explore and communicate about distance, weight, length, height, and time. MAT2b: Children will classify and organize objects according to their properties and attributes.
GoalP-MATH9. Child identifies, describes, compares, and composes shapes.	MAT3b: Children will explore, visualize, and analyze shapes and shape attributes.
Goal P-MATH 10. Child explores the positions of objects in space.	MAT3a: Children will explore and describe the spatial relationships between objects, the environment and themselves.



HEAD START Scientific Reasoning	ALABAMA STANDARDS FOR EARLY LEARNING AND DEVELOPMENT Science Exploration and Knowledge (SCI): Exploring the World Around Me
Goal P-SCI 1. Child observes and describes observable phenomena (objects, materials, organisms, and events).	SEK1a: Children will differentiate between living and non-living things and their characteristics.
	SEK1b: Children will demonstrate emerging understanding of matter and energy.
	SEK1c: Children will demonstrate emerging understanding of the earth and atmosphere.
Goal P-SCI 2. Child engages in scientific talk.	SEK1e: Children will gain knowledge through exploration and discovery.
Goal P-SCI 3. Child compares and categorizes observable phenomena.	SEK1d: Children will gain knowledge through exploration and discovery.
Goal P-SCI 4. Child asks a question, gathers information, and makes predictions.	SEK1d: Children will gain knowledge through exploration and discovery.
Goal P-SCI 5. Child plans and conducts investigations and experiments.	SEK1d: Children will gain knowledge through exploration and discovery.
Goal P-SCI 6. Child analyzes results, draws conclusions, and communicates results.	SEK3: Children will use logical thinking and reasoning to solve meaningful problems and inform decisions.
	MAT4b: Child uses logical thinking and reasoning to solve meaningful problems and inform.



HEAD START Perceptual, Motor, and Physical Development	ALABAMA STANDARDS FOR EARLY LEARNING AND DEVELOPMENT (PDH): Growing Strong, Healthy and Resilient
Goal P-PMP 1. Child demonstrates control, strength, and coordination of large muscles.	PDH1a: Children will demonstrate increasing body awareness and control, strength and coordination of large muscles.
Goal P-PMP 2. Child uses perceptual information to guide motions and interactions with objects and other people.	PDH1a: Children will demonstrate increasing body awareness and control, strength, and coordination of large muscles.
GoalP-PMP3. Child demonstrates increasing control, strength, and coordination of small muscles.	PDH b: Children will demonstrate increasing control and coordination of small muscles.
Goal P-PMP 4. Child demonstrates personal hygiene and self-care skills.	PDH2a: Children will demonstrate increasing independence in performing in self-care tasks.
Goal P-PMP 5. Child develops knowledge and skills that help promote nutritious food choices and eating habits.	PDH2a: Children will demonstrate increasing independence in performing in self-care tasks.
Goal P-PMP 6. Child demonstrates knowledge of personal safety practices and routines.	PDH2b: Children will demonstrate increasing awareness of safe habits, safety rules and personal safety.



CROSSWALK

Alabama Early Learning Guidelines: Department of Human Resources Early Learning Guidelines Crosswalk Alabama Early Learning Guidelines: DHR Crosswalk

SOCIAL EMOTIONAL DEVELOPMENT (SED) Me, Myself, and My Relationships

SED1a Self-Awareness: Children will demonstrate an emerging personal identity through awareness of own personal characteristics, skills, and abilities. SC/EM Birth-6 Months 8: develop an awareness of self as a separate individual from others

SC/EM 6-12 Months 9: respond to her/his own image in a mirror SC/EM 12-18 Months 5: try to achieve a sense of self-identity

SC/EM 4 Years 3: often seem selfish and unable to understand taking turns SD Birth-6 Months 12: respond to her/his name and caregiver's actions

SD Birth-6 Months 13: respond to self in mirror

SD 12-18 Months 2: imitate the actions and activities of others SD 12-18 Months 5: begin to achieve a sense of self-identity SD 3 Years 5: become defensive of toys and other possessions

SD 5 Years 8: argue about many things and have a strong sense of "fairness"

SD 5 Years 9: be independent, yet still want and need help

CD 18-24 Months 2: refer to self by name, and name other familiar objects

CD 2 Years 1: be able to say what gender she or he is

SED1b Self-Esteem: Children will demonstrate emerging confidence in their own abilities. SC/EM 12-18 Months 6: become more independent

SC/EM 18-24 Months 1: start to help when washing her/his hands

SC/EM 3 Years 7: want to do for herself/himself SC/EM 4 Years 2: show pride in accomplishments SC/EM 4 Years 4: demand doing many things for self

SD 5 Years 7: boast about accomplishments

SED2a Manage Feelings:

Children will identify, manage, and express their feelings SC/EM Birth-6 Months 3: express her/his needs and emotions with different cries and vocal sounds

SC/EM Birth-6 Months 4: smile in response to a friendly face or voice

SC/EM Birth-6 Months 10: imitate sounds, facial expressions, and actions of others

SC/EM 6-12 Months 1: cry when she/he needs help

SC/EM 6-12 Months 8: indicate her/his wants through movements and sounds SC/EM 12-18 Months 2: ask for what she/he wants through sounds and motions

SC/EM 12-18 Months 7: start to show different social emotions, such as affection, jealousy, anger, and sympathy

SC/EM 18-24 Months 4: choose toys to play with and help pick up toys SC/EM 18-24 Months 5: let you know when she/he needs to use the toilet

SC/EM 18-24 Months 8: show different emotions and moods SC/EM 18-24 Months 9: become aware of her/his own feelings SC/EM 3 Years 1: be friendly, laugh often, and be eager to please SC/EM 3 Years 2: have occasional nightmares and fear of the dark

SC/EM 4 Years 5: show very different emotions within a short period of time

SC/EM 5 Years 1: show many different feelings

SC/EM 5 Years 3: often be able to express feelings in words

SC/EM 5 Years 6: have better self-control of emotions

SD 6-12 Months 5: show affection

SD 12-18 Months 3: show affectionate responses and begin social interactions

SD 4 Years 1: be outgoing, friendly, and overly enthusiastic at times

SD 4 Years 6: rely more on verbal expressions than physical aggression

SD 4 Years 7: engage in name-calling and teasing

CD Birth-6 Months 2: smile and respond to faces or objects

CD Birth-6 Months 11: make same type of gesture as one that was modeled

LLD Birth-6 Months 10: laugh out loud

LLD 6-12 Months 8: show emotions by making different sounds and expressions

LLD 12-18 Months 10: greet people with a smile or concern

LLD 2 Years 10: begin to communicate feelings when having conflicts with others

KEY SC/EM: Self-Concept/ **Emotional**

SD: Social Development LLD: Language & Literacy Development

CD: Cognitive Development PD: Physical Development

Alabama Standards for Early Learning and Development

Alabama Early Learning Guidelines: DHR Crosswalk

SED2b Self-Regulation: Children will begin to self-regulate.

SC/EM Birth-6 Months 7: entertain self by playing with fingers, hands, and toes SC/EM Birth-6 Months 11: spend less time crying, and will laugh out loud

SC/EM 12-18 Months 4: be able to sit still for a short while SC/EM 12-18 Months 8: better control her/his own behaviors SC/EM 2 Years 5: change mind and moods quickly SC/EM 2 Years 6: sometimes be able to make choices

SC/EM 2 Years 7: sometimes want to hold onto the "old", rather than try the "new" SC/EM 2 Years 11: display aggressive behaviors, such as hitting, biting, and shoving

SC/EM 3 Years 5: sometimes have a special security blanket, stuffed animal or toy for comfort SC/EM 3 Years 6: need affection, support and comfort when she/he is afraid, hurt or sad

SC/EM 4 Years 1: sometimes become physical/aggressive when angry SD birth 6 Months 6: become upset if toys or other objects are taken away

SD 12-18 Months 8: begin to briefly wait for responses to her/his requests

SED3a Relationships with Adults: Children will form relationships and interact positively with adults who consistently

respond to their needs.

SC/EM Birth-6 Months 2: begin to establish emotional attachments or "bonding" relationships with parents/family and caregivers

SC/EM Birth-6 Months 6: stop crying when parents, family members, and/or caregivers come near SC/EM Birth-6 Months 9: seek attention of parent or caregiver by using body movements and/or vocal sounds

SC/EM 6-12 Months 6: have emotional attachments to particular people

SC/EM 18-24 Months 6: recognize when people are feeling happy, sad, angry, or scared

SC/EM 18-24 Months 7: show affection for you and others that she/he knows SC/EM 3 Years 8: possibly have difficulty adjusting to being away from parents

SC/EM 4 Years 6: show jealousy of others who seem to be taking an adult's attention away from

SC/EM 4 Years 7: desire to please adults

SC/EM 5 Years 2: start to understand the feelings of others

SD Birth-6 Months 4: reach out to familiar people

SD Birth-6 Months 5: become more outgoing and social

SD Birth-6 Months 7: smile in response to a friendly face or voice

SD Birth-6 Months 8: usually stop crying when picked up and held

SD Birth-6 Months 9: begin to develop a sense of security and trust with parents and caregivers

SD Birth-6 Months 10: imitate, maintain, or avoid interactions

SD Birth-6 Months 11: show individual responses to different people and situations

SD 6-12 Months 1: recognize and bond with primary caregivers

SD 6-12 Months 2: recognize familiar people and may be shy of strangers

SD 6-12 Months 3: begin to respond to more than one familiar person at a time

SD 6-12 Months 4: begin to be sociable by initiating interactions with other children and adults

SD 6-12 Months 6: grab caregiver's hand or leg when frightened, or look at caregiver for reassurance

SD 18-24 Months 3: learn to seek help from caregivers, if needed

SD 18-24 Months 5: alternate between clinging to parents and caregivers or resisting them

SD 2 Years 5: develop trusting relationships with caregivers

SD 3 Years 10: enjoy adult attention

CD Birth-6 Months 2: prefer to listen to mother's and primary caregiver's voices

CD Birth-6 Months 3: often move body to speech of a parent or caregiver

Alabama Early Learning Guidelines: DHR Crosswalk

and Development	Alabama Early Learning Guidelines: DHR Crosswalk
SED3b Relationships with Children: Children will develop ways to interact and build relationships with peers.	SC/EM 2 Years 10: enjoy social interaction SC/EM 3 Years 4: show affection toward children who are younger or get hurt SC/EM 5 Years 5: be caring and affectionate, especially toward injured children, younger children, and animals SD 12-18 Months 1: be sociable but able to play alone for a short time SD 18-24 Months 1: mostly play next to, but not with, other children SD 18-24 Months 6: offer toys to other children, but usually be possessive of playthings SD 2 Years 2: enjoy being with other children, but may use unacceptable social behavior SD 2 Years 4: enjoy small group activities SD 2 Years 6: show interest in children of the same age SD 2 Years 7: begin to cooperate with less physical aggressiveness SD 3 Years 1: sometimes take turns, but will not always be willing to do so SD 3 Years 3: observe other children playing and may join in for a short time SD 3 Years 9: begin making friends SD 3 Years 11: enjoy sitting with arms around friends, or holding hands SD 4 Years 8: develop close friendships with playmates SD 5 Years 1: enjoy telling jokes and making people laugh
SOCIAL STUDIES (SST) Lea	arning about Myself, My Family, and My Community
SST1a Family Structure: Children will develop a sense of belonging to a family group and can articulate the roles of its members and how families are the same and different.	SD 6-12 Months 7: identify family members, friends, and pets LLD 18-24 Months 8: enjoy stories about self and family LLD 3 Years 5: talk about known objects and people not present LLD 4 Years 9: give first and last name, family members' names, gender (girl or boy), and telephone number LLD 5 Years 5: state the name of city/ town where child lives, birthday, and family members' names
SST1b Community Belonging: Children will build a sense of belonging to a group and follow its rules.	SC/EM 2 Years 2: choose toys and begin to put them away when asked to do so SD 12-18 Months 6: follow simple directions SD 5 Years 5: often follow directions and carry out responsibilities CD 6-12 Months 5: recognize and anticipate activities
SST1c Diversity and Culture: Children will show understanding of how people are customs are alike and different.	
SST2a Economics: Children will understand about supply and demand, why people work, money, and community helpers.	
SST2b Geography: Children will identify basic concepts of location and features in the community.	
SST2c History: Children will demonstrate understanding of events	

past.

and people from the

SD: Social Development LLD: Language & Literacy Development CD: Cognitive Development PD: Physical Development

Alabama Standards for Early Learning and Development

Alabama Early Learning Guidelines: DHR Crosswalk

APPROACHES TO PLAY AND LEARNING (APL) Developing Skills and Attitudes for Success			
APL1a Imaginative Play: Children will use their imaginations to learn about the world around them.	SC/EM 6-12 Months 5: play SC/EM 2 Years 9: enjoy playing SC/EM 3 Years 3: often talk to self SD 18-24 Months 2: engage in make-believe or dramatic play SD 2 Years 1: use more imagination SD 2 Years 3: imitate adults' activities SD 3 Years 4: use objects in pretend play SD 3 Years 8: engage in make-believe play SD 4 Years 2: sometimes have imaginary playmates or companions SD 4 Years 3: boast, exaggerate, and make up stories SD 5 Years 10: enjoy pretend-play LLD 5 Years 17: show interest in social and workplace roles CD 6-12 Months 11: imitate simple movements CD 3 Years 6: act out real life situations CD 4 Years 9: have an interest in playing school CD 4 Years 11: have a vivid imagination		
APL1b Collaborative Play: Children will learn to work and play together to achieve a common goal.	PD 6-12 Months 18: play simple games SD 3 Years 2: join in simple games and group activities SD 4 Years 4: cooperate with others and participate in group activities SD 5 Years 2: often play cooperatively SD 5 Years 3: participate in group play and shared activities		
APL2a Persistence, Engagement, and Attention: Children will develop the ability to focus their attention and concentrate to complete tasks.	SC/EM Birth-6 Months 2: be awake and active for longer times SC/EM 5 Years 7: dress self completely, learn to tie shoes, and sometimes notice when clothing is on the wrong side SC/EM 5 Years 8: enjoy responsibility and have a strong need to feel accepted and powerful SC/EM 5 Years 9: plan and carry out activities and projects independently SD 12-18 Months 7: begin to be eager and want to do more in her/his surroundings LLD Birth-6 Months 3: turn head in response to sound from either side		
APL2b Task Analysis: Children will identify the steps needed to achieve a goal.			
APL2c Reasoning and Problem Solving: Children will identify and develop strategies for solving simple problems.	PD 6-12 Months 12: use different actions with different objects CD 12-18 Months 9: have an interest in the ability to make changes		

Alabama Early Learning Guidelines: DHR Crosswalk

APL3a Curiosity,			
Invention and Initiative:			
Children will show			
eagerness,			
imagination, and			
creativity as they try			
new tasks.			

SC/EM 4 Years 8: enjoy being silly/playful

SD 18-24 Months 4: show tremendous curiosity about people and things in their surroundings

SD 5 Years 6: continue to ask many questions

PD 6-12 Months 8: learn about things by handling them PD 6-12 Months 9: look all around at things near and far

PD 6-12 Months 13: hold onto objects, look at them, and put them in mouth

CD 6-12 Months 6: reject an object or toy after playing with it many times

CD 6-12 Months 7: watch a fast-moving object as it goes up, down, or sideways

CD 6-12 Months 8: usually not turn objects over to see the other side

CD 6-12 Months 10: spend time looking at own hand

CD 12-18 Months 7: have an interest when others point out objects in her/his surroundings

CD 12-18 Months 8: give you several common objects when asked for by name

CD 12-18 Months 9: have an interest in exchanging objects with others

CD 12-18 Months 10: have an interest in pointing to objects

SCIENCE EXPLORATION AND KNOWLEDGE (SEK) Exploring the World Around Me

SEK1a Scientific
Inquiry:
Children will gain
knowledge and
through exploration and
discovery.

LLD 5 Years 14: ask "why?" questions

PD 6-12 Months 15: like to play with many objects, dropping one and picking up another, one by one

CD Birth – 6 Months 4: look about, even in a darkened area

CD Birth – 6 Months 5: follow a slowly moving object through a complete arc of 180 degrees

CD Birth – 6 Months 6: continue to gaze in direction of moving objects that seem to disappear

CD Birth – 6 Months 7: distinguish between objects CD Birth – 6 Months 9: watch hand movements

CD Birth – 6 Months 10: focus on and reach for object, and distinguish between textures, solids, and

liquids

CD Birth – 6 Months 15: experience different environments

CD 6-12 Months 3: recognize that objects can change

CD 6-12 Months 4: follow a moving object with eyes, and will briefly look for an object that has disappeared

CD 6-12 Months 9: be able to line up an object in one hand with another object in other hand

CD 6-12 Months 10: be able to grab an object which moves after she/he begins to reach for it

CD 12-18 Months 2: find an object by looking in the right place when it is hidden in first one place,

then another, and then a third place

CD 12-18 Months 6: notice features of sameness and differences

CD 12-18 Months 11: have an interest in the ability to make changes

SEK1b Biological Science:

LLD 12-18 Months 6: begin to point to and name body parts and learn about self

Children will differentiate between living and nonliving things and their CD 12-18 Months 4: point to three body parts when asked CD 2 Years 2: point to smaller body parts when asked

CD 4 Years 7: enjoy learning about how things grow and operate

SEK1c Physical Science: Children will

and energy.

characteristics

CD Birth-6 Months 10: focus on and reach for object, and distinguish between textures,

solids, and liquids

demonstrate emerging understanding of matter

CD Birth – 6 Months 14: become aware of starting and stopping

CD 6-12 Months 7: watch a fast-moving object as it goes up, down, or sideways

CD 3 Years 10: have an interest in changing things in her/his environment

SD: Social Development LLD: Language & Literacy Development CD: Cognitive Development PD: Physical Development

Alabama Standards for Early Learning and Development	Alabama Early Learning Guidelines: DHR Crosswalk
SEK1d Earth and Space Science: Children will demonstrate emerging understanding of the earth and atmosphere.	CD Birth – 6 Months 10: focus on and reach for object, and distinguish between textures, solids, and liquids CD 4 Years 12: have an interest in day and night, before and after, and coming and going
SEK1e Environment and Ecology: Children will demonstrate understanding of their impact on taking care of the world.	SC/EM 6-12 Months: explore her/his environment CD 18-24 Months 7: develop a sense of ownership CD 3 Years 10: have an interest in changing things in her/his environment
SEK2a Use of Tools: Children will use simple and more complex tools to accomplish a task.	PD 4 Years 12: become more accurate at hitting nails and pegs with a hammer CD 12-18 Months 13: have an interest in using objects as tools CD 12-18 Months 13: have an interest in using objects as tools CD 18-24 Months 5: continue to use objects as tools
SEK2b Media Literacy: Children will demonstrate understanding of the types of information they are receiving through media.	CD 3 Years 9: enjoy stories that give real information CD 4 Years 13: have an interest in things real and not real
SEK2c Digital Citizenship: Children will demonstrate safe use of technology.	
SEK2d Computational Thinking: Children will use technological skills, concepts, and behaviors to solve problems or complete projects.	
SEK3 Engineering Processes: Children will use beginning design processes for problem solving.	PD 12-18 Months 2: try to stack blocks on top of each other PD 4 Years 7: build a tower with ten or more blocks, using dominant hand CD 18-24 Months 10: begin to understand that parts of an object can make a whole

Alabama Early Learning Guidelines: DHR Crosswalk

Mathematical Thinking (MA	ATv): Exploring, Processing and Logical Reasoning
MAT1a: Number Relationships: Children will understand the concept of numbers, and the relationships between numbers and quantities.	CD 18-24 Months 4: understand amount words, such as more, less, and another CD 18-24 Months 10: begin to understand that parts of an object can make a whole CD 2 Years 8: become more interested in the concept of some and all CD 3 Years 11: be interested in who has more or less CD 5 Years 13: understand the concept of "less than"
MAT1b: Counting and Number Sense: Children will connect number names to quantities.	CD 2 Years 4: become interested in how many objects she/he has CD 3 Years 12: continue to have an interest in counting CD 4 Years 20: understand the concept of size and amount CD 5 Years 10: count to 20 and above CD 5 Years 11: recognize numbers from one to ten
MAT2a: Children will develop understanding of putting together or adding to and taking apart and taking from.	CD 12-18 Months 12: notice same/different and some/all
MAT2b: Sets: Children classify and organize objects according to properties and attributes.	LLD 2 Years 4: begin to name and match colors, sizes, and shapes PD 6-12 Months 11: enjoy playing with all kinds of objects CD 18-24 Months 6: point to matching or similar objects CD 18-24 Months 8: understand that words can label sameness and differences CD 18-24 Months 9: understand that some have more, and some have less CD 3 Years 2: sort objects based on shape or color CD 3 Years 4: name and match primary colors CD 5 Years 3: sort objects on the basis of both color and shape CD 5 Years 4: sort a variety of objects in a group that have one thing in common
MAT2c: Patterns: Children will recognize simple patterns in daily life and play experiences.	SD Birth-6 Months 3: enjoy familiar routines LLD 6-12 Months 10: be aware of daily routines and activities LLD 2 Years 8: respond to verbal and nonverbal signals for routines and changes CD Birth-6 Months 14: become aware of starting and stopping CD 4 Years 8: understand the sequence of daily events CD 5 Years 12: identify objects in a series (first, second, last)

CD: Cognitive Development

Emotional Developme	LLD: Language & Literacy	PD: Physical Development
Alabama Standards for Early Learning and Development	Alabama Early Learning Guidelines: DHR Crosswalk	
MAT3a: Spatial Reasoning: Children will explore and describe the spatial relationships between objects, their environment, and themselves.	LLD 3 Years 8: begin to learn "directional" words CD 5 Years 1: build with small and large blocks CD 5 Years 14: understand the concept of "one-half"	
MAT3b: Shapes: Children will explore, visualize, and analyze shapes and shape attributes.	e same color, shape, or size , and a square d size	
MAT4: Measurement and Time: Children will explore and communicate about distance, weight, length, height, and time.	CD 4 Years 1: have an interest in the order of things CD 5 Years 5: understand the concept of smallest and sh CD 5 Years 7: begin to understand time concepts CD 5 Years 8: begin to relate clock time to the daily scheo CD 5 Years 9: probably be able to tell time on the hour CD 5 Years 15: know the purpose of a calendar CD 5 Years 16: recognize and identify a penny, a nicke	dule
MAT4b: Logical Thinking, Reasoning, and Data Analysis: Children use logical thinking and reasoning to solve meaningful problems and inform decisions.	LLD 4 Years 8: answer appropriately when asked what to	do if tired, cold, or hungry

SD: Social Development

KEY

SC/EM: Self-Concept/

Alabama Early Learning Guidelines: DHR Crosswalk

LANGUAGE AND LITERACY (LLT) Understanding and Expressing by Speaking, Listening, Reading, and Writing

LLT1a Receptive Language: Children will gain information by understanding the meaning of words and gestures. SC/EM 2 Years 8: sometimes respond to what you ask her/him to do and sometimes do the opposite SD Birth- 6 Months 2: look for person who is talking

LLD Birth-6 Months 1: distinguish between different sounds and voices

LLD Birth-6 Months 1: communicate by blinking, moving a body part, stopping a movement, shifting eyes about, or making a startle response

LLD Birth-6 Months 2: show a preference for certain sounds, especially for human speech

LLD Birth-6 Months 4: hear and make different sounds LLD Birth –6 Months 5: make sounds other than crying

LLD Birth –6 Months 6: communicate by crying in different ways when hungry, hurt, scared, or uncomfortable

LLD Birth -6 Months 7: react to sounds and make sounds by cooing and blowing bubbles

LLD Birth- 6 Months 8: make sounds (coo) and move body when engaging in a face-to-face exchange with parents and others

LLD Birth- 6 Months 9: search for source of sounds in immediate surroundings

LLD 6-12 Months 1: imitate some non-speech sounds

LLD 6-12 Months 2: begin babble (baby talk) to communicate

LLD 6-12 Months 3: turn head when called by name or when familiar objects or persons are named

LLD 6-12 Months 7: listen to conversations and understand what is being said

LLD 12-18 Months 3: be able to recognize, name, and/or pick out common objects

LLD 12-18 Months 7: begin to understand when asked to do something

CD Birth-6 Months 8/12: correctly find the source of a sound

CD 6-12 Months 1: continue to look toward the source of sounds

CD 18-24 Months 1: follow simple directions in the order given

CD 12-18 Months 3: understand and follow simple requests

CD 18-24 Months 3: be able to understand longer sentences

CD 3 Years 3: enjoy interaction, stories, and activities with riddles, guessing, and suspense

CD 3 Years 4: follow a two-step direction

SD: Social Development LLD: Language & Literacy Development

CD: Cognitive Development PD: Physical Development

Alabama Standards

for Early Learning and Development	Alabama Early Learning Guidelines: DHR Crosswalk		
LLT1b Expressive Language: Children will use words and gestures to express their thoughts, feelings and needs to others.	SC/EM Birth-6 Months 5: coo, gurgle, and squeal when awake SD Birth-6 Months 1: make babbling sounds LLD 6-12 Months 4: begin to repeat sounds or words of more than one syllable that have meaning to her/him LLD 6-12 Months 5: begin to say recognizable words LLD 6-12 Months 6: begin to communicate and name many things LLD 12-18 Months 1: babble words and try using words to describe actions LLD 12-18 Months 2: begin to name familiar objects and their owners LLD 12-18 Months 9: use one word questions to ask for or name something LLD 18-24 Months 1: begin to actually understand how to use language to communicate LLD 18-24 Months 1: begin to make phrases or short sentences of two or three words LLD 18-24 Months 5: begin to express her/his needs using simple sentences and/or actions LLD 18-24 Months 6: ask many questions LLD 18-24 Months 6: ask many questions LLD 18-24 Months 7: speak 50 to 300 different words LLD 2 Years 5: use sentences to say "no" LLD 2 Years 6: continue to ask many questions LLD 3 Years 1: answer simple questions appropriately LLD 3 Years 2: engage in conversation by taking turns talking and listening LLD 3 Years 9: talk about the actions of others LLD 3 Years 6: use detailed sentence structure to describe events and activities LLD 5 Years 1: nave a vocabulary of 1500 words or more LLD 5 Years 1: have a vocabulary of 1500 words or more LLD 5 Years 7: have speech that is nearly 100% understandable LLD 5 Years 9: use past tense of verbs LLD 5 Years 10: understand singular and plural nouns LLD 5 Years 11: define simple words by their use LLD 5 Years 10: speak home language		
LLT1c Social Rules of Language: Children will use, adapt, and follow the rules of language.	LLD 12-18 Months 5: show increased interest in conversational turn-taking LLD 18-24 Months 4: begin to use appropriate manners in speech and/or action LLD 2 Years 1: understand longer sentences and use we, she, he, I LLD 2 Years 2: talk more and use phrases and clauses to create more adult-like sentences LLD 2 Years 3: sing and/or say nursery rhymes, songs, and fingerplays LLD 2 Years 9: talk with other children while playing together LLD 3 Years 11: join in social interactions LLD 4 Years 2: refer to activities and events in the past tense LLD 4 Years 3: match listener's level of understanding by changing tone of voice and sentence structure LLD 5 Years 12: answer telephone appropriately and call person to the telephone or take a message CD 12-18 Months 5: point to and tell you a specific object she/he wants CD 2 Years 7: frequently ask the names of various objects and activities		

Alabama Early Learning Guidelines: DHR Crosswalk

and Development	Alabama Early Learning Guidelines. DAR Crosswalk
LLT 2a Comprehension: Children will demonstrate understanding of both the written and spoken word.	SD 3 Years 6: sit and listen to stories for up to ten minutes at a time SD 3 Years 7: not both others and dislike being bothered by others while listening to stories LLD 12-18 Months 8: respond to simple questions with "yes" or "no" and/or appropriate head movements LLD 4 Years 1: answer "who?", "what?", "when?" "where", "how?", and "why?" questions during conversation LLD 5 Years 6: want to read and act out stories CD 3 Years 1: listen attentively to age-appropriate stories CD 3 Years 3: enjoy interaction, stories, and activities with riddles, guessing, and suspense CD 4 Years 2: have an interest in how stories, finger plays, and songs look in writing CD 4 Years 3: have an interest in acting out stories CD 4 Years 5: enjoy using words and creating silly language CD 4 Years 6: be interested in books CD 4 Years 15: begin to picture read very simple picture books with a few words CD 4 Years 16: recognize several printed words
LLT 2b Phonological Awareness: Children will begin to recognize and word with sounds in spoken language.	LLD 2 Years 3: say nursery rhymes and sing songs LLD 4 Years 7: recite rhymes and sing simple songs CD 4 Years 17: tell if paired words are the same or different in sound CD 2 Years 5: join in singing nursery rhymes and songs
LLT 2c Alphabet Knowledge: Children will demonstrate an emerging understanding that letters and letter sounds represent the sounds of spoken language.	CD 3 Years 7: draw a circle, a square, and some letters CD 4 Years 4: name about 10 letters, especially those in their name CD 4 Years 10: have a growing interest in letters and numbers CD 4 Years 18: write a few capital letters CD 4 Years 19: possibly print own name CD 5 Years 6: recognize many letters and some sounds
LLT 2d Print Awareness and Book Handling: Children will construct meaning and appreciation of print.	LLD 6-12 Months 9: notice pictures LLD 12-18 Months 3: begin to name and point out familiar pictures in a book LLD 3 Years 6: show interest in books LLD 3 Years 7: show interest in written words LLD 4 Years 5: begin to make the connection between spoken and written words CD 12-18 Months 1: look at and point to pictures in a book CD 3 Years 5: pretend to read to others CD 3 Years 9: enjoy stories that give real information CD 4 Years 2: have an interest in how stories, finger plays, and songs look in writing CD 4 Years 6: be interested in books CD 4 Years 15: begin to picture read very simple picture books with a few words
LLT 3 Emergent Writing: Children will demonstrate beginning understanding of the idea that marks on paper convey a message.	LLD 3 Years 12: show interest in seeing her/his name LLD 4 Years 4: want to write her/his name LLD 5 Years 8: practice writing skills LLD 5 Years 15: write her/his name CD 4 Years 16: recognize several printed words

KEY SC/EM: Self-Concept / Emotional Development

SD: Social Development LLD: Language & Literacy Development CD: Cognitive Development PD: Physical Development

Alabama Standards for Early Learning and Development

Alabama Early Learning Guidelines: DHR Crosswalk

CREATIVE ARTS (CRA) E	expressing Feelings and Ideas through Art, Music, Movement and Drama
CRA 1 Visual Arts: Children will demonstrate an increasing understanding and enjoyment of the visual arts through exploration.	
CRA 2 Music: Children will demonstrate an increasing understanding and appreciation of music as a form of self- expression.	LLD 12-18 Months 4: show increased interest in music and rhythm LLD 18-24 Months 9: sing along with familiar tunes CD Birth-6 Months 13: connect sound and rhythms with movements SC/EM 6-12 Months 7: become familiar with different types of sounds, tones of voices, and types of music
CRA 3 Movement and Dance: Children will demonstrate growing interest and control in rhythmic movements.	SD 12-18 Months 4: enjoy listening to and making music, dancing, and singing
CRA 4 Drama & Acting: Children will demonstrate an increasing understanding of drama through the exploration of actions and language.	LLD 5 Years 2: tell familiar stories using pictures

PHYSICAL DEVELOPMENT AND HEALTH Growing Strong, Healthy and Resilient

PDH1a Gross Motor Development: Children will demonstrate increasing body awareness and control, strength, and coordination of large

muscles.

- PD Birth-6 Months 1: engage in motor activities that are primarily uncontrollable
- PD Birth-6 Months 3: turn head from side to side when placed in a face down position
- PD Birth-6 Months 6: develop muscle tone
- PD Birth-6 Months 7: improve in muscle strength and control
- PD Birth-6 Months 8: raise head and upper body on arms when in a face down position
- PD Birth-6 Months 9: turn head to either side when on back
- PD Birth-6 Months 10: clasp hands above face, wave arms about, and reach for objects
- PD Birth-6 Months 12: surprisingly roll onto side and then from front to back to side at will
- PD Birth-6 Months 13: progress from sitting with full support to sitting with little support
- PD 6-12 Months 1: crawl to get from one place to another
- PD 6-12 Months 2: pull himself upright, and stand firmly while holding on
- PD 6-12 Months 3: crawl up and down steps
- PD 6-12 Months 4: gradually gain control of back muscles
- PD 6-12 Months 5: bring hands in front of body and hold them together
- PD 6-12 Months 6: turn body and grab an object with both hands
- PD 6-12 Months 16: throw objects
- PD 12-18 Months 5: develop overhand throwing
- PD 12-18 Months 6: like to run around and sit still for a short period of time to play
- PD 12-18 Months 7: walk well unsupported
- PD 12-18 Months 8: move from sitting or stooping to standing without help
- PD 12-18 Months 9: hit/pound objects
- PD 12-18 Months 10: travel and carry objects from one place to another
- PD 18-24 Months 6: walk directly to places she/he knows and remembers
- PD 18-24 Months 7: kick or throw a ball forward
- PD 18-24 Months 8: walk up and down stairs alone, both feet on one step at a time and holding onto railing
- PD 2 Years 1: stand on either foot and balance, jump, and stand on tiptoes
- PD 2 Years 2: walk between two straight lines about 8 inches apart
- PD 2 Years 3: be very active and more coordinated
- PD 3 Years 1: walk, jump, hop, and run on two feet
- PD 3 Years 2: throw and catch a large ball with some success
- PD 3 Years 6: walk up and down stairs independently, using alternating feet
- PD 3 Years 7: balance momentarily on one foot
- PD 3 Years 8: hop on one foot, kick a large ball, and jump in place
- PD 4 Years 1: walk forward on a straight line, hop on one foot, and cross legs when sitting on the floor
- PD 4 Years 2: pedal and steer a wheeled toy with confidence and skill
- PD 4 Years 3: climb ladders, steps, trees, and playground equipment
- PD 4 Years 4: throw a ball overhand
- PD 4 Years 5: jump over or from objects five or six inches high and land with both feet together
- PD 4 Years 6: run, stop, start, and move around objects with ease
- PD 5 Years 1: walk, run, hop on one foot, jump, slide from side to side and begin to skip
- PD 5 Years 2: throw and catch a large ball easily
- PD 5 Years 5: walk backwards, heel to toe, balance on either foot with good control for ten seconds and walk a balance beam
- PD 5 Years 6: probably learn to do a forward roll
- PD 5 Years 7: bend to touch toes without flexing knees
- PD 5 Years 8: ride a tricycle or wheeled toy with speed and skillful steering, and probably learn to ride a bicycle
- SC/EM 12-18 Months 1: start to move freely

SD: Social Development LLD: Language & Literacy Development CD: Cognitive Development PD: Physical Development

Alabama Standards for Early Learning and Development

PDH1b Fine Motor

small muscles.

Alabama l	Early L	.earning	Guidelines:	DHR	Crosswalk

Development:
Children will
demonstrate increasing
strength, control, and
coordination of their

- PD Birth-6 Months 2: hold hand(s) in a fist
- PD Birth-6 Months 4: grasp objects with entire hand
- PD Birth-6 Months 5: hold hands in an open or semi-open position
- PD Birth-6 Months 11: improve in eye coordination
- PD Birth-6 Months 17: begin to use thumb and forefinger to grip PD 6-12 Months 7: be able to hold a toy in each hand at the same time
- PD 12-18 Months 3: scribble on paper while holding crayon in fist
- PD 12-18 Months 4: begin to turn pages in books PD 18-24 Months 1: turn pages of book one by one
- PD 18-24 Months 2: string beads together
- PD 18-24 Months 3: roll, pound, and squeeze clay
- PD 18-24 Months 4: correctly place shapes in a form board/puzzle
- PD 18-24 Months 5: imitate a vertical stroke on paper PD 18-24 Months 9: look at magazines and tear paper
- PD2Years 4: imitate you folding paper or clothing
- PD 2 Years 5: fit things into one another and take things apart and put them back together
- PD 2 Years 6: draw a circle
- PD 3 Years 3: hold crayon or marker between first two fingers and thumb
- PD 3 Years 4: begin to cut with scissors
- PD 4 Years 8: form shapes and objects out of clay/playdough
- PD 4 Years 9: paint, draw, and describe the picture
- PD 4 Years 10: make shapes and letters
- PD 4 Years 11: hold a crayon or marker, using the first two fingers and thumb
- PD 4 Years 13: thread small beads on a string
- PD 4 Years 14: pick up puzzle pieces and manipulate the pieces into place
- PD 5 Years 3: hold crayons, pencils, and paint brushes in more adultlike $\,$
- grasp
- PD 5 Years 4: use thumb and individual fingers to pick up small objects
- PD 5 Years 9: build three-dimensional structures with small cubes by copying from a model
- SC/EM 6-12 Months 2: begin to hold her/his own bottle SC/EM 6-12 Months 3: begin to try to feed herself/himself
- SC/EM 6-12 Months 4: want to hold and try to use her/his drinking cup SC/EM 18-24 Months 2: be able to eat and drink with only a little spilling
- SC/EM 18-24 Months 3: be able to dress self in simple clothing

PDH2a Healthy Habits:

Children will show increasing

independence in performing self-care

tasks.

SC/EM 12-18 Months 3: begin to express that diaper needs

changing

SC/EM 2 Years 1: be able to eat and drink with limited spilling

SC/EM 2 Years 3: be able to get own water

SC/EM 2 Years 4: have "accidents" when toilet-trained

PD 6-12 Months 14: hold cup with both hands and drink from it PD 12-18 Months 1: hold cup with both hands and drink from it

PD 18-24 Months 10: remove hat and mittens, snap large snaps, and unzip a large zipper

PD 3 Years 5: feed self without assistance

PD 5 Years 4: take full responsibility for using the toilet

PDH2b Safety: Children will

demonstrate increasing awareness of safe habits, safety rules, and personal safety



CROSSWALK

Crosswalk to National and State Standards
Family and Community Engagement: Connections to Help Me Succeed

Family and Community Engagement: Connections to Help Me Succeed

Alabama Standards for Early Learning and Development:

FCE1a: Child Development and Parenting: Child development and Parenting:

Early learning programs support families' understanding of child development and parenting techniques.

Head Start Performance Standards

1302: 50 (b)(1) Recognize parents as their children's primary teachers and nurturers and implement intentional strategies to engage parents in their children's learning and development and support parent-child relationships, including specific strategies for father engagement

1302.51: Parent activities to promote child learning and development

Head Start Parent, Family and Community Framework

Family Outcomes: Families as lifelong learners

Parents and families learn about their childs personality, development, and learning style. They also advance their own learning interests through education, training, and other experiences that support their parenting, careers, and life goal

Family Outcomes: Positive parent-child relationships

Beginning with the transition to parenthood, parents and families develop warm relationships that nurture their child>s health, development, and learning

National Standards for Family-School Partnerships-National PTA

Standard 3: Supporting school success

Families and school staff continuously collaborate to support students' learning and healthy development both at home and at school, and have regular opportunities to strengthen their knowledge and skills to do so effectively.

First Class Alabama

CF 2 Parent/Family Engagement Expectations

Family participation in the First Class Pre-K program is expected. Families are responsible for completing 12 participation hours each school year. Examples of ways to participate are attending the family orientation, completion of the ASQ-3 screener, attending field trips,

volunteering in the classroom, attending parent conferences, attending enrichment meetings, participating in IEP meetings and completing take-home activities.

CF 2.1 Parental Programming

4. Parent education and parent engagement activities

Alabama Child Care

Licensing

D 5. Staff-Parent Communication:

a. The staff and parent(s)/guardian(s) shall discuss discipline or behavior problems to determine appropriate action consistent with disciplinary practices above.

The center shall provide parents with information about the influenza disease and influenza vaccine. (Code of Alabama 1975, Section 38-7-14.1.)

Alabama Quality Stars

Level 1: Shares information on child development and children's health with families annually Level 2 Shares information with families regarding the importance of having a primary healthcare provider for children

Level 4: Has a parent resource area that addresses the need and interests of the families serve

Family and Community Engagement: Connections to Help Me Succeed

Alabama Standards for Early Learning and Development:

FCE1b: Communication:

Early learning programs promote respectful and reciprocal communication strategies with families.

Head Start Performance Standards

1302.50 (b)(2): Develop relationships with parents and structure services to encourage trust and respectful, ongoing two-way communication between staff and parents to create welcoming program environments that incorporate the unique cultural, ethnic, and linguistic backgrounds of families in the program and community

1302 (b)(5)(5) Conduct family engagement services in the family's preferred language, or through an interpreter, to the extent possible, and ensure families have the opportunity to share personal information in an environment in which they feel safe; and

Head Start Parent, Family and Community Framework

Program Impact Area: Family Partnerships

program staff and families build ongoing, reciprocal, and respectful relationships. Program staff value families' unique expertise about their children. Staff engage in regular communication with families to understand their goals for their children and themselves and work toward those goals together

National Standards for Family-School Partnerships-National PTA

Standard 2: Communicating effectively

Families and school staff engage in regular, two-way, meaningful communication about student learning.

First Class Alabama

CF 2 Parent/Family Engagement Expectations

Family participation in the First Class Pre-K program is expected. Families are responsible for completing 12 participation hours each school year. Examples of ways to participate are attending the family orientation, completion of the ASQ-3 screener, attending field trips, volunteering in the classroom, attending parent conferences, attending enrichment meetings, participating in IEP meetings, and completing takehome activities.

CF 2.1 Parental Programming

2. Formal and informal parent/teacher conferences

Alabama Child Care

Licensing

D 5. Staff-Parent Communication:

Staff shall be available for communication and conferences with the parent(s)/quardian(s) at a mutually convenient time.

Alabama Quality Stars

Level 3: Holds at least two parent teacher conferences annually

Level 3: Holds a parent orientation to include program philosophy, goals, objectives, and expectations

Level 4: Conducts an annual written parent survey that is available to all families

Family and Community Engagement: Connections to Help Me Succeed

Alabama Standards for Early Learning and Development:

FCE1c:

Early learning programs connect in-home and out-of-home experiences to optimize children's learning.

Head Start Performance Standards 1302:51(a) A program must promote shared responsibility with parents for children's early learning and development, and implement family engagement strategies that are designed to foster parental confidence and skills in promoting children's learning and development

Head Start Parent, Family and Community Framework

Program Impact Area: Teaching and Learning

Through teaching and learning, families and staff work together to promote children's learning, development, and school readiness. As children's first and most important teachers, families are engaged as partners in their children's learning and development.

Families share their knowledge about their child. Teachers and home visitors share information about the child's progress. Head Start and Early Head Start programs build connections with community partners to offer children and families access to other learning opportunities

Family Outcomes: Parents as lifelong educators

Parents and families observe, guide, promote, and participate in the everyday learning of their children at home, school, and in their communities.

Family Outcomes: Family Engagement in Transitions

Parents and families encourage and advocate for their child's learning and development as they transition to new learning environments within and between Early Head Start, Head Start, early childhood services, early elementary grades, and beyond

National Standards for Family-School Partnerships-National PTA

Standard 3: Supporting school success

Families and school staff continuously collaborate to support students' learning and healthy development both at home and at school, and have regular opportunities to strengthen their knowledge and skills to do so effectively.

First Class Alabama

CF 2 Parent/Family Engagement Expectations

Family participation in the First Class Pre-K program is expected. Families are responsible for completing 12 participation hours each school year. Examples of ways to participate are attending the family orientation, completion of the ASQ-3 screener, attending field trips, volunteering in the classroom, attending parent conferences, attending enrichment meetings, participating in IEP meetings, and completing takehome activities.

CF 2.1 Parental Programming

1. Home visits, including home visitation models such as HIPPY, Parents as Teachers

Alabama Child Care

Licensing

D 5. Staff-Parent Communication

Alabama Quality Stars

Level 5: Completes a developmentally appropriate child assessment on each child three times annually and aggregates data into a written report that documents child outcomes and shares information with families

Family and Community Engagement: Connections to Help Me Succeed

Alabama Standards for Early Learning and Development:

FCE1d: Family Participation:

Early learning programs promote families' participation in their children's program experiences.

Head Start Performance Standards

1302.34 (b)(5): Parent and family engagement in education and child development services

1302:50 (b)(4): Family Engagement

Provide parents with opportunities to participate in the program as employees or volunteers

Head Start Parent, Family and Community Framework

Program Impact Area: Teaching and Learning

Through teaching and learning, families and staff work together to promote children's learning, development, and school readiness. As children's first and most important teachers, families are engaged as partners in their children's learning and development.

Families share their knowledge about their child. Teachers and home visitors share information about the child's progress. Head Start and Early Head Start programs build connections with community partners to offer children and families access to other learning opportunities.

National Standards for Family-School Partnerships-National PTA

Standard 1: Welcoming all families into the school community

Families are active participants in the life of the school, and feel welcomed, valued, and connected to each other, to school staff, and to what students are learning and doing in class.

First Class Alabama

CF 2 Parent/Family Engagement Expectations

Family participation in the First Class Pre-K program is expected. Families are responsible for completing 12 participation hours each school year. Examples of ways to participate are attending the family orientation, completion of the ASQ-3 screener, attending field trips,

volunteering in the classroom, attending parent conferences, attending enrichment meetings, participating in IEP meetings, and completing take-home activities.

CF 2.1 Parental Programming

- 3. Classroom visits and options for parents and families to participate in classroom activities
- 6. Opportunities to engage families outside of the regular service day

Alabama Child Care

Licensing

D 5. Staff-Parent Communication:

Alabama Quality Stars

Family and Community Engagement: Connections to Help Me Succeed

Alabama Standards for Early Learning and Development:

FC1e: Decision-Making and Leadership:

Early learning programs provide families with opportunities to contribute to their children's program operation.

Head Start Performance Standards

1301.4 (a) Establishing parent committees. A program must establish a parent committee comprised exclusively of parents of currently enrolled children as early in the program year as possible.

1301.4 (b): Within the parent committee structure, a program may determine the best methods to engage families using strategies that are most effective in their community, as long as the program ensures the parent committee carries out the following minimum responsibilities

Head Start Parent, Family and Community Framework

Family Outcomes: Families as advocates and leaders

Parents and families advocate for their children and take on leadership roles in Head Start and Early Head Start. They participate in decision-making, policy development, and organizing activities in communities and states to improve children's safety, health, development, and learning experiences.

National Standards for Family-School Partnerships-National PTA

Standard 4: Speaking up for every child

Families are empowered to be advocates for their own and other children, to ensure that students are treated fairly and have access to learning opportunities that will support their success

Standard 5: Sharing power

Families and school staff are equal partners in decisions that affect children and families and together inform, influence, and create policies, practices, and programs

First Class Alabama

CF 2 Parent/Family Engagement Expectations

Family participation in the First Class Pre-K program is expected. Families are responsible for completing 12 participation hours each school year. Examples of ways to participate are attending the family orientation, completion of the ASQ-3 screener, attending field trips, volunteering in the classroom, attending parent conferences, attending enrichment meetings, participating in IEP meetings, and completing takehome activities.

CF 2.1 Parental Programming

5. Family involvement in decision making about their own child and about their child's early childhood program

Alabama Child Care

Licensing

D 5. Staff-Parent Communication:

The center shall notify parent(s)/guardian(s) of procedures for making a complaint, including name(s) of person(s) to contact.

Alabama Quality Stars

Level 5: Utilizes results from annual parent survey to improve programmatic outcomes

Family and Community Engagement: Connections to Help Me Succeed

Alabama Standards for Early Learning and Development:

FCE2: Program Climate and Environment:

Early learning programs are welcoming to all children and families.

Head Start Performance Standards 1302.50 (b)(2): Develop relationships with parents and structure services to encourage trust and respectful, ongoing two-way communication between staff and parents to create welcoming program environments that incorporate the unique cultural, ethnic, and linguistic backgrounds of families in the program and community

Head Start Parent, Family and Community Framework Program Impact Area: Program Environment

Refers to the features and physical setting of the program, which affect the interactions and relationships families and staff experience. High-quality program environments help protect the health and safety of children, families, and staff. They make families feel welcomed, valued, and respected. They also promote children's well-being, learning, and development. High-quality environments facilitate cultural and linguistic responsiveness, promote open and regular communication, and provide a sense of support to families. These environments create opportunities for families to build relationships with other Head Start parents and community organizations

National Standards for Family-School Partnerships-National PTA Standard 1: Welcoming all families into the school community

Families are active participants in the life of the school, and feel welcomed, valued, and connected to each other, to school staff, and to what students are learning and doing in class.

First Class Alabama

CF 2 Parent/Family Engagement Expectations

Family participation in the First Class Pre-K program is expected. Families are responsible for completing 12 participation hours each school year. Examples of ways to participate are attending the family orientation, completion of the ASQ-3 screener, attending field trips, volunteering in the classroom, attending parent conferences, attending enrichment meetings, participating in IEP meetings, and completing takehome activities.

Alabama Child Care

Licensing

D 5. Staff-Parent Communication:

The center shall be open to visits from parent(s)/guardian(s) at any time during the center's operating hours.

Parent(s)/guardian(s) shall be informed of their right to visit and observe their child during hours of care.

Alabama Quality Stars

Level 5: Has a written parent engagement plan

Family and Community Engagement: Connections to Help Me Succeed

Alabama Standards for Early Learning and Development:

FCE3: Community Partnerships:

Early learning programs collaborate with community agencies to support children and families.

Head Start Performance Standards 1302.53: Community partnerships and coordination with other early childhood and education programs

Head Start Parent, Family and Community Framework Program Impact Area: Community Partnerships

Through community partnerships, Head Start, Early Head Start, and childcare programs build collaborative relationships with community organizations that support positive child and family outcomes. These organizations may include libraries, health centers, schools and school districts, sources of economic support, the workforce, higher education, human services agencies, faith-based organizations, businesses, and others

Program Outcomes: Family Connections to Peers and Community
Parents and families form connections with peers, mentors, and other community
members in formal and informal social networks. These networks are supportive and
educational. They honor and are inclusive of families' home languages and cultures.
They also enhance families' social well-being and community life

National Standards for Family-School Partnerships-National PTA Standard 6: Collaborating with community

Families and school staff collaborate with community members to connect students, families, and staff to expanded learning opportunities, community services, and civic participation.

First Class Alabama CF 2 Parent/Family Engagement Expectations

Family participation in the First Class Pre-K program is expected. Families are responsible for completing 12 participation hours each school year. Examples of ways to participate are attending the family orientation, completion of the ASQ-3 screener, attending field trips, volunteering in the classroom, attending parent conferences, attending enrichment meetings, participating in IEP meetings and completing takehome activities.

Alabama Child Care



CROSS WALK

Alabama Courses of Study

Crosswalk to Alabama Courses of Study Social and Emotional Development: Myself, My Feelings, My Relationships

ASELD	KINDERGARTEN	FIRST GRADE	SECOND GRADE
SED1a: Self- Awareness: Children will demonstrate an emerging personal identity through awareness of one's own personal characteristics, skills, and abilities.	Physical Education K-4.1 Personal responsibility Follow directions, adhere to class procedures, use equipment properly, and accept responsibility for behavior, when prompted, to create a safe environment.	Physical Education 1-4.1 Personal responsibility Acknowledge personal responsibility by using equipment and space safely and appropriately while following the rules and boundaries of the learning environment	Physical Education 2-4.1 Personal responsibility Practice skills with minimal teacher prompting and accept responsibility for behavior and performance actions to ensure a safe environment.
SED1b: Self-	ALSDE Character Education Stand	dards specify the following standards:	
Esteem: Children will demonstrate	I) courage	10) self-control	19) school pride
emerging	2) patriotism	11) courtesy	20) respect for the
confidence	3) citizenship	12) compassion	environment
in their own abilities.	4) honesty	13) tolerance	21) patience
	5) fairness	14) diligence	22) creativity
SED2a: Manage Feelings: Children	6) respect for others	15) generosity	23) sportsmanship
will identify, and	7) kindness	16) punctuality	24) loyalty
express their feelings	8) cooperation	17) cleanliness	25) perseverance
reelings	9) self-respect	18) cheerfulness	
SED2b: Self- Regulation: Children begin to gain control of their emotions and responses	Physical Education K-4.4: Conflict Resolution Demonstrate willingness to seek help for solving problems and making decisions.	Physical Education 1-4.4: Conflict Resolution Identify alternative solutions to a given problem.	Physical Education 2-4.4: Conflict Resolution Develop effective coping skills for dealing with problems
SED3a: Relationships with Adults: Children	Physical Education K.4.2 Accepting and giving feedback	Physical Education 1.4.2 Accepting and giving feedback	Physical Education 2.4.2 Accepting and giving feedback
form relationships and interact positively with adults.	Appropriately respond to general feedback from teacher.	Appropriately respond to specific feedback from the teacher.	Appropriately respond to and implement specific feedback from the teacher.
SED3b: Relationships with Peers: Children develop ways to interact and build relationships with peers.	Physical Education K-4.3: Working with Others Share equipment and space with peers.	1-4.3 Physical Education: Working with Others Work in a variety of class environments with moderate supervision. Examples: partner, small group, large group, whole class	2-4.3 Physical Education: Working with Others Work in a variety of class environments with minimum supervision. Examples: partner, small group, large group, whole class



Social Studies: Learning about Myself, My Family, and My Community

ASELD	KINDERGARTEN	FIRST GRADE	SECOND GRADE
SST1a: Family Structure: Children will develop a sense of belonging to a family group, articulate family members' roles, and identify how families are alike and different.	K.2: Identify rights and responsibilities of citizens within the family, classroom, school, and community.	1-12: Compare common and unique characteristics in societal groups, including age, religious beliefs, ethnicity, persons with disabilities, and equality between genders.	2.1: Relate principles of American democracy to the founding of the nation.
SST1b: Community Belonging: Children build a sense of belonging to a group and follow its rules.	 K.2: Identify rights and responsibilities of citizens within the family, classroom, school, and community. K.3: Describe how rules provide order, security, and safety in the home, school, 	1.2: Identify rights and responsibilities of citizens within the local community and state.	2.2: Identify national historical figures and celebrations that exemplify fundamental democratic values, including equality, justice, and responsibility for the common good.
SST1c: Diversity and Culture: Children show understanding of how people and customs are alike and different.	K.6: Compare cultural similarities and differences in individuals, families, and communities.	1.11 : Identify traditions and contributions of various cultures in the local community and state. (Alabama).	2.9: Describe how and why people from various cultures immigrate to the United States.
SST2a: Economics: Children will understand about supply and demand, why people work, money, and community helpers.	 K.5: Differentiate between goods and services. K.7: Describe roles of helpers and leaders, including school principal, school custodian, volunteers, police officers, and fire and rescue workers. 	1.3: Recognize leaders and their roles in the local community and state. (Alabama).1.10: Describe the role of money in everyday life.	2.7: Explain production and distribution processes.2.8: Describe how scarcity affects supply and demand of natural resources and human- made products.
SST2b: Geography: Children will identify basic concepts of location and features in the landscape.	 K.8: Recognize maps, globes, and satellite images. K.9: Differentiate between landforms and bodies of water on maps and globes. K.10: Apply vocabulary related to giving and following directions. 	1.8 : Identify land masses, bodies of water, and other physical features on maps and globes.	2.5: Differentiate between a physical map and a political map.2.6: Identify states, continents, oceans, and the equator using maps, globes, and technology.



Social Studies: Learning about Myself, My Family, and My Community

ASELD	KINDERGARTEN	FIRST GRADE	SECOND GRADE
SST2c: History: Children will demonstrate understanding of events and people from the past and present.	K.11: Identify symbols, customs, famous individual, and celebrations representative of our state and nation (Alabama). K.12: Describe families and communities of the past, including jobs, education, transportation, communication, and recreation.	 1.3: Recognize leaders and their roles in the local community and state. (Alabama). 1.5: Identify historical events and celebrations within the local community and throughout Alabama. (Alabama). 1.6: Compare ways individuals and groups in the local community and state lived in the past to how they live today. (Alabama). 	 2.1: Relate principles of American democracy to the founding of the nation. 2.2: Identify national historical figures and celebrations that exemplify fundamental democratic values, including equality, justice, and responsibility for the common good. 2.3: Use various primary sources, including calendars and timelines, for reconstructing the past. 2.11:Interpret legends, stories, and songs that contributed to the development of the cultural history of the United States.



Approaches to Play and Learning (APL): Developing Skills and Attitudes for Success

ASELD	KINDERGARTEN	FIRST GRADE	SECOND GRADE
APL1a: Imaginative Play: Children will use their imaginations to learn about the world around them.	KAET-1: Transition between imagination and reality and use words and gestures to invent and inhabit an imaginary "elsewhere" in dramatic play or guided drama experience		
APL1b: Collaborative Play: Children will learn to work and play together to achieve a common goal.	KAET-3: Participate in dramatic play or a guided drama experience alone and with peers KAET-13: Activity engage and make choices independent and with others in drama play or a guided drama experience		
APL2a: Persistence, Engagement, and Attention: Children will develop the ability to focus their attention and concentrate to complete tasks.	A:A2.2: Demonstrate how effort and persistence positively affect learning	A:A2.2: Demonstrate how effort and persistence positively affect learning	A:A2.2: Demonstrate how effort and persistence positively affect learning
APL2b: Task Analysis: Children will identify the steps needed to achieve a goal.	A:A2.1: Apply time-management and task-management skills C:A2.9: Utilize time- and task- management skills	A:A2.1: Apply time- management and task- management skills C:A2.9: Utilize time- and task- management skills	A:A2.1: Apply time- management and task- management skills C:A2.9: Utilize time- and task- management skills
APL2c: Reasoning and Problem Solving: Children will identify and develop strategies for solving simple problems.	A:B2.5: Use problem-solving and decision-making skills to assess progress toward educational goals PS:B1.5: Demonstrate when, where and how to seek help for solving problems and making decisions		
APL3a: Curiosity, Invention, and Initiative: Children will show eagerness, imagination, and creativity as they try new tasks.			
APL3b: Risk taking and flexibility: Children will demonstrate a willingness to take risks and try new things.			



Crosswalk to Alabama Courses of Study Science Exploration and Knowledge: Exploring the World Around Me

			SECOND GRADE
SEK1a: Scientific Inquiry: Children will gain 2) knowledge 3) through exploration and discovery. 5) 6) 7)		out Investigations Defining Problems ting Data ons and Designing Solutions and Communicating Information Models	
Science: Children will differentiate between living and non-living things and their characteristics. 3) Disting and no verify working to surv needin plants water, 4) Gath suppor animal needs enviror breaking provide burrow raise y growin and bu	inguish between living onliving things and what living things need rive (e.g., animals, ag food, water, and air; needing nutrients, sunlight, and air). There evidence to ret how plants and so provide for their by altering their nament (e.g., tree roots ag a sidewalk to expace, red fox ring to create a den to oung, humans ag gardens for food ailding roads for ortation).	From Molecules to Organisms: Structures and Processes 5. Design a solution to a human problem by using materials to imitate how plants and/or animals use their external parts to help them survive, grow, and meet their needs (e.g., outerwear imitating animal furs for insulation, gear mimicking tree bark or shells for protection).* 6. Obtain information to provide evidence that parents and their offspring engage in patterns of behavior that help the offspring survive (e.g., crying of offspring indicating need for feeding, quacking or barking by parents indicating protection of young). Heredity: Inheritance and Variation of Traits 7. Make observations to identify the similarities and differences of offspring to their parents and to other members of the same species (e.g., flowers from the same kind of plant being the same shape, but differing	Ecosystems: Interactions, Energy, and Dynamics 5. Plan and carry out an investigation, using one variable at a time (e.g., water, light, soil, air), to determine the growth needs of plants. 6. Design and construct models to simulate how animals disperse seeds or pollinate plants (e.g., animals brushing fur against seed pods and seeds falling off in other areas, birds and bees extracting nectar from flowers and transferring pollen from one plant to another).* 7. Obtain information from literature and other media to illustrate that there are many different kinds of living things and that they exist in different places on land and in water (e.g., woodland, tundra, desert, rainforest, ocean, river).



Science Exploration and Knowledge: Exploring the World Around Me

ASELD

KINDERGARTEN FI

FIRST GRADE

SECOND GRADE

SEK1c: Physical Science: Children will demonstrate emerging understanding of matter and energy.

Mobility and Stability: Forces of Nature

1. Investigate the resulting motion of objects when forces of different strengths and directions act upon them (e.g., object being pushed, object being pulled, two objects colliding).

Waves and Their Applications in Technologies for Knowledge Transfer

- I. Conduct experiments to provide evidence that vibrations of matter can create sound (e.g., striking a tuning fork, plucking a guitar string) and sound can make matter vibrate (e.g., holding a piece of paper near a sound system speaker, touching your throat while speaking).
- 2. Construct explanations from observations that objects can be seen only when light is available to illuminate them (e.g., moon being illuminated by the sun, colors and patterns in a kaleidoscope being illuminated when held toward a light).
- 3. Investigate materials to determine which types allow light to pass through (e.g., transparent materials such as clear plastic wrap), allow only partial light to pass through (e.g., translucent materials such as wax paper), block light (e.g., opaque materials such as construction paper), or reflect light (e.g., shiny materials such as aluminum foil).
- 4. Design and construct a device that uses light or sound to send a communication signal over a distance (e.g., using a flashlight and a piece of cardboard to simulate a signal lamp for sending a coded message to a classmate, using a paper cup and string to simulate a telephone for talking to a classmate).*

Matter and its Interactions

- I. Conduct an investigation to describe and classify various substances according to physical properties (e.g., milk being a liquid, not clear in color, assuming shape of its container, mixing with water; mineral oil being a liquid. clear in color, taking shape of its container, floating in water; a brick being a solid, not clear in color, rough in texture. not taking the shape of its container, sinking in water).
- 2. Collect and evaluate data to determine appropriate uses of materials based on their properties (e.g., strength, flexibility, hardness, texture, absorbency).*
- 3. Demonstrate and explain how structures made from small pieces (e.g., linking cubes, blocks, building bricks, creative construction toys) can be disassembled and then rearranged to make new and different structures.
- **4.** Provide evidence that some changes in matter caused by heating or cooling can be reversed
- (e.g., heating or freezing of water) and some changes are irreversible (e.g., baking a cake, boiling an egg).



Crosswalk to Alabama Courses of Study Science Exploration and Knowledge: Exploring the World Around Me

ASELD	KINDERGARTEN	FIRST GRADE	SECOND GRADE
SEK1d: Earth and Space Science: Children will demonstrate emerging understanding of the earth and atmosphere.	Earth's Systems 7) Observe and describe the effects of sunlight on Earth's surface (e.g., heat from the sun causing evaporation of water or increased temperature of soil, rocks, sand, and water). 8) Design and construct a device (e.g., hat, canopy, umbrella, tent) to reduce the effects of sunlight. 9) Observe, record, and share findings of local weather patterns over a period of time (e.g., increase in daily temperature from morning to afternoon, typical rain and storm patterns from season to season)	Earth's Place in the Universe 8. Observe, describe, and predict patterns of the sun, moon, and stars as they appear in the sky (e.g., sun and moon appearing to rise in one part of the sky, move across the sky, and set; stars other than our sun being visible at night, but not during the day). 9. Observe seasonal patterns of sunrise and sunset to describe the relationship between the number ofhours of daylight and the time of year (e.g., more hours of daylight during summer as compared to winter).	Earth's Systems 8. Make observations from media to obtain information about Earth's events that happen over a short period of time (e.g., tornados, volcanic explosions, earthquakes) or over a time period longer than one can observe (e.g., erosion of rocks, melting of glaciers). 9. Create models to identify physical features of Earth (e.g., mountains, valleys, plains, deserts, lakes, rivers, oceans). 10. Collect and evaluate data to identify water found on Earth and determine whether it is a solid or a liquid (e.g., glaciers as solid forms of water; oceans, lakes,
SEK1e: Environment and Ecology	Earth and Human Activity 10) Ask questions to obtain information about the purpose of weather forecasts in planning for, preparing for, and responding to severe weather. Ecosystems: Interactions, Energy and Dynamics 6) Identify and plan possible solutions (e.g., reducing,		rivers, streams as liquid forms of water). Earth and Human Activity 11. Examine and test solutions that address changes caused by Earth's
	reusing, recycling) to lessen the human impact on the local environment.*		events (e.g., dams for minimizing flooding, plants for controlling erosion).*

Science Exploration and Knowledge: Exploring the World Around Me

ASELD	KINDERGARTEN	FIRST GRADE	SECOND GRADE
SEK2a: Use of Tools: Children	Digital Tools	Digital Tools	Digital Tools
will use simple and more complex tools to accomplish a task.	R6) Produce, review, and revise authentic artifacts that include multimedia using appropriate digital tools.	R6) Produce, review, and revise authentic artifacts that include multimedia using appropriate digital tools.	R6) Produce, review, and revise authentic artifacts that include multimedia using appropriate digital tools.
a taon.	Global Collaborator: Collaborative Research	Digital Identity: Impact of Computing	Digital Identity: Impact of Computing
	7) Locate letters and numbers on the keyboard.	8) Identify ways in which computing devices have	8) Identify ways in which computing devices have
	DigitalCulture:Impactof Computing	impacted people's lives.	impacted people's lives.
	6) Recognize ways in which computing devices make certain tasks easier.	Global Communicator: Communication 9) Use a variety of digital	Global Communicator: Communication
	Computational Thinker:	tools collaboratively to connect with other learners.	9) Use a variety of digital tools collaboratively.
	Programming and Development	Global Communicator: Digital Tools	Global Communicator: Digital Tools
	2) Demonstrate use of input devices	10) Identify an appropriate tool to complete a task when given guidance and support.	10) Identify multiple tools which could be used to complete a
	Computing Analyst: Systems	Type five words per	task.
	12) Use a variety of digital devices, in both independent and collaborative settings.	minute minimum with 95% accuracy using appropriate keyboarding techniques.	II) Type 10 words per minute with 95% accuracy using appropriate keyboarding techniques.
	Computing Analyst: Data	Computing Analyst: Data	Computing Analyst: Systems
	11) Describe how digital devices save information.	16) Demonstrate how digital devices can save information as data that can be stored, searched, retrieved, and deleted.	17) Explain the purposes of visible input and output components of digital devices
		Computing Analyst: Systems	
		17) Use digital devices with a variety of operating systems	
		18)Label visible components of digital devices	



Crosswalk to Alabama Courses of Study Science Exploration and Knowledge: Exploring the World Around Me

ASELD	KINDERGARTEN	FIRST GRADE	SECOND GRADE
SEK2b: Media Literacy: Children	Impact of Computing	Impact of Computing	Impact of Computing
will demonstrate understanding of the types of	R3) Assess the validity and identify the	R3) Assess the validity and identify the purpose of digital content.	R3) Assess the validity and identify the purpose of digital content.
information they are receiving	purpose of digital content.	Collaborative Research	Collaborative Research
through media	Collaborative Research	R5) Locate and curate	R5) Locate and curate information from digital sources to answer.
	R5) Locate and	information from digital sources to answer research	Computational Thinker:
	curate information from	questions.	Abstraction
	digital sources to answer research	Computational Thinker: Abstraction	I) Create and sort information into useful order using digital tools.
	questions.	I) Classify and sort information into logical	Computational Thinker: Algorithm
	Global Communicator: Collaborative Research	order with and without computer	2) Create an algorithm for other learners to follow.
	8) Present information from	Computational Thinker: Algorithm	Citizen of a Digital Culture: Digital Identity
	a variety of digital resources	2) Order events into a logical sequence or algorithm	7) List positive and negative impacts of digital communication.
	Computing Analyst: Data	Citizen of a Digital Culture:	Global Collaborative: Collaborative Research
	10) Collect data and organize it	Legal and Ethical Behavior 5) Differentiate between	
	in a chart or graph	prior knowledge and ideas or thoughts gained from	 Conduct basic keyword searches to gather information.
	collaboratively	others	Computing Analyst: Data
		Global Communicator: Collaborative Research:	I4) Collect, create, and organize data in a digital chart or graph.
		12) Identify keywords in a search and discuss how they may be used to	15) Explain how users control the ways digital devices save information in an organized manner.
		gather information	Computing Analyst: Systems
		Computing Analyst: Data	16) Compare the different operating
		14) Discuss the purpose of collecting and organizing data	systems used on digital devices.
		15) Interpret data displayed in a chart.	

Science Exploration and Knowledge: Exploring the World Around Me

ASELD	KINDERGARTEN	FIRST GRADE	SECOND GRADE
SEK2c: Digital Citizenship:	Safety, Privacy, and Security	Safety, Privacy, and Security	Safety, Privacy, and Security
Children will demonstrate safe use of technology	R1) Identify, demonstrate and apply personal safe use of digital devices	R1) Identify, demonstrate and apply personal safe use of digital devices	R1) Identify, demonstrate and apply personal safe use of digital devices
	Legal and Ethical Behavior	Legal and Ethical Behavior	Legal and Ethical Behavior
	R2) Recognize and demonstrate age-appropriate responsible use of digital devices and resources as outline in school/district rules	R2) Recognize and demonstrate age-appropriate responsible use of digital devices and resources as outline in school/district rules.	R2) Recognize and demonstrate age-appropriate responsible use of digital devices and resources as outline in school/district rules.
	Systems	Systems	Systems
	R4) Identify and employ appropriate troubleshooting techniques to solve computing or connectivity issues.	R4) Identify and employ appropriate troubleshooting techniques to solve computing or connectivity issues.	R4) Identify and employ appropriate troubleshooting techniques to solve computing or connectivity issues.
	Citizen of a Digital Culture: Safety, Privacy and Security	Citizen of a Digital Culture: Safety, Privacy and Security	Citizen of a Digital Culture: Legal and Ethical Behavior
	 Distinguish between private and public information. 	4) Identify age-appropriate methods for keeping personal information private.	5) Cite media and/or owners of digital content at an age- appropriate level.
	4) Identify age-appropriate methods for keeping personal information private.	Citizen of a Digital Culture: Legal and Ethical Behavior	6) Demonstrate appropriate behaviors for communicating in a digital
	Citizen of a Digital Culture: Legal and Ethical Behavior	6) Identify appropriate and inappropriate behaviors for communicating in a	environment.
	5) Demonstrate appropriate behaviors for working with	digital environment.	
	others responsibly and kindly.	Citizen of a Digital Culture: Digital Identity	
		7) Recognize that a person has a digitalidentity.	



Crosswalk to Alabama Courses of Study Science Exploration and Knowledge: Exploring the World Around Me

ASELD	KINDERGARTEN	FIRST GRADE	SECOND GRADE
SEK2d: Computational Thinking:	Computational Thinker: Algorithms	Computational Thinker: Programming and Development	Computational Thinker: Programming and Development
Children will use technological skills, concepts, and behaviors to solve problems	1) List the sequence of events required to solve problems. Global Communicator: Collaborative Research	3) Construct elements of a simple computer program in collaboration with others.	3) Construct elements of a simple computer program using basic commands.
or complete projects.	9) Create a research- based product	Global Communicator: Collaborative Research	4) Identify bugs in basic programming.
	collaboratively using online digital tools, given specific guidance.	13) Create a research- based product collaboratively using online	Global Communicator: Collaborative Research
	Innovative Designer: Design Thinking	digital tools. Innovative Designer: Design	13) Create a research- based product collaboratively using online
	13) Use a design process in a guided setting to	Thinking	digital tools.
	create an artifact or solve a problem.	 19) Identify and revise problem-solving strategies to solve a problem. 	Innovative Designer: Design Thinking
		to soive <i>а</i> ргошетт.	18) Investigate the design process and use digital tools to illustrate potential solutions to a problem, given guidance and support.
Children will use	Scientific and Engineering Practices:		
beginning design processes for	8) Planning and Carrying	out Investigations	
problem solving.	9) Asking Questions and [-	
	10) Analyzing and Interpret		
		ons and Designing Solutions	
		and Communicating Information	
	13) Developing and Using I14) Engaging in Argument f		
	, 5 5 5 5 5		



Crosswalk to Alabama Courses of Study Mathematical Thinking (MAT): Exploring, Processing and Logical Reasoning

ASELD	KINDERGARTEN	FIRST GRADE	SECOND GRADE
MAT1a: Numbers and Quantity:	Foundations of Counting	Operations and Numbers: Base Ten	Operations and Numbers: Base Ten
Number Relationships. Children will	Count to tell the number of objects.	Understand place value.	Understand place value
understand the concept of	Compare numbers.	Use place value understanding and	Use place value understanding and
numbers, and the relationships	Operations with Numbers	properties of operations to add and subtract.	properties of operations to add and
oetween numbers and quantities.	Work with numbers 11-19 to gain foundations for place value.		subtract.
MAT1b: Numbers and	Foundations of Counting	Operations and Numbers: Base Ten	
Relationships: Counting and Number Sense. Children will connect number names to quantities.	Know number names and the count sequence.	Extend the counting sequence.	
MAT2a: Algebraic Thinking:	Operations and Algebraic Thinking	Operations and Algebraic Thinking	Operations and Algebraic Thinking
Operations. Children will develop an understanding of butting together,	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.	Represent and solve problems involving addition and subtraction.	Represent and solve problems involving addition and
adding to, taking apart, and taking	apart and taking norm.	Understand and apply properties of operations	subtraction.
rom.		and the relationship between addition and subtraction.	Add and subtract with 20.
		Add and subtract within 20.	Work with equal group of objects to gain foundations for
		Work with addition and subtraction equations.	multiplication.
 //AT2b: Algebraic Thinking:	Data Analysis	Data Analysis	Data Analysis
Sets Children classify and organize objects according to oroperties and attributes.	Collect and analyze data and interpret results.	Describe and compare measurable attributes.	Describe and compare measurable attributes.
MAT2c: Algebraic	Operations and Algebraic Thinking	Operations and Algebraic Thinking	Operations and Algebraic Thinking
Thinking: Patterns Children will ecognize simple patterns in daily ife and play experiences.	Understand simple patterns	Understand simple patterns	Understand simple patterns



Crosswalk to Alabama Courses of Study Mathematical Thinking (MAT): Exploring, Processing and Logical Reasoning

ASELD	KINDERGARTEN	FIRST GRADE	SECOND GRADE
MAT3a: Spatial Reasoning and Geometry: Spatial Reasoning Children will explore and describe the spatial relationships between objects, their environment, and themselves.	Geometry Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).	Geometry Reason with shapes and their attributes.	Geometry Reason with shapes and their attributes.
MAT3b: Spatial Reasoning and Geometry: Shapes Children will explore, visualize and analyze shapes and shape attributes.	Geometry Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres). Analyze, compare, create, and compose shapes.	Geometry Reason with shapes and their attributes.	Geometry Reason with shapes and their attributes.
MAT4a: Measurement and Data Analysis: Measurement and Time Children will explore and communicate about distance, weight, length, height, and time.	Measurement Describe and compare measurable attributes.	Measurement Describe and compare measurable attributes. Work with time and money	Measurement Measure and estimate lengths in standard units. Relate addition and subtraction to length. Work with time and money.
MAT4b: Measurement and Data Analysis: Logical Thinking, Reasoning, and Data Analysis Children use logical thinking and reasoning to solve meaningful problems and inform decisions.	Data Analysis Collect and analyze data and interpret results.	Data Analysis Collect and analyze data and interpret results.	Data Analysis Collect and analyze data and interpret results.



Language and Literacy: Understanding and Expressing by Speaking, Listening, Reading, and Writing

ASELD	KINDERGARTEN	FIRST GRADE	SECOND GRADE
LT1a: Receptive	Speaking and Listening	Speaking and Listening	Speaking and Listening
.anguage:	Standards Comprehension	Standards Comprehension	Standards
Children will gain	and Collaboration	and Collaboration	Comprehension and
nformation by	SL.K.1 (31)	SL.1.1 (31)	Collaboration
nderstanding	SL.K.2 (32)	SL.1.2 (32)	SL.2.1 (29)
ne meaning	SL.K.3 (33)	SL.1.3 (33)	SL.2.2 (30)
•	3L.N.3 (33)	SL.1.3 (33)	
f words and	December of Kennel day and	December of Kennel	SL.2.3 (31)
estures.	Presentation of Knowledge and	Presentation of Knowledge	5 4 4 515 1 1
	Ideas	and Ideas	Presentation of Knowledge
	SL.K.4 (34)	SL.1.4 (34)	and Ideas
	SL.K.5 (35)	SL.1.5 (35)	SL.2.4 (32)
	SL.K.6 (36)	SL.1.6 (36)	SL.2.5 (33)
			SL.2.6 (34)
	Language Standards	Language Standards	
	Conventions of Standard	Conventions of Standard	Language Standards Convention
	English	English	of Standard English
	L.K.I (37)	L.1.1 (37)	L.2.1 (35)
	L.K.2 (38)	L.1.2 (38)	L.2.2 (36)
	Vocabulary Acquisition and Use	Vocabulary Acquisition and Use	Knowledge of Language
	L.K. 4 (39)	L.1.4 (39)	L.2.3 (37)
	L.K. 5 (40)	L.1.5 (40)	
	L.K.6 (41)	L.1.6 (41)	Vocabulary Acquisition and Use
			L.2.4 (38)
			L.2.5 (39)
			L.2.6 (40)
LT1b:	Speaking and Listening	Speaking and Listening	Speaking and Listening
xpressive	Standards Comprehension	Standards Comprehension	Standards Comprehension
anguage:	and Collaboration	and Collaboration	and Collaboration
hildren will	SL.K.1 (31)	SL.1.1 (31)	SL.2.1 (29)
se words	SL.K.2 (32)	SL.1.2 (32)	SL.2.2 (30)
nd gestures	SL.K.3 (33)	SL.1.3 (33)	SL.2.3 (31)
express			
neir	Presentation of Knowledge	Presentation of Knowledge	Presentation of Knowledge
noughts,	and Ideas	and Ideas	and Ideas
elings and	SL.K.1 (34)	SL.1.4 (34)	SL.2.4 (32)
eeds to	SL.K.2 (35)	SL.1.5 (35)	SL.2.5 (33)
thers.	SL.K.3 (36)	SL.1.6 (36)	SL.2.6 (34)
	Language Standards Conventions	Language Standards	Language Standards
	of Standard Language	Conventions of Standard	Conventions of Standard
		English	English
	L.K.1 (37)	<u> </u>	
	Vesselvien, Assuicition and Use	L.1.1 (37)	L.2.1 (35)
	Vocabulary Acquisition and Use	L.1.2 (38)	L.2.2 (36)
	L.K.4 (39)		
	L.K.5 (40)	Vocabulary Acquisition and Use	Knowledge of Language
	L.K.6 (41)	L.1.4 (39)	L.2.3 (37)
		L.1.5 (40)	
		L.1.6 (41)	Vocabulary Acquisition and Use
			L.2.4 (38)
			L.2.5 (39)

Language and Literacy: Understanding & Expressing by Speaking, Listening, Reading, and Writing

ASELD	KINDERGARTEN	FIRST GRADE	SECOND GRADE
LLT1c: Social Rules of	Speaking and Listening Standards	Speaking and Listening Standards Comprehension	Speaking and Listening
Language:	Comprehension and	and Collaboration:	Standards Comprehension and Collaboration:
Children will use,	Collaboration:	SL.1.3 (33)	SL.2.3 (31)
adapt, and follow	SL.K.3 (33)	,	, ,
the rules of	B 441 616 1 1	Presentation of Knowledge	Presentation of Knowledge
language.	Presentation of Knowledge and Ideas	and Ideas L.1.4 (34)	and Ideas L.2.4 (32)
	L.K.4 (34)	L.1.6 (36)	L.2.6 (34)
	L.K.6 (36)	2.1.0 (00)	2.2.0 (04)
		Language Standards	Language Standards
	Language Standards	Conventions of Standard	Conventions of Standard
	Conventions of Standard English	English	English
	L.K.1 (37)	L.1.1 (37)	L.2.1 (35)
	2	Vocabulary Acquisition and Use	Knowledge of Language
	Vocabulary Acquisition and Use	L.1.4 (39)	L.2.3 (37)
	L.K.4 (39)	L.1.4 (40)	Vacabulan, Association and Has
	L.K.4 (40) L.K.6 (41)	L.1.6 (41)	Vocabulary Acquisition and Use L.2.4 (38)
	L.N.O (41)		L.2.5 (39)
			L.2.6 (40)
LLT2a:	Reading Standards for	Reading Standards for	Reading Standards for Literature
Comprehension:	Literature	Literature	Key Ideas and Details:
Children will	Key Ideas and Details: RL.K.1 (1)	Key Ideas and Details:	RL.2.1 (1) RL.2.2 (2)
demonstrate emerging	RL.K.2 (2)	RL.1.1 (1) RL.1.2 (2)	RL.2.3 (3)
understanding of	RL.K.3 (3)	RL.1.3 (3)	112.2.0 (0)
ooth the written			Integration of Knowledge and Ide
and spoken	Integration of Knowledge and Ideas	Integration of Knowledge and Ideas	RL.2.7 (7)
word.	RL.K.7 (7) RL.K.9 (8)	RL.1.7 (7) RL.1.9 (8)	RL.2.9 (8)
	NL.N.3 (0)	NL. 1.9 (0)	Range of Reading and Level of
	Reading Standards for Information	Reading Standards for	Text Complexity
	Text	Informational Text Key	RL. 2.10 (9)
	Key Ideas and Details	Ideas and Details	- "
	RI.K.1 (10) RI.K.2 (11)	RI.1.1 (10) RI.1.2 (11)	Reading Standards for
	RI.K.3 (12)	RI.1.3 (12)	Informational Text Key Ideas and Details
	()		RI.2.1 (10)
	Craft and Structure	Craft and Structure	RI.2.2 (11)
	RI.K.4 (13)	RI.1.4 (13)	RI.2.2 (12)
	RI.K.5 (14)	RI.1.5 (14)	Craft and Structure
	RI.K.6 (15)	RI.1.6 (15)	RI.2.4 (13)
	Reading Standards:	Reading Standards:	RI.2.5 (14)
	Foundational Skills	Foundational Skills	RI.2.6 (15)
	Fluency	Fluency	
	RF.1.4 (23)	RF.1.4 (23)	Range of Reading and Level of
			Text Complexity RI.2.10 (19)
			ReadingStandards:
			Foundational Skills
			Fluency
			RF.2.4 (21)



Language and Literacy: Understanding and Expressing by Speaking, Listening, Reading, and Writing

ASELD	KINDERGARTEN	FIRST GRADE	SECOND GRADE
LLT2b: Phonological Awareness: Children will begin to	Reading Standards: Foundational Skills Phonological Awareness RF.K.2 (21)	Reading Standards: Foundational Skills Phonological Awareness RF.1.2 (21)	Reading Standards: Foundational Skills Phonics and Word Recognition RF.2.3 (20)
recognize and associate words with sounds in spoken language.	Phonics and Word Recognition RF.K.3 (22)	Phonics and Word Recognition RF.1.3 (22)	
LLT2c: Alphabet Knowledge: Children will demonstrate an emerging understanding that letters and letter sounds represent the sounds of spoken language.	Reading Standards: Foundational Skills Phonics and Word Recognition RF.K.3 (22)	Reading Standards: Foundational Skills Phonics and Word Recognition RF.1.3 (22)	Reading Standards: Foundational Skills Phonics and Word Recognition RF.2.3 (20)
LLT2d: Print Awareness and Book Handling: Children will construct meaning	Reading Standards for Literature: Craft and Structure RL.1.4 (4) RL.1.5 (5) RL.1.6 (6)	Reading Standards for Literature: Craft and Structure RL.1.4 (4) RL.1.5 (5) RL.1.6 (6)	Reading Standards for Literature: Craft and Structure RL.2.4 (4) RL.2.5 (5) RL.2.6 (6)
from and appreciation of print.	Reading Standards for Informational Text Craft and Structure RI.K.5 (14) RI.K.6 (15)	Reading Standards for Informational Text Craft and Structure RI.1.5 (14) RI.1.6 (15)	Reading Standards for Informational Text Craft and Structure RI.2.4 (13) RI.2.5 (14) RI.2.6 (15)
	Reading Standards Foundational Skills Print Concepts RF.K. 1 (20)	Reading Standards Foundational Skills Print Concepts RF.1.1 (20)	Reading Standards Foundational Skills Phonics and Word Recognition RF.2.1 (20)
LLT3: Emergent Writing: Children will demonstrate emerging understanding that writing is a way to communicate.	Writing Standards Text Types and Purposes W.K 1 (24) W.K 2 (25) W.K. 3 (26) Production and Distribution of Writing W.K.5 (27) W.K.6 (28) Research to Build and Present Knowledge W.K.7(29) W.K.8 (30)	Writing Standards Text Types and Purposes W.1 1 (24) W.1 2 (25) W.1.3 (26) Production and Distribution of Writing W.1.5 (27) W.1.6 (28) Research to Build and Present Knowledge W.1.7 (29) W.1.8 (30)	Writing Standards Text Types and Purposes W.2 1 (22) W.2 2 (23) W.2 3 (24) Production and Distribution of Writing W.2.5 (25) W.2.6 (26) Research to Build and Present Knowledge W.2.7 (28) W.2.8 (29)

Creative Arts: Exploring Feelings and Ideas through Art, Music, Movement and Drama

ASELD	KINDERGARTEN	FIRST GRADE	SECOND GRADE
CRA1: Visual Arts	Anchor Standard 1: Gen	erate and conceptualize artistic ic	deas and work.
Children will demonstrate an	Anchor Standard 2: Orga	anize and develop artistic ideas a	nd work.
emerging understanding	Anchor Standard 3: Refi	ne and complete artistic work.	
and enjoyment of the use of visual arts as a	Anchor Standard 4: Sele	ct, analyze, and interpret artistic	work for presentation
form of self- expression.	Anchor Standard 5: Deve	elop and refine artistic techniques	and work for presentation
	Anchor Standard 6: Con	vey meaning through the present	ation of artistic work.
	Anchor Standard 7: Perc	ceive and analyze artistic work.	
	Anchor Standard 8: Inter	pret intent and meaning in artistic	work.
CRA2: Music Children will	Anchor Standard 9: Appl	ly criteria to evaluate artistic work	
demonstrate an emerging understanding and appreciation of music as a form of self- expression.	Anchor Standard 10: Syr	nthesize and relate knowledge an	d personal experiences.
CRA3: Movement and Dance Children will demonstrate growing interest and control in using rhythmic movements for self-expression.			
CRA4: Drama and Acting Children will demonstrate an emerging appreciation for the use of drama for self- expression.			



ASELD	KINDERGARTEN	FIRST GRADE	SECOND GRADE
PDH1a: Gross Motor Development:		ndard 1: Motor Skills and Movement tency in a variety of motor skills and	
Children will demonstrate increasing body awareness and control,	K-1.1 Locomotor skills Attempt to hop, gallop, jog, run, slide, skip, jump, and leap while maintaining balance.	1-1.1 Locomotor skills Demonstrate correct form for hopping, galloping, and sliding.	2-1.1 Locomotor skills Demonstrate correct form for skipping.
strength, and coordination of large muscles.	K-1.2 Locomotor skills Developmentally appropriate/ emerging outcomes first appear in Grade 2	1-1.2 Locomotor skills Developmentally appropriate/ emerging outcomes first appear in Grade 2	2-1.2 Locomotor skills Demonstrate correct form of jogging and running
	K-1.3 Locomotor skills Perform jumping and landing actions	1-1.3 Locomotor skills Perform jumping and landing of activities with balance	2-1.3 Locomotor skills Use a variety of one-and two- footed takeoffs and landings
	K-1.4 Locomotor skills Apply rhythmic expression in response to music	1-1.4 Locomotor skills Combine locomotor, non- locomotor, and manipulative skills in rhythmic activities	2-1.4 Locomotor skills Demonstrate directionality in simple folk, line, partner, and circle dances and rhythmic routines
	K-1.5 Non-locomotor skills (stability) Use different bases of support to maintain momentary stillness	1-1.5 Non-locomotor skills (stability) Maintain stillness on different bases of support with different body shapes	2-1.5 Non-locomotor skills (stability) Balance on different bases of support, combining levels and shapes
	K-1.6 Non-locomotor skills (stability) Attempt to create wide, narrow, curled, and twisted body shapes by curling and stretching	1-1.6 Non-locomotor skills (stability) Create wide, narrow, curled, and twisted body shapes by curing and stretching	2-1.6 Non-locomotor skills (stability) Differentiate among twisting, curling, bending, and stretching actions
	K-1.7 Non-locomotor skills (stability) Attempt to transfer weight from one body part to another: a. in self-space b. by rolling sideways in multiple body shapes	1-1.7 Non-locomotor skills (stability) Transfer weight from one body part to another in self-space with both narrow and curled body shapes	2-1.7 Non-locomotor skills (stability) Transition weight from various bases of support by: transferring weight from feet to different body parts while maintaining balance; rolling in different directions with both a narrow and curled body shape
	K-1.8 Manipulative Skills Attempt underhand and overhand throw	1.1.8 Manipulative Skills Throw underhand and overhand with hand/foot opposition	2.1.8 Manipulative Skills Throw underhand and overhand, demonstrating correct form with hand/foot opposition



ASELD	KINDERGARTEN	FIRST GRADE	SECOND GRADE
	K-1.9 Manipulative Skills Attempt to catch a dropped ball from varying heights	1.1.9 Manipulative Skills Catch various sizes of soft objects from a self-toss before they hit the ground	2.1.9 Manipulative Skills Catch a self- tossed or well- thrown object with hands, not trapping or cradling against the body
	K-1.10 Manipulative Skills Attempt to dribble a ball with one hand using consecutive contacts	1.1.10 Manipulative Skills Dribble continuously in a stationary position, using the preferred hand	2.1.10 Manipulative Skills Dribble continuously in self space and while traveling, with preferred hand, demonstrating correct form
	K-1.11 Manipulative Skills Tap a ball forward, using inside of foot	1.1.11 Manipulative Skills Walk while tapping a ball, using alternating feet	2.1.11 Manipulative Skills Dribble with alternating feet, demonstrating control of ball and body
	K-1.12 Manipulative Skills Attempt to pass and trap a slow- moving ball	1.1.12 Manipulative Skills Pass and trap a moving ball in a static environment, demonstrating correct	1.1.12 Manipulative Skills Pass and trap a ball with accuracy to a partner, using varying force and distance
	K-1.13 Manipulative Skills Kick a stationary ball, planting foot and making contact with shoelaces	1.1.13 Manipulative Skills Approach a stationary ball, make contact below center line, and kick it forward	2.1.13 Manipulative Skills Demonstrate kicking skills by: using a running approach towards a stationary ball with correct form; attempting to make contact with a moving ball; attempting to kick a dropped ball/object, making contact with shoelaces
	K-1.14 Manipulative Skills Independently volley a lightweight object with varying body parts	1.1.14 Manipulative Skills Independently volley a lightweight object upward with consecutive hits	2.1.14 Manipulative Skills Demonstrate volleying lightweight objects with partner
	K-1.15 Manipulative Skills Attempt to strike a lightweight object with a paddle or other short- handled implement	1.1.15 Manipulative Skills Demonstrate striking a lightweight object upward with a short-handled implement	2.1.15 Manipulative Skills Demonstrate striking a lightweight object upward with a short-handled implement, using consecutive hits
	K-1.16 Manipulative Skills Attempt to strike a stationary object with a long-handled implement	1.1.16 Manipulative Skills Strike a stationary object with a long-handled implement using correct	2.1.16 Manipulative Skills Strike an object, using correct hand placement and proper body orientation
	K-1.17 Manipulative Skills Attempt a single jump with self-turned rope.	1.1.17 Manipulative Skills Demonstrate rope skills by jumping self-turned rope; attempting to turn a long rope multiple times consecutively with a partner	2.1.17 Manipulative Skills Demonstrate rope skills with correct form by: jumping self-turned rope consecutively forward and backward; jumping a long rope multiple times consecutively with student partners



ASELD	KINDERGARTEN	FIRST GRADE	SECOND GRADE
		2: Movement and performance: The ph strategies, and tactics related to mov	
	K-2.1 Movement Concepts: Space Demonstrate the difference between movement in personal and general space while attempting to maintain self-control	1-2.1 Movement Concepts: Space Demonstrate moving in personal and general space while maintaining self- control, in response to designated class expectation	2-2.1 Movement Concepts: Space Apply the concept of personal and general space during class activities
	K-2.2 Movement Concepts: Pathways, shapes, levels Travel: by using various pathways; demonstrating various levels	1-2.2 Movement Concepts: Pathways, shapes, levels Understand and employ a variety of relationships with objects	2-2.2 Movement Concepts: Pathways, shapes, levels Integrate shapes, levels, and pathways into simple movement sequences
	K-2.3 Movement Concepts: Speed, direction, force Travel: in general space with varying speeds; attempting directionality concepts	1.2.3 Movement Concepts: Speed, direction, force Demonstrate the difference between strong and light force	2.2.3 Movement Concepts: Speed, direction, force Recognize and adjust exertion of force on an object required during an activity
	K-2.4 Movement Concepts: Strategies and tactics Developmentally appropriate/ emerging outcomes first appear in Grade 3.	1.2.4 Movement Concepts: Strategies and tactics Developmentally appropriate/ emerging outcomes first appear in Grade 3.	2.2.4 Movement Concepts: Strategies and tactics Developmentally appropriate/ emerging outcomes first appear in Grade 3.
		rd 3: Physical Activity and Fitness: The s to achieve and maintain a health-enhar	
	K-3.1: Physical activity knowledge Differentiate between active play and non- actively play outside physical education class	1.3.1: Physical activity knowledge Identify the benefits of participating in physical activity for at least 60 minutes a day	2.3.1 Physical activity knowledge Describe the benefits of participating in moderate to vigorous activities outside physical
	K-3.2 Engagement in physical activity Participate in physical education class	1.3.2 Engagement in physical activity Actively engage in physical education class	2-3.2 Engagement in physical activity Actively engage in physical education class in response to instruction and practice
	K-3.3 Fitness knowledge Discover the connection between physical activity and the change in heart rate and breathing	1-3.3 Fitness knowledge Verbalize how active play and physical activity strengthen the heart muscle	2-3.3 Fitness knowledge Identify physical activities that contribute to a high level of fitness and the importance of warm-up and cool-down related to vigorous physical activity



ASELD	KINDERGARTEN	FIRST GRADE	SECOND GRADE	
	Physical Education Anchor Standard 4: Personal and Social Behavior: The physically literate individual exhibits responsible personal and social behavior that respects selfand others. (See ADSELDs Social Emotional Development domain)			
	Physical Education Anchor Standa the value of physical activity for health			
	K-5.1 Health Acknowledge that physical activity is important for good health	1-5.1 Health Identify physical activity as a component of good health	2-5.1 Health Describe the relationship between physical activity and good health	
	K-5.2 Challenge Acknowledge that physical activities require varying degrees of challenge and difficulty	1-5.2 Challenge Explain that continued practice in physical activities can lead to success	2-5.2 Challenge Identify physical activities that build confidence and activities that are challenging	
	K-5.3 Self-expression and enjoyment Name physical activities that are enjoyable	1-5.3 Self-expression and enjoyment Recall positive feelings that result from participating in physical activities	2-5.3 Self-expression and enjoyment List physical activities that provide self-expression	
	K-5.4 Social interaction Discuss the enjoyment of active play with peers	1-5.4 Social Interaction Share personal reasons for enjoying physical activities that involve peers	2-5.4 Social Interaction Describe the positive social interactions that come with engaging with others in physical activity	
PDH1b: Fine Motor Development: Children will demonstrate increasing strength, control, and coordination of their small muscles.	Not addressed			



ASELD	KINDERGARTEN	FIRST GRADE	SECOND GRADE
PDH2a: Healthy Habits: Children will show	Health Education Anchor Standard 1 prevention to enhance health.	Students will comprehend concepts relat	ted to health promotion and disease
increasing independence in performing self- care tasks.	K.1.1 Health Promotion: Healthy Behaviors Identify behaviors that impact personal health	1.1.1 Health Promotion: Healthy Behaviors Explain how healthy behaviors impact personal health	2.1.1 Healthy Promotion: Healthy Behaviors Describe behaviors that enhance physical and mental health.
	K.1.2 Health Promotion: Nutrition and Food Identify healthy food choices	1.1.2 Health Promotion: Nutrition and Food List food safety precautions	2.1.2 Nutrition and Food Summarize motivations for eating food.
	K.1.4 Health Promotion: Hygiene Explain why healthy behaviors such as brushing teeth and getting adequate sleep are important	1.1.4 Health Promotion: Nutrition and Food Explain rationale for not sharing hygiene products.	2.1.4 Health Promotion: Nutrition and Food List ways to prevent germs from spreading.
	K.1.5 Health Promotion: Disease Prevention and Health Care Describe ways to prevent the spread of communicable diseases	1.1.5 Health Promotion: Disease Prevention and Health Care Apply measures for cleanliness and disease prevention	2.1.5 Health Promotion: Disease Prevention and Health Care Investigate how immunizations and regular care from health professionals prevent disease.
	K.1.7 Health Promotion: Dimensions of Health Identify positive examples of physical health		
	Health Education Anchor Standard 2 technology and other factors on healt	Students will analyze the influence of fam hehaviors.	ily, peers, culture, media,
		1.2.2 Analyzing Influences: Media & Technology Describe how advertisements can influence food choices.	2.2.1 Analyzing Influences: Family, Peer, Culture Identify ways the school supports personal health practices and behaviors.
			2.2.2 Analyzing Influences: Media & Technology Discuss how advertisements can influence individuals to purchase certain products.



ASELD	KINDERGARTEN	FIRST GRADE	SECOND GRADE	
	Health Education Anchor Standard 3			
	1.3.1 Access to Information: Information, Products and Services Identify school and community health helpers who can assist in understanding health procedures	1.3.1 Access to Information: Information, Products and Services Describe the roles of various healthcare professionals.	2.3.2 Access to Information: Information, Products and Services Identify adults and professionals who help to promote regular physical activity.	
		1.3.2 Access to Information: Information, Products and Services Identify school and community health helpers who can be contacted in emergencies.		
	Health Education Anchor Standard 6: Shealth.	Students will demonstrate the ability to u	se goal-setting skills to enhance	
	K.6.1 Goal Setting: Self- Awareness Define a goal and identify several potential age- appropriate, short-term health goals.	1.6.1 Goal Setting: Self- Awareness Create an age- appropriate personal health goal.	2.6.1 Goal Setting: Self- Awareness Describe various ways to reach a personal health goal.	
	K.6.2 Goal Setting: Problem Solving Identify family members who can assist with achieving short-term health goals	1.6.2 Goal Setting: Problem Solving Describe ways that parents and other trusted adults can help a student achieve a health goal.	2.6.2 Goal Setting: Problem Solving Identify school and community individuals who can help support personal health goals	
	Health Education Anchor Standard 7: sand avoid or reduce health risks.	Students will demonstrate the ability to p	ractice health- enhancing behaviors	
	K.7.1 Self-Management: Monitor Progress Show healthy behaviors that improve personal health and wellness.	1.7.1 Self-Management: Monitor Progress Identify healthy practices and behaviors to maintain and improve personal health.	2.7.1 Self-Management: Monitor Progress Predict how healthy behaviors can reduce health risks	
	Health Education Anchor Standard 8 community health.	Health Education Anchor Standard 8 : Studentswilldemonstrate the ability to advocate for personal, family, community health.		
	K.8.1 Advocacy: Promote Healthy Habits Role play behaviors that promote personal healthy habits.	1.8.1 Advocacy: Promote Healthy Habits Encourage peers to make positive health choices.	2.8.1 Advocacy: Promote Healthy Habits Enlist family and community participation in positive health activities.	



ASELD	KINDERGARTEN	FIRST GRADE	SECOND GRADE
PDH2b: Safety: Children will demonstrate	Health Education Anchor Standard health.	5: Children will demonstrate the ability to us	se decision-making skills to enhance
increasing awareness of safe habits, safety rules	K.1.3 List everyday chemical products that can be used like a harmful drug.	1.1.2 List food safety precautions	2.1.6 List ways to prevent common childhood injuries
and personal safety.	K.1.6 List reasons to call for emergency assistance	1.1.3 Explain how over-the- counter and prescription medicines can be misused	2.4.4 Summarize strategies for reporting harmful acts.
	K.5.1 Discuss when and what assistance is needed for health-related situations.	1.1.6 Demonstrate asking for assistance to enhance safety for self and others	2.4.5 Demonstrate how to tell a trusted adult if inappropriate touching occurs.
	K.7.2 Demonstrate healthy behaviors that prevent injuries	1.4.4 Demonstrate ways to respond in an unwanted, threatening, or dangerous situation.	2.5.1 Differentiate between situations when a health-related decision can be made individually or when assistance is needed.
		1.4.5 Identify appropriate and inappropriate touches	2.7.2 Describe personal behaviors that enhance safety at school, home, and within the community.
		1.5.1 Describe situations in which students must choose between healthy and risky behaviors.	
		1.7.2 Determine behaviors that avoid or reduce injury	



APPENDICE S

APPENDIX ONE

The Wonder of Play

Play is a vital part of children's development and learning. Play helps young children learn about their own abilities and interests, how to get along with others and to appreciate others' differences. Play provides opportunities for children to take on roles and act out familiar situations to give them a window on the world. It builds children's vocabulary and encourages their creativity and curiosity. Children problem solve when they try new ways of doing things like ride a bike or put together a puzzle, and active

Play provides opportunities for children to take on roles and act out familiar situations to give them a window on the world.

play grows children's muscles, strength and stamina. In fact, play enables children to experience the four key ingredients for successful learning: children who are mentally active; engaged not distracted; socially interactive; and connecting to their world learn best. (Hirsh-Pasek, 2015)

Two Types of Play

Two types of play contribute to children's engagement and learning. The first, free play, is child-directed without adult involvement and unstructured. This play is spontaneous and occurs naturally, encouraging children's curiosity and creativity. Pretend play or playground play are examples. Guided play, the second type, builds on free play through adult interaction. Adults keep children's learning goals in mind

and scaffold or guide their play. Children still lead or direct the play while adults engage with them, suggesting additional materials and asking questions to encourage deeper thinking or exploration. Professionals who join children in the block corner or who make play dough shapes with them guide their play through the questions they ask. "What do you think might happen if you put that big block on the tower?" or "Mary wants to play with us, how can we find her some play dough?" When adults participate in play, children typically continue their play for longer periods of time and research indicates that academic outcomes improve when children

are exposed to guided play.

Stages of Play

Children progress through stages of social play. As early as 1932, an educational pioneer Mildred Parten identified six stages of play, beginning at birth.

Stage	What it typically looks like	Age it typically happens
Unoccupied Play	Babies explore materials and objects around them as they learn about the world around them.	Birth to 3 months
Solitary	Children play alone, typically without noticing others. They use this type of play to explore new ideas and to master basic skills.	Birth to two years
Onlooker	Children watch others play and may ask them questions but they do not join in. They are learning about social roles and rules through observation.	Two to three years
Parallel	Children play next to each other or side by side without interacting together. They are paying attention to each other but they are not engaged in social exchange.	Two and a half years to three years
Associative	Children show interest in what others are doing and may have the same goals for play. They ask questions and communicate with each other but their play has no set rules.	Three to four years
Cooperative (or Social)	Children may play in a group and follow or establish rules for play. They share ideas and toys and may even adopt goals or guidelines for their play.	Four to six years

Many Kinds of Play

Play activities come in different forms and in different ways, each of which may have its own unique connection to children's learning. Can you recognize these kinds of play?

- Symbolic play: children use objects or actions to represent other objects
- Rough and tumble play: children engage in active play that gauges physical strength
- Socio-dramatic play: children act out experiences
- Social play: children are involved in interactive play where everyone follows rules
- Creative play: children use their imaginations and try new things
- Communication play: children use words or gestures during play such as charades or joke-telling
- Dramatic play: children are assigned roles to act out
- · Locomotor play: children use movement like hide and seek, tag or races
- Deep play: children try new experiences to conquer fear, such as climbing on a play structure
- Exploratory play: children use their senses to discover things around them
- Fantasy play: children make believe; they act out things that are unlikely to happen
- Imaginative play; children use unconventional rules during play such as pretending to fly
- Mastery play; children control the physical environment like digging holes
- Object play: children use eye-hand coordination such as painting
- Role play: children explore ways of being like using a laptop or cell phone
- Recapitulative play: children explore history, stories, rhymes

Bob Hughes: A Playworker's Taxonomy of Play Types, London, Playlink, UK.

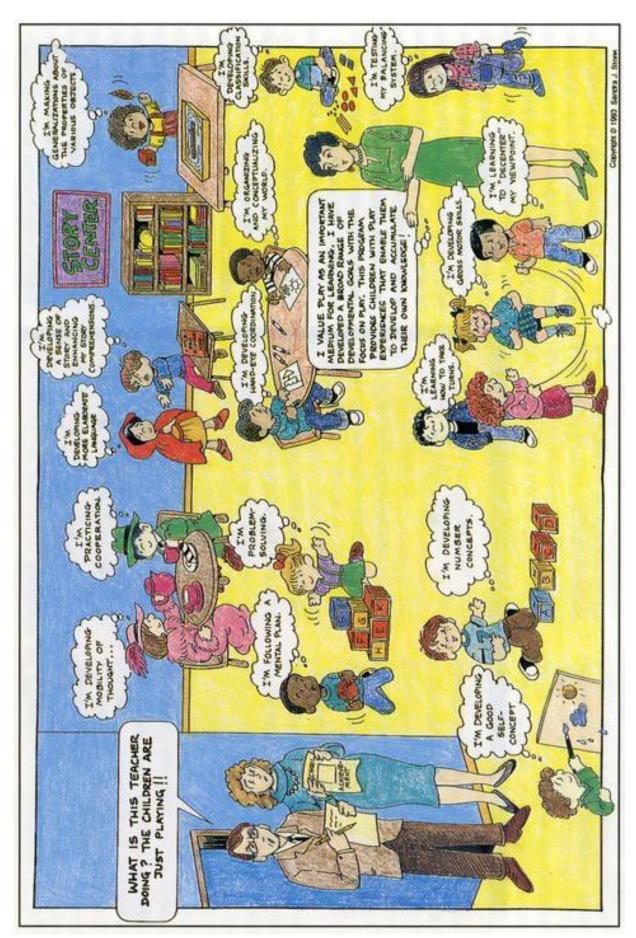
Supportive Environments

Children's play can be supported and enhanced when the environment is purposefully designed to consider varied play experiences and where the materials and equipment promote the different types and forms of play.

Materials and Equipment to Support Children's Play and Learning

	Include these materials for Infants	Add these materials for Young Toddlers	Add these materials for Older Toddlers	Add these materials for Preschoolers
SENSORY MATERIALS	Sucking toysRattlesUnbreakable mirrorsPatterned crib sheetsMobiles	 Music boxes Busy boxes Large bells and drums Non-toxic finger paint and play dough Water play with cups and spoons 	 Sand play with household objects Scarves for dancing Listening games Texture boards Musical instruments 	 More toys for sand and water play Rhythm instruments Prisms Feely boxes
ACTIVE PLAY	Foam climbing ramps and wedges Large brightly colored balls Bouncy toys	 Crawling tunnel Riding toys Cardboard boxes Balls Push and pull toys 	 Low climber and slide Wagon Sandbox and toys No-pedal bikes and riding toys Bouncy balls Mini trampoline 	 Low balance beam Low basketball hoop and balls Tricycles Parachute Bean bags Jump ropes
CONSTRUCTION OR BLOCK	Soft blocks Nesting toys	 Cardboard blocks Stacking toys Pounding bench Foam blocks Large duplo blocks Wire mazes 	Wood unit blocks Little people Wood or plastic animals Cars and trucks Train and tracks Toy construction tools Alphabet blocks	 Full set of wood unit blocks Wood signs and accessories for roadways Small carpet with roadways Woodworking bench and materials Lincoln logs and tinker toys
MANIPULATIVES	Large ringsSqueeze toysTextured ballsLarge measuring spoons	 2-6 piece puzzles with knobs Nesting toys Large pegboards Snap together toys with large pieces Shape sorters 	 4-6 piece puzzles Large beads for stringing Stacking toys Scissors and cards for cutting 	 12-20 piece puzzles and pegboards Stringing and lacing toys and cards Pattern blocks Dressing boards Measuring tapes and rulers

Include these materials for Infants		Add these materials for Young Toddlers	Add these materials for Older Toddlers	Add these materials for Preschoolers
DRAMATIC PLAY	Soft dolls Peek-a-boo games Finger plays and songs	Blankets to wrap dolls Dishes, pans, spoons, Brooms, dustpan Unbreakable mirrors Shopping cart Purses Telephones Pretend food Stuffed animals	Doll bed and carriages Doll clothes Realistic dolls Table and chairs Toy appliances – stove, refrigerator, etc. Simple dress-up clothes Puppets	Theme-based collections of dressups and realistic accessories (hair salon, pet store, doctor office, etc.) Dollhouse and furniture
READING AND LISTENING AREA	 Recordings of songs, voices and sounds Sturdy cloth or cardboard books Lap books with large pictures of faces, objects, shapes 	Books with simple stories Finger plays and songs Posted pictures at eye level Puppets	Books with stories about familiar things Flannel board and pieces	Books from different genres (non-fiction, poetry, fiction)
WRITING AREA		Large paper Fat crayons Bingo markers	 Fat pencils Different types of paper Stampers Feely letters Magnetic letters Chalkboards and chalk 	 Colored pencils Posted alphabet Simple words (cat, boy) Stencils Journals Alphabet cards Dry erase boards and markers
ART AREA	 Textured objects Brightly colored toys Edible finger paint (baby food) 	 Finger paint Non-toxic, washable markers Chalk Fat, unwrapped crayons Large paper 	Water-based paint and large brushes Scissors and things tocut Play dough Large paper of different textures and colors Stickers and paper	 Watercolors Hole punchers Glue, paste and thing to paste Magazines to cut up Crayons and markers Natural materials like leaves or pinecones Collage materials
TECHNOLOGY		Play phonesPlay camerasSimple musical instruments	 Keyboard and mouse Digital books to listen with adults Play laptops or tablets Take apart toys and materials 	 Boom boxes, CD players and headsets Digital cameras Laptops or tablets Coding and robotics games and toys



Permission for use granted by Dr. Stone

264

APPENDIX TWO

Stages of Development and Learning

Children's development typically progresses through stages, each stage building on the one before. While young children's growth is often uneven, with mastery of some skills earlier than others, the steps that children go through remain the same. This document describes early childhood theorists' identified stages in the areas of: psychosocial (or developmental) development; dual language learning; play; writing; and art.

Stages of Psychosocial Development (Erik Erikson)

Erikson, a psychologist, developed a theory on the stages of children's development. He believed that children go through a series of eight stages that are influenced by their relationships and social interactions. They experience basic conflicts between their own feelings and needs and those of the world around them and develop virtues or positive characteristics that enable them to handle conflicts or crises. Adults who creative positive, nurturing environments and experiences for children impact the results of each stage, affecting children's social and emotional development, and ultimately the way in which they view the world and life. Each stage builds on the one(s) before them and the early stages that children, birth through age 5, experience may be reflected in their behaviors and attitudes that are exhibited in early learning programs.

- Stage 1: Mistrust vs. Trust occurs from birth through 18 months. Children develop a sense of trust, confidence and security if they are well cared for and nurtured. If their needs are not met, they develop mistrust or a sense of worthlessness and insecurity. Infants develop the basic virtue of hope during this stage.
- Stage 2: Autonomy vs. Shame generally occurs between 18 months and three years old. Well-cared for children develop a strong sense of independence, confidence and self-esteem and begin to learn right from wrong. Children without strong adult relationships experience feelings of worthlessness and shame and may even have difficulty learning. The basic virtue children develop is will.
- Stage 3: Initiative vs. Guilt impacts preschoolers, age 3-5. Confident and well-adjusted children begin to develop social roles during this stage. They may copy or imitate adults, engage in dramatic play to understand the world and build strong familiar relationships. Mal-adjusted preschoolers are easily frustrated and experience guilt. Children develop a sense of purpose at this stage.
- Stage 4: Industry vs Inferiority develops in children between 5 and 12 years old. Children who are encouraged to be creative and innovative become competent and confident in their ability to reach their goals. The virtue they develop is **competence**. Children may feel inferior if they are restricted in their attempts to try or master new things.

Learn more about Erikson's stages of psychosocial development that continue until adulthood at https://www.simplypsychology.org/Erik-Erikson.html.

Stages of Dual Language Learners' English Acquisition

STAGE ONE Home Language Use	The child uses his home language with other children and adults. This may last for days or months until the child realizes that others cannot understand him.	
STAGE TWO Nonverbal Period	The child limits the use of his home language, and primarily uses nonverbal ways of communication. He uses this time to observe, listen to, and learn the features, sounds, and words of the new language. This important stage may last a few months to a year.	
STAGE THREE Telegraphic and Formulaic Speech	The child repeats familiar one- and two- word phrases in English to name objects and respond to situations. He may not understand the meaning of the words he is using or use them appropriately all of the time, but he notices that the words get the response he needs. (For example, the child may use the phrase "Lookit" to get other children's attention while playing.)	
STAGE FOUR Productive Language Use	The child produces simple sentences in meaningful contexts. As his experiences broaden, his sentences become increasingly longer and more complex. Errors are common as he tries out new vocabulary and language rules during this stage. He will also frequently use linguistic features of his home language(s) to maximize understanding and communication in English.	

Taken from: WIDA, the Early Years: Planning for Dual Language Development and Learning. WCER | University of Wisconsin–Madison | www.wida.us

Stages of Play

Children progress through stages of social play. As early as 1932, an educational pioneer, Mildred Parten, identified six stages of play, beginning at birth.

Stage	What it typically looks like	Age it typically happens
Unoccupied Play	Babies explore materials and objects around them as they learn about the world around them.	Birth to 3 months
Solitary	Children play alone, typically without noticing others. They use this type of play to explore new ideas and to master basic skills.	Birth to two years
Onlooker	Children watch others play and may ask them questions but they do not join in. They are learning about social roles and rules through observation.	Two to three years
Parallel	Children play next to each other or side by side without interacting together. They are paying attention to each other but they are not engaged in social exchange.	Two and a half yearstothree years
Associative	Children show interest in what others are doing and may have the same goals for play. They ask questions and communicate with each other but their play has no set rules.	Three to four years
Cooperative (or Social)	Children may play in a group and follow or establish rules for play. They share ideas and toys and may even adopt goals or guidelines for their play.	Four to six years

Stages of Writing*

Stages of Emergent Writing				
Stage	Description	Example		
Drawing	Drawings that represent writing			
Scribbling	Marks or scribbles the child intends to be writing	LIN & CELL		
Wavy scribbles or mock handwriting	Wavy scribbles that imitate cursive writing and have a left-to-right progression; child pretends to write words			
Letter-like forms or mock letters	Letters and marks that resemble letter-like shapes	PF 2 19 H		
Letter strings	Strings of letters that do not create words, written left to right, including uppercase and lowercase letters	500 HO(11		
Transitional writing	Letters with spaces in between to resemble words; letters/words copied from environmental print; letters often reversed	<u> 5</u> (00j		
Invented or phonetic spelling	Different ways to represent the sounds in words; the first letter of the word or beginning and ending sounds represent the entire word	TLKTHE		
Beginning word and phrase writing	Words with beginning, middle, and ending letter sounds; short phrases	MOM		
Conventional spelling and sentence writing	Correct spelling of words, generally the child's name and words such as mom and dad; sentences with punctuation and correct use of uppercase and lowercase letters	MADISON		

Promoting Children's Emergent Writing/Young Children/November 2017

Stages of Drawing

Stage One: Scribbling

Children use their hands and fingers with some control as they develop eye-hand coordination. Color is less important than the lines they are making. Provide unwrapped crayons, chalk, tempera paint, large paper, clay, wide bristle brushes, collage materials and materials that encourage children to experiment with colors and tools. Set up a specified area for art and a place to display children's creations.

Disordered or Random Scribbling (18 months to 3 years) These scribbles are usually children's first markings.
Children are exploring with different tools and may hold them upside down or sideways. There are no definite pictures, just marks as they learn to coordinate their hands with the markings they're making.



Controlled Scribbling (2-3 years)

This stage begins about 6 months after scribbling begins.
Children learn that they can control the marks they are making and begin to make shapes like circles, crosses, or squares as well as wavy lines, putting them in the chosen, direction.

Named Scribbling (3 to 5 years)

Children begin to name and describe the marks they have made even though they may be unrecognizable. They may respond to adults' questions about their artwork.



Preschematic Stage (between 4 and 7 years old)

Children begin to draw objects that are recognizable but usually unrealistic. They typically begin by drawing pictures of themselves or family members and may add more body parts as they begin more aware of their own body. Children often use colors that don't represent the object (blue apples, green body) and positioning may be all over the page. They use shapes and lines to create their depictions.



Schematic Stage (between 5 and 8 years old)

Children are developing their own ideas about how to represent objects or figures (schema) and repeatedly use the same symbol or design for these objects. For example, they may draw a person with large lips and flowing pants or a house with windows but no doors. Drawings show a difference between sky and ground, become more complex, including more detail using the same schema (or representations). Children may make up stories to go along with their artwork.





APPENDIX THREE

Inclusion in Early Learning Programs

(Adapted from: Delaware Guide to Promoting Inclusion in Early Care and Education¹; A Place For Me: Including Children With Special Needs in Early Care and Education Settings by Phyllis A. Chandler²; and Preparing Young Children for the Inclusion of Children with Disabilities into the Classroom by Marla Lohmann³)

"Inclusive early education is not just about placement in a program, but is more about active participation in social interactions and the development of children's abilities and skills. Children at a range of developmental levels, including children identified with special needs, should be welcomed as valued members of the community by supporting active participation in all early childhood settings."

(UNDERWOOD ET AL., 2012)

Inclusive early childhood programs are in the best interests of all young children, with and without disabilities, and result in greater empathy and acceptance of differences among all children, as well as in improved academic, social, and behavioral outcomes for children with disabilities. Like all children, it is critical for children with disabilities to be exposed to a variety of rich experiences where they can learn in the context of play and everyday interactions and engage with their peers. High-quality early childhood programs can facilitate experiences that foster learning for all children (U.S. Department of Health and Human Services and U.S. Department of Education, 2015).

Young children with and without disabilities play and learn together in a variety of settings: homes, daycare centers, Head Start centers, as well as private, state, and federally supported early childhood programs. Promoting development and a sense of belonging for every child are widely held values among early education and intervention professionals and in society.

Inclusive early care and education is:

- Children of all abilities and backgrounds living, learning, and playing together in the same classroom;
- Children of all abilities and backgrounds fully participating in daily activities because the activities and routines are planned to meet the needs of each child;
- · Caregivers and teachers holding high expectations for every child; and
- · Valuing each child's individual strengths and needs.

Protections for students with disabilities:

Protections for young children with disabilities are provided through long-standing federal laws such as the Individuals with Disabilities Education Act (IDEA). In the findings to the IDEA (2004), Congress states, "Almost 30 years of research and experience has demonstrated that the education of children with disabilities can be made more effective by ... having high expectations for such children and ensuring their access to the general education curriculum in the regular classroom program, to the maximum extent possible in order to ...meet developmental goals and ... the challenging expectations that have been established for all children..." This principle applies equally to the participation of young children with disabilities in inclusive early childhood programs. Although more broadly based than the IDEA, the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act



of 1973 safeguard children with disabilities' access to programs and services provided by entities that receive any federal funding. These laws prohibit discrimination based on service availability, accessibility (e.g., ramps), and delivery. Under both the ADA and Section 504, programs cannot deny a child with a disability the opportunity to participate in or benefit from a program's services solely based on the disability. (Illinois Early Learning Project, 2015).

What does inclusive early care and education look like?

- Children with different abilities, interests, and backgrounds playing and learning together in the same classroom;
- Every child involved in all daily activities;
- Any specialized services needed by individual students are embedded within the routines and curriculum of the regular early childhood setting;
- · Materials or activities adapted to meet the different needs of each child;
- Full participation of every child intentionally encouraged;
- · Needs of the children are the basis for the daily plans and schedules; and
- Teachers encouraging and modeling attitudes of acceptance, high expectations, and facilitated learning at all times.

Who benefits from inclusion and inclusive early care and education?

The early childhood professional:

- Inclusion improves teachers teachers experience increased growth and learning to benefit all children.
- Inclusion allows for more interaction with colleagues regular and special education teachers, along with service providers, work together to meet the unique learning needs of all students.
- Inclusion is rewarding all children will learn and grow together.

Other children in your care:

- Inclusion helps children discover that all children are more alike than different.
- Inclusion builds children's self-esteem.
- · Inclusion allows children to learn from each other.
- · Inclusion helps children see the strengths and abilities of each unique friend.

Children with a disability:

- Inclusion increases children's opportunities to play and talk together.
- Inclusion creates opportunities for friendships among children.
- Inclusion builds children's self-esteem and independence.

Families:

- Inclusion connects families to other families and resources in their community.
- Inclusion increases families' participation in the classroom, school, and community.

Community:

- Inclusion increases the sharing of resources among various agencies, benefiting all children.
- Inclusive early care and education sends a message to the community that all children are valued and welcomed equally.

Successfully including children with special needs in early childhood programs with typically developing children depends on:

- teacherswhobelievethatallchildrenhavethepotentialtolearn. Apositive attitude towards helping all children grow and develop is important.
- teachers who know and understand child development. Understanding that children learn
 skills in a particular order will help the early care and education provider and
 educator set realistic expectations for a child's skill development. As an example, a
 child needs to practice standing before the child can practice walking. A child with
 special needs may need to have a skill divided into smaller steps before the skill can
 be mastered.
- teachers who realize that the child with special needs is more like other children than different. While there are some exceptions, many two-year-old children with special needs have the same challenges of being two that all children face. Where and when possible, setting similar expectations for all children will help them to be accepted by peers.
- teachers who encourage a child to be independent. Children like to do things on their own. There is a tendency to "over" help children with special needs. However, it is better for the development of all children to encourage them to do whatever they can for themselves.

having a physical environment that meets the needs of the child. In most cases, the
environment may not need to be changed at all. Adapt your space to
the needs of the child.

• planning activities that all children cando. It is possible to plan activities, snacks, meals, and programs that are appropriate for all children.

 a willingness of the teachers to work with the family and other professionals who may be providing support services to the child. While in an early care and education program, a child with special needs may receive additional services from a specialist.
 Communication with those providing support helps improve the experience of the child.

An inclusive early care and education program plans activities and routines so that all children can participate.

Some activities may need to be adapted or changed for children of different abilities or stages of development. When you observe children being successful, repeat the activity or plan similar activities to let children practice their skills. Success builds on success. Adjust routines to meet the needs of all children with special needs, as well as for all children in the program.

How can you make your program more inclusive and help all students be successful?

- Be sure that your classroom is physically accessible for all students.
 Remove any barriers that might prevent a child getting from one place to another.
- Position children with disabilities in the midst of their peers. Do not place a child with a disability at the edge of the group or away from his peers.
- Encourage children without disabilities to interact with children with disabilities.
- Promote authentic friendships—children without physical impairments sometimes take on a "parent" role in interactions with their peers with disabilities.
- Help children find common ground and ways to interact with one another as friends.
- Give all children tools for interactions and conversations. Provide them with toys or objects to initiate discussion (an example might include a popular book).
- Provide children who struggle with communication with alternate ways to express themselves. This could be pointing or using pictures and using picture schedules.
- Pair children with and without disabilities to work and playtogether.
- Use a variety of methods for instruction—talk to the children, illustrate with pictures, model, and provide the opportunity for hands-on learning whenever possible.
- Provide a detailed and changeable visual classroom picture schedule so that all children know the plan for the day.
- Explain a child's disability to other children in an age-appropriate way. Allow them to ask questions about differences.
- Provide developmentally appropriate activities in the early childhood setting that meet the learning, behavioral, and social needs of all children.
- Assist children with self-help skills but expect them to help themselves whenever possible. Foster independence in all children.
- Communicate frequently with parents and other early childhood professionals.
- Treat all children in your classroom with love and respect.
- Have high expectations for all children, regardless of their abilities.
- Seek out resources for learning more about teaching all types of learners, for example, the Early Childhood Technical Assistance Center (http://ectacenter.org/) and the Technical Assistance Center on Social Emotional Intervention for Young Children (http://challengingbehavior.fmhi.usf.edu/)

Suggestions for activities to support children's needs

To support children with speech and language delays:

- Talk while you are doing activities use simple words:
 - Talk to yourself, describing what you are doing.
 - As a child is doing a task, talk about the steps the child is using to complete a task.
- Repeat what the child says, modeling correct grammar and forms of words (ex.: verb forms, word endings, etc.) and adding any omitted words.
- Take advantage of opportunities or events that naturally occur during the day to talk.
- Talk with children while going through tasks during the day using as much descriptive language as possible.
- Create situations where a child needs to communicate (for example, forget silverware for a meal; place objects out of reach and ask the children to get or ask for objects).
- Create situations that would encourage a child to interact and talk (for example, offer a new toy, a popular book, a new learning center, or a new visual).
- Count a set of objects together, out loud, and name the objects.
- Use visual supports to help children express themselves (pointing, using pictures, individual picture schedules, first-then boards, etc.).
- · Give simple directions.
 - -Start with one step at a time.
 - Repeat directions if necessary, using simplified wording.

Activity ideas to help children to develop speech and language skills:

- · Sing.
- Read to a child or to the group.
- Use rhymes, pausing before saying a word to let the child/children shout it out.
- Repeat sounds in a game-like fashion, imitating each other.
- Play "What's this?" with pictures.
- Use picture cards: "feed the dog" by pretending to feed a stuffed animal picture cards of the alphabet, numbers, colors, and/or pictures of common objects.
- Do simple puzzles supply words for colors, shapes, and directions.
- Plan time each day for each child to talk with you and with other children.
- Plan for "show and tell" at first, a child may just nod "yes" or "no" to statements
 you provide about their item. As a child feels more comfortable, they will start to add
 words.
- Let other children ask questions about the "show and tell" item.

To support children with developmental delays:

- · Follow routines.
- Be consistent, follow the same routine every day.
- Give the child one direction at a time.
- Plan new activities for a short amount of time and gradually increase the time spent on the activity each day.
- Practice skills over and over again.
- Limit number of choices given to avoid confusion.
- Give information in a variety of ways speech, gestures, and/or pictures.
- Use activities that involve the interests of the children (for example, dinosaurs, cars, and/ or sports).

Activity ideas to help children develop their skills:

- Develop an obstacle course to encourage crawling, pedaling, etc.
- Scavenger hunt for items with characteristics (for example, use plastic eggs to hunt for colors or objects to hunt for shapes).
- Give food in small pieces like cereal to pick up with fingers.
- Sort and make patterns with colored blocks, beads, etc.
- Prepare food or snacks naming food items; counting and measuring; physically mixing, rolling, and stirring during the food preparation.
- Create areas for children to use pretend play such as a grocery store, doctor's
 office, restaurant, beach, or farm. These theme areas allow children to interact at
 all different levels.

To support children with hearing loss:

- Speak or gesture directly to the child.
- Position the child near to the front of the classroom and/or the speaker.
- Wait for children to watch you. This indicates they are ready to pay attention.
- Eliminate background noises that may be distracting.
- Help children use simple signs that the entire group can practice at circle time.

Activity ideas to help children who have hearing loss:

- Use simple music activities shaking rattles to music or rhythm.
- Play matching games taking time to identify the picture and look at it.
- Exercise with picture directions or video.
- Cook with picture cards.
- Sing songs with actions such as "If You're Happy" and "Hokey Pokey".
- Have all children learn simple signs to use at mealtime or snack time.
- Have children use picture cards to express what they want.

To support children with visual impairment:

- Be aware of lighting make sure the rooms are well lit.
- Arrange furniture to have clear, uncluttered pathways.
- Talk, describing what everyone is doing during an activity.
- Use many descriptive words rather than vague words.
- Use more words to replace gestures or body language.
- Use clear visual images dark solid lines for cutting.

Activity ideas to help children who have visual impairments:

- Play games involving the senses of touch, smell, and taste.
- Velcro[®] laminated body parts, animals, etc. on board or mat.
- Tossballs.
- Put shapes into a shapebox.
- Make up stories during circle time; use their imagination each child adds a sentence.
- Play "Copy Cat" stacking blocks in different patterns.

To support children with physical disabilities:

- Ensure walkways are wide enough for all children to move freely around the room.
- Position children with disabilities in the midst of their peers.
- Make sure the furniture arrangement can be adjusted for special equipment.
- Adapt activities so that all children can participate.
- Use larger crayons or special scissors as needed.

Activity ideas to help children who have physical disabilities:

- · Blow bubbles.
- Use puzzles with knobs on them.
- Put shapes into shape boxes.
- · Animal walk.
- · Scarf dance to music.
- Play "Hot Potato" sitting or standing.
- Play "I Spy".
- · Use group exercises.
- Use a "Follow the Leader" approach. Consider playing "Follow the Leader" in different positions (lying, standing, sitting, etc.) so that all can participate.
- · Toss beanbags.
- Prepare food Consider cooking at a table rather than standing at a counter.
- Play obstacle course Set up the course in a way that all children can participate, perhaps having children crawl on the floor or use "wheeled" transportation.
- Do art projects Create group murals or collages while lying on the floor or sitting at a table.
- · Lace cardboard cards.
- Use Velcro® wall boards that children can access either standing or sitting.
- · Bowl with plastic water bottles as pins.

To support children with social and/or behavior issues:

- · Follow routines.
- Be consistent, follow the same routine every day.
- Use a lot of structure to offer comfort and predictability.
- Promote positive behavior; model appropriate behavior.
- Use activities appropriate for age or ability.
- Provide a safe, risk-free environment for children to try new activities without feeling that they might fail. Focus on their willingness to try something new.
- Watch for frustration, talk through possible ways to solve problems.
- Do new activities or teach a new skill when children are rested and relaxed.

- Balance physically demanding activities with less active or quiet activities (for example, plan a quiet activity before nap time).
- Remember that some children may need to "watch" before participating.
- Provide a quiet place in case a student needs to "cool down".

Activity ideas to help children with social and/or behavioral issues:

- · Have a "Show and Tell" during circle time.
- · Use play dough.
- Make individual or group collage.
- Have a music center Play marching band with simple homemade instruments.
- Follow the leader through a course using a variety of movements such as crawling, slithering, or walking.
- Play a game of "Red Light/Green Light" or "Go/Stop".

Final Thoughts: Inclusion Benefits Everyone

A child with a disability is a child first. His disability does not define him. Children with disabilities are as different as all children are - treat them as individuals. All children can develop friendships with peers, learn how to play and interact with one another, and learn new skills by observing and imitating peers through participating in an inclusive early childhood environment. The experiences that children with and without disabilities have with teachers in their earliest years can set the tone for their interactions with teachers in later grades and are crucial to promoting positive attitudes about school and learning (National Centeron Quality Teaching and Learning, 2013).

If you are concerned that your child may have a disability:

For children 0 through 2 years:

Early Intervention Child Find - 1-800-543-3098 (or TTY 800-499-1816)

For children 3 through 21 years:

Contact your local school system's Special Education department.

¹ Adapted from the Guide to Promoting Inclusion in Early Care and Education: A Section of the User's Guide to the Growing Together Portfolio, Delaware Health and Social Services Birth to Three Early Intervention System (https://www.dhss.delaware.gov/dms/epqc/birth3/files/growingtogether.pdf).

² Adapted from A Place For Me: Including Children With Special Needs in Early Care and Education Settings by Phyllis A. Chandler: National Association for the Education of Young Children, Washington, D.C., 1994.

³ Adapted from Preparing Young Children for the Inclusion of Children with Disabilities into the Classroom by Marla Lohmann: National Association for the Education of Young Children (NAEYC) Blog. (2017). (https://www.naeyc.org/resources/blog/preparing-young-children-inclusion).

Additional References:

DEC/NAEYC. (2009). *Early childhood inclusion: A joint position statement of the Division for Early Childhood (DEC) and the National Association for the Education of Young Children (NAEYC)*. Chapel Hill: The University of North Carolina, FPG Child Development Institute. Illinois Early Learning Project. *Inclusion in Preschool Classrooms*. (2015). Retrieved from https://illinoisearlylearzning.org/tipsheets/inclusion/.

Individuals with Disabilities Education Act, 20 U.S.C. § 1400 (2004). National Center on Quality Teaching and Learning. (2013). *Improving Teacher-Child Interactions: Using the CLASS in Head Start Preschool Programs.* Retrieved from https://eclkc.ohs.acf.hhs.gov/publication/improving-teacher-child-interactions-using-class-head-start-preschool-programs.

Underwood, K., Valeo, A., & Wood, R. (2012). Understanding Inclusive Early Childhood Education: A Capability Approach. *Contemporary Issues in Early Childhood, 13*(4), 290-299. Retrieved from https://journals.sagepub.com/doi/abs/10.2304/ciec.2012.13.4.290.

U.S. Department of Health and Human Services and U.S. Department of Education. (2015). *Policy statement on inclusion of children with disabilities in early childhood programs*. Retrieved from https://sites.ed.gov/idea/files/joint-statement-full-text.pdf/.

Resources in Alabama:

http://www.rehab.alabama.gov/individuals-and-families/early-intervention
This site is Alabama's Early Intervention System, which contains information for families and service providers of children ages 0 through age 2 with suspected or diagnosed disabilities. If concerned about your child's development please call Child Find to make a referral – 1-800-543-3098.

https://www.alsde.edu/sec/ses/Pages/home.aspx

This site is the Alabama State Department of Education, Special Education Services, which contains information for families and service providers children ages 3 through 21 with suspected or diagnosed disabilities.

https://helpmegrowalabama.org/

This site is Help Me Grow Alabama, which links children birth to age 8 and their families to community-based developmental and behavioral services and support.

Additional Resources on Inclusion for Families and Professionals:

http://www.circleofinclusion.org/

This site offers demonstrations of and information for children from birth through age eight on inclusive programs, methods, and practices with interactive lessons, forms, and other materials that can be downloaded.

http://www.kidshealth.org

This site provides doctor-approved health information about children, including information on growth and development, behavior, and positive parenting.

http://www.zerotothree.org

This site provides early childhood professionals information and resources about child development from birth through age three.

http://www.edu.gov.on.ca/childcare/underwood.pdf

This site contains an article, "Everyone Is Welcome: Inclusive Early Childhood Education and Care" by Dr. Kathryn Underwood, Ryerson University, Ontario, Canada.

https://cainclusion.org/camap/

This site is the California MAP to Inclusion & Belonging: Making Access Possible, providing supports, resources, and training for early care providers and families around inclusion.

https://www.cde.state.co.us/resultsmatter/RMVideoSeries_PracticesHereAndThere This site is part of the Colorado Dept. of Education, Results Matter Video Library which contains videos on several early childhood topics, including inclusion, to be used in professional development activities.

https://www.acf.hhs.gov/ecd/child-health-development/watch-me-thrive

This site is Birth to 5: Watch Me Thrive!, a coordinated federal effort to encourage healthy child development, universal developmental and behavioral screening for children, and support for the families and providers who care for them.

https://ccids.umaine.edu/resources/ec-growingideas/inclusionres/

This site is from the University of Maine, Center for Community Inclusion and Disability Studies. The page on Inclusive Early Childhood Education – Selected Resources includes numerous resources, articles, books, and tools on inclusion for families and professionals.

http://www.practicalautismresources.com/printables

This site contains a list of over 100 pages of free printable items, as well as games and activities, designed for creating tasks including associations, task boxes, vocabulary, picture cards, math materials, blank templates, behavioral supports, and data forms.

http://www.supportforfamilies.org

This site offers general information on inclusion, tips, and links to other resources.

https://www.pacer.org/ec/

This site, PACER's Early Childhood Family Information and Resources Project, gives parents of children ages birth through 5 years tools to help their children obtain education, health care, and other services.

https://www.fmptic.org/resources/early-intervention-early-childhood

This site is Family Matters Parent Training & Information Center Early Intervention/Early Childhood, which contains resources for parents, including a library of articles and videos.

https://ectacenter.org/topics/inclusion/

This site is part of the Early Childhood Technical Assistance Center. The Inclusion page contains indicators of high-quality inclusion, federal requirements, research and studies on inclusion, and tools on inclusion for early childhood programs.

Books for Children on Disability-Related Topics:

https://www.notimeforflashcards.com/2018/03/picture-books-promote-diversity-inclusion.html This site is part of No Time for Flashcards. The Picture Books that Promote Diversity and Inclusion list focuses on building community through inclusion and the strength that comes from a diverse community.

https://chipublib.bibliocommons.com/list/share/72113334/75171110

This site is part of the Chicago Public Library. This topic guide, Children's Picture Books About Disabilities, contains a list of positive books about disability or that feature characters with disabilities.

https://iris.peabody.vanderbilt.edu/resources/books/

This site is part of the IRIS Center at Vanderbilt University. The page of Children's Books: Portrayals of People with Disabilities contains information and synopses of children's and young adult literature about or having to do with people with disabilities.

APPENDIX FOUR

Dual Language Learners in Alabama's Early Learning Programs

(adapted from Minnesota Practice Brief #3, Dual Language Learners)

Introduction

The term dual language learners (DLL) refers to children, age birth to five, who are learning two or more languages at the same time or learning a second language while continuing to develop their first language. Children who are DLLs come from homes where a language other than English is spoken. For some, both a language other than English and English may be spoken at home. (U.S. Department of Health and Human Services and U.S. Department of Education, 2016)

DLLs may master two or more languages in different ways. Some may begin learning them at the same time or simultaneously, right from the beginning – at birth. Others may learn them sequentially, learning their home language first and adding English as they begin to participate in schools or early learning programs. The timing and exposure and opportunity to use both languages impacts the rate of development. Also important to DLLs' language mastery are community attitudes towards their learning and use of multiple languages, as well as each child's own personality, motivation, and ability. (*WIDA*, 2014)

Children exposed to two languages early in life develop two separate, but inter-related language systems. Learning more than one language at the same time does not confuse young children; rather, the human brain is capable of learning multiple languages at very young ages. In fact, this learning is often easiest at young ages, under the right conditions. (Espinosa, 2013)

We know that language learning occurs through relationships and is a primary task in young children's development. As infants interact with their family members and primary caregivers, they hear the sounds of the language that surrounds them. In addition to sounds, children learn vocabulary and meaning from daily interactions that are concrete and related to their experiences. For example, the word "apple" conveys the concept of a round fruit that may be red, yellow, or green; that is ready to eat in the fall; that can be eaten raw or cooked, etc. Just one word carries a great deal of meaning.

"During the first five years of life, children's brains develop rapidly, highly influenced by the experiences they share with the adults and peers in their lives. Exposure to language is a unique experience because it is continuous and constant. Children are surrounded by language during many of their waking hours. Constant exposure makes language highly consequential for brain development and learning." (U.S. Department of Health and Human Services and U.S. Department of Education 2016)

The capability for infants to learn multiple languages is now well-recognized in the field of neuroscience. Through exposure to the home language, children's language learning narrows and becomes focused on the interactions with their loved ones. Beginning as early as nine months of age, the brain starts to do away with language synapses that are no longer necessary for understanding the child's home language (Kluger 2013). Throughout their early years, children's ability to learn multiple languages is more acute than in the adult years as this pruning continues. Therefore, it is important for families and early childhood professionals to make the most of these remarkable capabilities and consider the benefits of learning multiple languages.

"The weight of current research indicates that becoming proficient in two languages is both possible for and beneficial to young children. Reports also show that a strong home- language base makes it easier to learn English, and that young children can learn two languages as naturally as learning one. (August & Shanahan 2006; Genesee 2010; Castro, Ayankoya, & Kasprzak 2011; Magruder, et al 2013)

"There is a scientific consensus that children have the capacity to learn two languages from birth and that this early dual language exposure does not confuse children or delay development in either language. In fact, dual language learning provides children with many cognitive and linguistic benefits. DLL children should be provided with high quality language experiences and support to master both of their languages." (Sandhofer & Uchikoshi, 2013).

The growing number of children who speak two or more languages often presents challenges in a society that is primarily English-speaking. As professionals in early childhood programs and educational systems implement use Alabama's Standards for Early Learning and Development and work toward high quality services to improve child outcomes, they must consider strategies for using the ASELDs effectively with all children including dual language learners.

The number of DLLs in early care and education programs and public schools in the United States has continued to rise during the past 20 years, with some states experiencing over a 200% rate of growth. (Espinosa, 2013)

The US Census Bureau projects that by the 2030s, children whose home language is other than English will increase from roughly 22 percent to 40 percent of the school-age population. The numbers are growing even more rapidly for the preschool years due to increasing immigration and birth rates (Center for Public Education 2012). (Magruder, Hayslip, Espinosa, and Matera 2013)

Stages of Dual Language Learners' Development

Preschoolers who learn English as a second language after they have begun learning a home language will typically progress through several stages (Tabors, 2008). The variability of how and when these stages happen can be even greater for DLLs than for children learning a single language, depending on how well-developed their first language may be and how well their first language transfers to their second. (Sandhoffer & Uchikoshi, 2013)

Children's second-language learning can be dependent on the similarity of the two languages, and the child's exposure to the second language. Their exposure to their home language also impacts learning since they are dependent on this information to build new knowledge. While it may take longer to learn some aspects of language that differ between the two of them, those differences are typically normal and do not indicate a delay or disorder. (Espinosa, 2013)

- In stage one, children keep using their home language at school but may begin to say less or even stop talking if the school environment does not support it.
- In stage two, children observe interactions and develop receptive language, but may not yet be willing to express the language they have learned. At stage two, a child may go right to his seat at the table when he hears the teacher announce lunch time, but is not ready to reply when asked what kind of sandwich he wants.
- In stage three, children understand the rhythms and intonations of English and begin to use some key phrases. You may hear "telegraphic speech" for example, "Up!" can mean "Look up at the bird!" while "Up?" can mean "Will you reach up and get me that toy?" Children also employ "formulaic speech" using memorized phrases that serve a function when a gesture or word is added. For example, "I want ____" plus pointing might mean "I want an apple."
- In stage four, children have informal fluency in the new language, including the ability to speak in full sentences and hold conversations. Even when they have progressed to the fourth stage, young DLLs still think and understand many things in their first language and will continue to need support and experiences in that language while continuing to develop their English. (Nemeth, 2016)

Alabama's Standards for Early Learning and Development support professionals' identification of children's

language development stages and the design of strategies to support their learning.

Benefits of Multilingualism

Children who understand and speak multiple languages experience unique benefits and advantages. In fact, new studies show that a "multilingual brain is nimbler, quicker, better able to deal with ambiguities, resolve conflicts and even resist Alzheimer's disease and other forms of dementia longer." (Kluger 2013)

Researchers have found differences in brain structure and development between bilingual children and their monolingual peers. Individuals who have continuous, high-quality exposure to more



than one language from a young age have greater grey matter density and more efficient synaptic connectivity in regions of the brain associated with language processing, as well as memory, attention and other executive functions. The extent of these differences, some studies have found, is greatest among individuals who were exposed to two languages before the age of five, and is dependent on how proficient the individual is in his or her second language, and at what age exposure to a second language began. (U.S. Department of Health and Human Services and U.S. Department of Education, 2016)

The Center on the Developing Child at Harvard University reminds us that executive function and self-regulation skills are those mental processes that enable us to plan, focus attention, remember instructions, and juggle multiple tasks successfully. Dual language learners use executive function to figure out the differences and similarities in words they hear in all languages they are exposed to. They are able to switch between languages, ignore irrelevant information, and transfer knowledge.

Dual language learners demonstrate cognitive flexibility or are better able to task switch, inhibit impulses, and solve problems.

Dual language learners, compared to their non-bilingual peers, have been found to have an easier time understanding math concepts and solving word problems; developing strong thinking skills; using logic; focusing, remembering and making decisions; thinking about language; and learning other languages. They demonstrate cognitive flexibility or are better able to task switch, inhibit impulses and solve problems.

Children's social emotional skill-building or their developing identity is also positive impacted as they become bilingual. DLLs show stronger ties to their family, culture and community. They are able to make new friends and establish strong relationships. (*Zelasko and Antunez, 2000*). And, recent research has also found that children raised in bilingual households show better self-control (*Kovics and Mehler, 2009*), which is a key indicator of school success.

The benefits for dual language learners continue into adulthood. "One-half to two-thirds of adults around the world speak at least two languages. In today's global society, they have many advantages. Globally, bilingual and biliterate adults have more job opportunities than monolingual adults. Bilingual and biliterate individuals have the opportunity to participate in the global community in more ways, get information from more places, and learn more about people from other cultures." (*Too Small to Fail*)

With so many benefits identified, it is clear that young children who are dual language learners have many strengths. Yet, historically, their academic achievement has lagged behind native English-speakers (Magruder, et al 2013). It is essential that early childhood professionals build on the many strengths identified and engage in thoughtful and intentional practices that address the needs of DLLs in all varieties of programs and services for children and families.

Addressing Gaps in Dual Language Learners' Achievement

Research tells us that children who are dual language learners enter kindergarten behind their peers in language, literacy and math, and these disparities grow as children progress through their school years. This is particularly true for children from lower incomes. This may be a result of early childhood systems lack of preparedness and failure to recognize children's cultures and languages as assets.

"Unless teachers and families make an effort to support both the home language and English, young DLLs can easily lose the ability to speak and understand their home language, or lose the balance between the two languages (*Puig 2010; Castro, Ayankoya, & Kasprzak 2011*).

If young children lose the language of their home, they will never experience the many advantages of becoming fully bilingual. They might find communicating with elder family members difficult and feel less connected to their family traditions and heritage. This disconnect can lead to emotional and self-esteem concerns as DLLs approach adolescence. (*Wong Fillmore, 19 1991*), (*Magruder, et al 2013*)

These gaps can be impacted when professionals provide early childhood programs and services for children and families that attend to the social and cultural context in which children are being raised and recognize and celebrate the diversity of families, languages, and cultures in their programs and communities.

Recent policy statements and recommendations emphasize the importance of honoring children's diversity. The Division for Early Childhood tells us: "For optimal development and learning of all children, individuals who work with children must respect, value, and support the culture, values, beliefs, and languages of each home and promote the meaningful, relevant, and active participation of families." (Division for Early Childhood 2010)

The U.S. Departments of Health and Human Services and Education states: Early childhood programs should be prepared to optimize the early experiences of these young children by holding high expectations, capitalizing on their strengths- including cultural and linguistic strengths - and providing them with the individualized developmental and learning supports necessary to succeed in school." (DHHS and DOE 2016)

WIDA, an organization that provides language development resources to those who support the academic success of multilingual learners has developed Early English Language (E-ELD) and Early Spanish Language (E-SLD) Development Standards to provide guidance to early childhood professionals. The key message is that children who are dual language learners need listening, speaking, and meaning-making skills (e.g. gestures and facial expressions) to make sense of and to contribute to the world of the classroom, home, and community. (See Standards for Dual Language Learners in ASELD's Language and Literacy domain.)

Establishing a Classroom Language Model

Early childhood programs have opportunities to work with children and families at the time in children's lives when language development in multiple languages has its most potential. Recommendations focus on a strength-based approach that recognizes the many benefits of bi- and multilingualism for children. Administrators and teachers and providers can identify a "language plan" for their program. (Passe 2013). They can approach language learning with children who are dual language learners by identifying and implementing a Classroom Language Model (CLM). (DHHS and DOE 2016).

"Taken together, research on language use in early childhood programs, and on the aforementioned benefits of supporting home language development, including fostering bilingualism, maintaining cultural connections and communication with family members, and the transferability of home language skills to English language acquisition, suggests that systematic and deliberate exposure to English, paired with supporting home language development within high quality early childhood settings, can result in strong, positive outcomes for children who are DLLs, as well as positive outcomes for native English speakers. (DHHS and DOE 2016, 12)"

There are different classroom language models (CLM) that can be adopted to ensure children's exposure and use of language are intentionally planned and implemented. These plans will identify strategies that promote children's optimal language and literacy development. Early childhood programs should carefully choose their CLM, based on the composition of the home language/s of the children in their program and their learning needs, and the language proficiencies of their lead teachers and providers, informed by input from families.

While four models are identified, the first three have the greatest impact for young dual language learners. And benefits are seen, for not only dual language learners, but for monolingual English-speaking children as well.

- Dual immersion. This approach provides instruction in both English and a second language at alternating times of the day, on alternating days, or on alternating weeks.
- Home language instruction with English support. Under this model, instruction is primarily
 provided in children's home language, but there is support for English language
 acquisition, through intentional exposure to English, the availability of learning materials in
 English, and the display of English words. This approach can be appropriate for infants
 and toddlers who are DLLs.
- English language instruction with home language support. In this approach, instruction is primarily provided in English, but there is support for the home language through intentional exposure to- and some instruction in- the home language, the availability of learning materials in the home language, and the display of multicultural pictures and words in the home language. This approach can be appropriate for preschool children who are DLLs whether or not the program also serves monolingual-English-speaking children.

Use of English-only. In this model, instruction and all activities are carried out in English
only, without home language or cultural support. Not supporting development of the
home language means that DLLs who speak that language are less likely to receive
the benefits discussed above, including developing bilingualism, maintaining cultural
connections and communication with family members, and the transferability of home
language skills.

Supporting Dual Language Learners

Unless you believe "in your bones" that having a second language in addition to English is a gift, and not a disadvantage, and diversity is a resource, not a problem to be solved, you are likely to respond to DLL children in ways that discourage the continued use of their home language—especially if you are not fluent in the child's home language. (Espinosa and Magruder, 2015)

Minnesota's Practice Brief for Dual Language Learners identifies six primary strategies for supporting Dual Language Learners in their programs that build on children's strengths and scaffold opportunities to support the development of each child towards their full potential.

- 1. Celebrate the cultural and linguistic diversity of children and their families.
- 2. Support children's fluency in their home language or honoring home languages if staff are not proficient in that language.
- 3. Use best practices to teach English.
- 4. Establish a culturally responsive learning environment across domains.
- **5.** Support children's language development through play (in English and in-home languages).
- 6. Talk, read, and sing together every day in English and in-home languages.

1. Celebrating Cultural and Linguistic Diversity

Developmentally appropriate practices include addressing the social and cultural context in which a child is being raised. This context is a complex whole of language, knowledge, beliefs, art, morals, laws, customs, and ways of living. When early childhood educators are intentional in creating a climate that celebrates cultural and linguistic diversity, they establish strong partnerships with families built on trust and acceptance.

"Early childhood leaders should intentionally promote a climate and values that are respectful of each and every child and their family, welcoming and inclusive to all, and assumes that every child has strengths that can be built on to help them meet their potential. Leaders should communicate that bilingualism is an asset, not only for DLLs, but for all children. Learning two or more languages is not a risk factor; it is a strength

that should be fostered. Families, regardless of their English proficiency, should be seen as capable partners in promoting children's learning and development and should be provided language assistance services to ensure they can act as the most important advocates in their children's educational experience. ((In some cases, language assistance services may be required to be provided.) The program should not only demonstrate respect for peoples of all cultures; it should embrace and celebrate their diversity. "(DHHS and DOE 2016, 20-21)

Alabama's professionals are encouraged to adopt the ASELDs in conjunction with curriculum and assessment in their programs. They must recognize the appropriateness of the developmental expectations in the standards for all children, while also taking into consideration the social, cultural, and linguistic context in which the children in their program are being raised. They communicate with families in a reciprocal, two-way manner so that their knowledge of family values, beliefs, and child-rearing practices helps them to consider the ways children are demonstrating their accomplishment of specific indicators of progress. They view the ASELDs through the lenses of the cultures of the families in their program community.

2. Supporting Children's Fluency in Their Home Language and Honoring Home Languages

It is important that professionals support and honor children's continued use of their home languages and recognize their developmental capabilities and accomplishments in the languages of their families rather than in English alone. Research has found that dual language learners who receive instruction in their home language make greater gains than those who received little or no home-language support. In one study of Spanish speakers across 11 states, results found that DLLs showed greater gains in math and reading when they received instruction in their home language.

Children whose home language is supported within their early learning program are more likely to develop a strong cultural identity and feel more confident in communicating with family members.

"DLLs come to early childhood programs with richly varied backgrounds, sets of skills, and cultural ways of knowing: they need teachers who welcome them and recognize their unique abilities, what they know, and what they need to learn. Teachers of young DLLs understand that children communicate their knowledge using the safest method possible, and this may mean the use of their home language, English, or a mixture of both." (Magruder, et al 2013)

Monolingual English educators have the responsibility to honor the children's home languages, even if they do not know those languages. They can make use of language specialists, family members, and volunteers to assist them in learning key words and phrases, finding resources in various languages to bring into the classroom, and interacting with the children in their home languages.

3. Using Best Practices to Teach English

English is the dominant language in the United States and Alabama. There is agreement that all young children need exposure and instruction to learn English. There are multiple ways to approach teaching English and more and more research to guide Englishlanguage learning experiences for children whose home language is not English.

"Multiple bodies of literature – including developmental and cognitive psychology, education research, and neuroscience – point to the benefits of supporting the home language of young children who are DLLs, alongside their English language development, in early childhood settings." (DHHS and DOE 2016)

4. Establish a Culturally Responsive Learning Environment

To be culturally and linguistically responsive, the learning environment needs to reflect the children and families in the early childhood program. Professionals intentionally plan for an environment that is organized into established learning areas appropriate for the age and developmental capabilities of the children in the program. They consider materials and experiences that will encourage interaction among children and adults so that oral language is nurtured and supported. They offer materials in multiple languages so that they are reflecting children's home languages as well as English. Print-rich environments include labeling of shelves and areas and providing books and posters in multiple languages.

Here are additional recommendations for establishing a culturally responsive learning environment for DLLs:

- I. Find out what languages will be spoken by children in your class and focus your classroom setup on what will most effectively support children who speak those languages.
- 2. Stock bookshelves with bilingual and monolingual books in each of the languages needed. Look for storybooks and nonfiction books that come with CDs or books available as apps with sound to help you learn to pronounce words in each child's language. Wordless books are also great for multilingual classes.
- 3. Ask families to send in photos of things that are meaningful to each child, such as foods, celebrations, and family activities. Ask them to help you label the images with words in both English and the home language to give you lots to talk about with the children. Use the pictures to make personalized posters, displays, and class books that children can relate to.
- **4.** Add labels that reflect the represented languages. Ask families or volunteers to help with the proper and the phonetic spelling. Labels don't build language and literacy unless you and the children really use them.
- **5.** Play music from different countries and in different languages. Ask families to send in their favorites to build that home-school connection.

- 6. Learn to say 10 to 20 key words in each child's home language to help them feel welcome, safe, and comfortable starting from their first day. Use an online translation app like Google Translate or ask parents to record words for you to learn. Try hello, my name is, eat, drink, hurt, bathroom, your parents will be here soon, wash your hands, help, yes, and no to start.
- 7. Make a picture communication board to help all children communicate their needs and feelings. Post photos of the children looking sad and happy, helping each other, cleaning up toys, going outside, solving a conflict, and participating in daily routines. (Nemeth 2016, 5)

5. Supporting Children's Language Development through Play

The most effective curricular approaches in early childhood are based on young children as active learners emphasizing play, exploration, and constructive learning more so than didactic, teacher- led, passive learning experiences. The Alabama Standards for Early Learning and Development emphasize play, exploration, and active learning for children from birth through kindergarten entry.

Play provides multiple opportunities for professionals to address children's language development. Books, toys, art, science, building materials, and dramatic play props can generate rich language interactions that reinforce vocabulary, concepts and language usage in all areas of the classroom. Adults interact with children as they play, narrating what they are doing, asking questions, and engaging children in non-verbal and verbal conversations. If early educators speak the children's language, they can have a conversation in that language. If they do not speak the child's language, early educators must use clear and precise English, with the addition of demonstrations, gestures, and facial expressions.

Play facilitation can be conducted in a child's home language or in English. Professionals can pair children in ways to encourage cross-language communication. Early educators must be aware of the amount of talking that children do. Classrooms with dual language learners tend to be quieter than classrooms with monolingual speakers, as children have less language to use with each other. Professionals do not want to miss the great meaning play has for children and the rich possibilities for both receptive and expressive language development it provides.

6. Talk, Read and Sing Together Every Day

One of the most common recommendations to support dual language learners involves talking, reading, and singing together every day with children as they learn both English and their home languages.

"The more interesting and interactive the conversations are that children take part in, the more language they learn. Reading books, singing, playing word games, and simply talking to and with children builds their vocabulary while providing increased opportunities to develop listening skills. Children learn by engaging in daily interactions and experiences with peers and skilled adults." (Magruder, et al 2013)

Daily conversations, exposure to books, and engagement in songs and chants are common happenings in early childhood programs. When professionals plan intentionally to engage with children in these ways, they are supporting the language development of all children. Conversations within the context of a warm and caring relationship provide a safe place in which to take risks with self- expression. Dual language learners may attempt to interact with a trusted professional in their second language because they know they will be supported. They feel confident to interact in the new language when adults encourage them in a calm and matter of fact manner. That happens best at play or reading time, one-on-one and in small groups.

Professionals recognize that learning language is important and are intentional in supporting such learning. They know that exposure to books in many languages builds on children's enjoyment of stories and connections to print and the sounds of languages. And that songs and chants provide opportunities for repetition, vocabulary, rhythm, and word play. In addition, for preschoolers, they plan for opportunities to support their emergent writing skills in multiple languages.

Partnering with Families

Alabama's Standards for Early Learning and Development stress the importance of family engagement in early childhood programs. Partnering with the families of dual language learners is an essential step in supporting their development. Professionals should:

- Create a respectful, welcoming, and inclusive climate.
- Perceive dual language learning as a strength and benefit.
- Learn about children's language backgrounds and families' preferred language for ongoing communication with the program.
- · Engage with families in establishing a culturally responsive learning environment.
- Inform families of how the ECIPs are used with dual language learners and with all children.
- Emphasize the importance of oral language as the foundation for literacy.
- Support families as children transition between programs and systems.
- Reassure families that their children will learn English to be successful in school.

Policies and procedures in early childhood programs should include attention to the needs of dual language learners and their families and provide information to families about the benefits of bilingualism, the importance of home language development, and families' central role in home language development and tips on providing a high-quality language environment in the home language, at home and in the community. (DHHS and DOE 2016)

Conclusion

Children who are dual language learners are attending early childhood programs in growing numbers. The benefits of bi- and multilingualism for both children and adults are well-documented. The Alabama Standards for Early Learning and Development are designed to support high quality services to improve child outcomes. Early childhood professionals must take steps to use the ASELDs effectively with ALL children including children who are dual language learners.

"....Everyone brings valuable resources to the education community. Children and youth who are linguistically and culturally diverse, in particular, bring a unique set of assets that have the potential to enrich the experiences of all learners and educators. Educators can draw on these assets for the benefit of both the learners themselves and for everyone in the community. By focusing on what language learners can do, we send a powerful message that children and youth from diverse linguistic and cultural backgrounds contribute to the vibrancy of our early childhood programs and K–12 schools." (WIDA)

For additional resources to support children who are Dual Language Learners, view the Family and Community Engagement domain of the ASELDs as well as each of the Adaptations and Accommodations pages for each domain.

Resources

Baker, Megina and Mariela Piez. 2018. The Language of the Classroom: Dual Language Learners in Head Start, Public Pre-K, and Private Preschool Programs. Washington, DC: Migration Policy Institute. Retrieved from: https://www.migrationpolicy.org/research/ https://www.migra

Castro, D. C., Paez, M. M., Dickinson, D. K. & Frede, E. (2011). Promoting language and literacy in young dual language learners: Research, practice, and policy. Child Development Perspectives, 5(1), 15-21.

Connecticut Office of Early Childhood. 2017. Supporting All Children Using the Connecticut Early Learning and Development Standards: Dual Language Learners. Retrieved from https://www.ct.gov/oec/lib/oec/DualLanguageLearnersFinalMar17 2016.pdf

The Division for Early Childhood (DEC). 2010. Position Statement: Responsiveness to ALL Children, Families, and Professionals: Integrating Cultural and Linguistic Diversity into Policy and Practice. Missoula, MT: Division for Early Childhood.

Espinosa and Magruder. 2015. "Practical and Proven Strategies for Teaching Young Dual Language Learners," in *Getting It Right for Young Children from Diverse Backgrounds: Applying Research to Improve Practice with a Focus on Dual Language Learners*, ed. Retrieved from https://www.earlychildhoodwebinars.com/wp-content/uploads/2016/01/Chapter-4 Practical-and-Proven-Strategies-for-Teaching-Young-Dual-Language-Learners.pdf

Espinosa, Linda. 2018. Encouraging the Development and Achievement of Dual Language Learners in Early Childhood. Retrieved from https://www.aft.org/ae/fall2018/espinosa.

Kluger, Jeffrey. 2013. "How the Brain Benefits From Being Bilingual." *Retrieved from* http://science.time.com/2013/07/18/ how-the-brain-benefits-from-being-bilingual/

Magruder, Elizabeth S. Whitcomb W. Hayslip, Linda M. Espinosa, and Carola Matera. 2013. "Many Languages, One Teacher: Supporting Language and Literacy Development for Dual Language Learners." Young Children 68 (1): 8-15. Washington, D.C.: NAEYC.

Nemeth, Karen. 2016. "Welcoming Dual Language Learners." Teaching Young Children 9 (5): 5. Washington, D.C.: NAEYC.

Nemeth, Karen, 2016. "Dual Language Learners in the Classroom" in Extensions Curriculum Newsletter from High Scope. Volume 30, No.1. *Retrieved from* https://highscope.org/wp-content/uploads/2018/08/170.pdf

Passe, Angèle Sancho. 2013. Dual Language Learners, Birth to Grade 3- Stategies for Teaching English. Saint Paul, MN: Redleaf Press.

Too Small to Fail. Talk, Read and Sing Together Every Day! The Benefits of Being Bilingual – A Review for Teachers and Other Early Education Program Providers. *Retrieved from* http://toosmall.org/community/body/Benefits-of-Being-Bilingual.pdf

U.S. Department of Health and Human Services and U.S. Department of Education. 2016. Policy Statement on Supporting the Development of Children Who Are Dual Language Learners in Early Childhood Programs. *Retrieved from* https://www.acf.hhs.gov/sites/ default/files/ecd/dll_policy_statement_final.pdf

WIDA. Focus on the Early Years, Dual Language Learners. *Retrieved from* https://wida.wisc.edu/sites/default/files/resource/FocusOn-EY-Dual-Language-Learners.pdf

APPENDIX FIVE

Physical Activity: Good Health through Movement

Introduction

Research shows that there is a relationship between cognitive (or learning) readiness and physical skill mastery. As children demonstrate balance, coordination, and strength, they are showing that they have the necessary skills to do things such as sit still and pay attention, balance in a chair, hold a pencil, track their eyes on a line – all necessary skills for learning. Children initially develop these skills through the typical sequence of skill mastery and then further develop them through play. The Center for Disease Control (CDC) tells us that "regular physical activity can help children and adolescents improve cardiorespiratory fitness, build strong bones and muscles, control weight, reduce symptoms of anxiety and depression, and reduce the risk of development health conditions such as heart disease."

How Much Physical Activity is Enough?

Shape America, or the Society of Health and Physical Education, has produced a set of guidelines for young children in its document Active Start: A Statement of Physical Activity Guidelines for Children, Birth to Age 5, 2nd edition. It specifies the amount and type of activity children should experience. Similar guidance is provided by Nemours Healthy Start, Standard 3.1.3 (Physical Activity and Screen Time) in Caring for Our Children, and the American Heart Association.



Guidelines for Infants

- Guideline 1 Infants should interact with caregivers in daily physical activities that are dedicated to exploring movement and the environment.
- Guideline 2 Caregivers should place infants in settings that encourage and stimulate movement experiences and active play for short periods of time several times a day.
- Guideline 3 Infants' physical activity should promote skill development in movement.
- Guideline 4 Infants should be placed in an environment that meets or exceeds recommended safety standards for performing large-muscle activities.
- Guideline 5 Those in charge of infants' well-being are responsible for understanding the importance of physical activity and should promote movement skills by providing opportunities for structured and unstructured physical activity.



Guidelines for Toddlers

- Guideline 1 Toddlers should engage in a total of at least 30 minutes of structured physical activity each day.
- Guideline 2 Toddlers should engage in at least 60 minutes -- and up to several hours -- per day of unstructured physical activity and should not be sedentary for more than 60 minutes at a time, except when sleeping.
- **Guideline 3** Toddlers should be given ample opportunities to develop movement skills that will serve as the building blocks for future motor skillfulness and physical activity.
- Guideline 4 Toddlers should have access to indoor and outdoor areas that meet or exceed recommended safety standards for performing large-muscle activities.
- Guideline 5 Those in charge of toddlers' well-being are responsible for understanding the importance of physical activity and promoting movement skills by providing opportunities for structured and unstructured physical activity and movement experiences.



Guidelines for Preschoolers

- Guideline 1 Preschoolers should accumulate at least 60 minutes of structured physical activity each day.
- Guideline 2 Preschoolers should engage in at least 60 minutes -- and up to several hours -- of unstructured physical activity each day, and should not be sedentary for more than 60 minutes at a time, except when sleeping.
- Guideline 3 Preschoolers should be encouraged to develop competence in fundamental motor skills that will serve as the building blocks for future motor skillfulness and physical activity.
- Guideline 4 Preschoolers should have access to indoor and outdoor areas that meet or exceed recommended safety standards for performing large-muscle activities.
- Guideline 5 Caregivers and parents in charge of preschoolers' health and well-being are responsible for understanding the importance of physical activity and for promoting movement skills by providing opportunities for structured and unstructured physical activity.

Daily Play Recommendations

MINIMUM TIME FOR				
	Teacher-led Play	Unstructured Play	Outdoor Play	Additional Recommendations
Infants	Build up to 30 minutes		2-3 times	Limit time to be in pre-made equipment
Toddlers	30 minutes	60 minutes	60-90 minutes	Limit inactivity to no more than one hour at a time except when sleeping
Preschoolers	60 minutes	120 minutes	60-90 minutes	Include light, moderate, and vigorous play

Physical Activity for Infants

It's never too early to encourage children's exercise for good health. Infants need opportunities for physical activity to develop their muscles, their bones and to practice their gross and fine motor skills. Babies' earliest movements and exploration help them make those brain connections that develop into healthy behaviors as they grow older, protect against obesity and support better sleep habits. Infants need opportunities to explore, move their bodies, and to experience the results of movement and action. Infants' physical activity begins with tummy time. When babies are laid on their tummies, they are acquiring the brain connections that link to motor development. They can use their limbs to reach, push, pull, kick, and twist. They strengthen their neck muscles and ready themselves for crawling and walking. Very young babies should be given 3-5 minutes of tummy time at a time, building up to about 30 minutes.

Infants' routines offer opportunities for physical activity. Professionals can move babies' legs and arms as they are change diapers and get them dressed. They can wiggle fingers and toes as they sing movement songs like "This Little Piggy". Self-feeding, as well as toys that children can shake, bang, stack, or grasp build eye-hand coordination.

Infants' movement must be supervised and should not be restricted. As babies begin to roll, sit, crawl, and walk, they need plenty of space and opportunities to safely practice those skills. Infant equipment such as swings, bouncy seats or molded seats should be limited and used for short periods.

Physical Activity for Toddlers

Toddlers need opportunities to stay healthy and develop motor skills through physical activity. Just like infants, they are building those important brain connections that link physical activity with skills. Toddlers need experiences that help them associate the joy of physical activity and movement with good attitudes and habits. They need to learn the skills that later make exercise easier and enjoyable.

Active play materials and equipment should assist toddlers' use and practice of basic movements. For example, delays in climbing mastery may occur if children aren't given opportunities to climb steps or eye-hand coordination may lag if they don't have access to balls to roll, throw and catch.

Toddlers' vigorous play typically occurs in short spurts that last for about 5-10 minutes, and then are followed by quieter activities. Professionals should provide both structured and unstructured play experiences that consider toddlers' short attention spans. Examples of structured play include dancing to music or a parade. Unstructured play allows children to move about freely and can include climbing or riding toys, running or walking.

Toddlers enjoy walking, jumping, running, marching and moving to music. They like riding toys and using toys that move like cars or trucks. Provide obstacle courses or opportunities to climb over, crawl through or climb over build muscles; and encourage their fun with rolling or throwing balls.

Physical Activity for Preschoolers

The U.S. Department for Health and Human Services recommends that pre-school children aged 3-5 should be physically active throughout the day with a minimum of three hours of a combination of light, moderate, and vigorous activity (2018). While the goal of three hours may seem daunting, physical activity can be integrated during the daily schedule and be used to support children's learning. Purposefully-designed physical activity can be used for transitions, and active play time like blocks or dress-up, and moving to music count toward the three hour goal.

Research also shows that when professionals design structured physical activities or games, children's physical activity levels are greater. Professionals should consider ways to design short, structured activities such as relay races or parachute play to promote physical activity.

The National Association for Sport and Physical Education describe three elements of exercise: endurance, strength, and flexibility. Aerobic activities such as running or hopping where children are active for periods of time, increase the heart rate, develop endurance. Climbing activities or exercise develop strength; and activities like stretching or bending that improve children's range of motion help to develop children's flexibility.

Preschoolers like to hop, skip, and jump. They enjoy balancing, catching, and kicking balls, and practicing gymnastic skills like tumbling. Preschoolers have fun with bikeriding, dancing, or using playground equipment.

Integrate Physical Activity throughout the Day

Early childhood professionals can incorporate physical activity experiences throughout the day. They can intentionally build motor skill development and movement as they teach math, literacy, or social-emotional concepts or through the design of their environment.

Children can:

- Move and act out stories (language and literacy)
- Walk or move like animals (science)
- Exercise to music (creativity)
- Use rhythm sticks, scarves or clapping games (mathematics)
- Count while they hop or jump from one object to another (mathematics)
- Participate in obstacle courses where they are learning over, under, up, down, etc. (language and literacy and mathematics)
- · Dance or move with others (social)
- Act out different feelings such as stomp when mad (emotional)
- Follow directions during movement games, like stop or go, fast and slow (approaches to learning and language and literacy)
- Make the shape of letters or numbers with their bodies or hands (mathematics and language and literacy)

Transitions may be more controlled when professionals build movement into them. Children can hop to the door, crawl to the table, or dance from one activity to another. As they walk outside, they can gently tap their heads or tummies, or walk on a tape line to balance. Prepare children for quiet or listening activities with a movement exercise. Do a series of exercises before story time; play Head Shoulders Knees and Toes before preparing for lunch.

Outdoor Play Leads to Good Health

Outdoor play must is a vital part of children's daily experiences. They need to breathe the fresh air, release pent-up energy, and engage in the exploratory, active play that being outside promotes. The Harvard School of Medicine, in their Health Publishing Blog describes 6 Reasons Children Need to Play Outside and how they support children's good health. They tell us outside play provides: 1) sunshine; 2)exercise; 3) executive functioning (unstructured time to make up games and rules, to explore on their own and figure things out; 4)risk-taking; 5)socialization; and 6) appreciation of nature.

Head Start, in Going Outside Improves Health, lists numerous benefits from outdoor play.

Outdoor time:

- · strengthens the heart and muscles
- strengthens children's immune systems
- reduces the number of viruses they may acquire and it provides access to vitamin D that improves bones and teeth.
- Positively impacts children's sleep patterns
- Reduces the likelihood of near-sightedness
- Produces milder symptoms of ADHD
- Helps develop a general sense of well-being
- Exposes children to a specific type of bacteria in dirt that may reduce anxiety and improve the ability to learn new tasks

Infants and Outdoor Play

There are wonderful experiences for infants outside! Through their senses, they can explore nature, enjoying its smells, sights, and sounds. Babies can enjoy the touch of tree bark, the smell of flowers, or the sounds of birds as they tweet from trees. Infants can be laid on their bellies on a blanket or a safe area of grass to watch others' actions or to feel the grass through their fingers. They can also practice pushing-up, crawling, climbing or early toddling in the grass or on outside surfaces.

Toddlers and Outdoor Play

Toddlers learn about their bodies when they play on outdoor equipment. As they climb up the ladder of a slide or crawl through a tunnel on a climbing structure, they are learning about taking risks, developing confidence and understanding about their body in space.

Toddlers love to dig; sandboxes or dirt piles present exciting

opportunities for learning.

Preschoolers and Outdoor Play

Outdoor play for preschoolers offers children opportunities to master skills like running, hopping and jumping and skipping. They can practice climbing, learn how to pedal riding toys, and use soil, sand and water to learn concepts. Nature walks expose them to the environment, building stronger attitudes and behaviors about nature and its need for protection. Preschoolers continue to develop the confidence and information about their own bodies in space and relish experiences that encourage independent exploration as well as social play with others.



APPENDIX SIX

Technology in Early Learning Programs

"A computer can help you learn to spell H-U-G, but it can never know the risk or the joy of actually giving or receiving one."

FRED ROGERS

Technology and interactive media are a part of young children's lives. They have access to digital books, games and videos, tablets and laptops, online chats and downloadable apps. The challenge is to determine how much exposure is appropriate, what types of technology are best, and what content should be viewed or used. Fred Rogers told us, "No matter how helpful computers are as tools in the classroom (and of course, they can be very helpful tools), they don't begin to compare in significance to the relationship between the teacher and the child that is human and mutual." It is those relationships that must guide adults' decision-making around technology use for young children.

Technology and interactive media play many roles in early childhood programs, for programs, professionals, and children.



Programs use interactive media to promote their program and to communicate with families. Social media has enabled programs to keep families informed. Program staff can send newsletters by email, post policies and upcoming events, provide links to child-friendly websites and postings, and share information about community events.

Professionals who work directly with children use technology and interactive media as learning devices and to document and share children's experiences. They can take photos or videos of children's work for documentation and assessment. They can send daily updates or photos to families; use whiteboards, laptops or other videos to help children learn a concept; and they can use adaptive technology for children with special needs.

Children watch TV, use smart, tablets or laptops to play games, watch videos, or learn new information. They use video chats to communicate with others and enhance fine motor skills through the use of a mouse or cursor.

The prevalence of interactive technology has triggered research and policy recommendations to guide programs' and families' appropriate use for children, birth to five. The U.S. Departments of Education and Health and Human Services have written a policy brief; the Fred Rogers Center and National Association for the Education of Young Children have issued a joint position statement, and the American Academy of Pediatrics has published recommendations, all of which offer support for professionals' incorporation of technology into their programs.

Technology and Interactive Media Defined

"We define technology broadly to mean anything human-made that is used to solve a problem or fulfill a desire. Technology can be an object, a system, or a process that results in the modification of the natural world to meet human needs and wants. From our perspective, technology in the classroom, in informal learning environments, and at home includes both analog tools such as a pencil or a wooden block, and digital tools, including tablets and digital cameras, microscopes, tangible technology, and simple robotics. In the digital age, the focus has become new screen-based technologies and interactive media. However, in the context of STEM, educators need to consider all the ways they use technology as a tool for learning and the affordances of new digital tools that make it possible for a child to move from media consumer to media creator." (Chip Donahue in Early STEM Matters: Providing High-Quality STEM Experiences for All Young Learners)

Technology tools are defined by the joint position statement "Technology and Interactive Media as Tools in Early Childhood Programs Serving Children from Birth through Age 8"... encompasses a broad range of digital devices such as computers, tablets, multitouch screens, interactive whiteboards, mobile devices, cameras, DVD and music players, audio recorders, electronic toys, games, e-book readers, and older analog devices still being used such as tape recorders, VCRs, VHS tapes, record and cassette players, light tables, projectors, and microscopes. "

The position statement further defines interactive media, "... refers to digital and analog materials, including soft-ware programs, applications (apps), broadcast and streaming media, some children's television programming, e-books, the Internet, and other forms of content designed to facilitate active and creative use by young children and to encourage social engagement with other children and adults."

These technology tools and interactive media, when used with purpose and care can provide children with access to new ideas and information and new ways of learning.

Research Findings

The amount of research that has been compiled on the impact of interactive media use with young children continues to grow. The findings, to date, agree on both its positive and negative influences. Frequent use of media reduces the amount of time children spend in creative play and interacting with others. Passive use

of interactive media may negatively influence children's health by encouraging obesity and poor sleep patterns. Children may show language delays and have trouble paying attention in school. They may exhibit aggressive behavior and read less.

Frequent use of media reduces the amount of time children spend in creative play and interacting with others.

Children can benefit from the use of technology and interactive media when used appropriately. When usage is hands-on and engaging, children can extend

their learning and skill development. They can research new information, explore new kinds of materials and tools, use technology tools to problem solve, expand vocabulary development and build long-distance relationships through digital media.

Appropriate Use of Technology

Technology and media tools should not replace other materials such as writing, art or building materials, but instead be used in conjunction with them to support children's successful learning and attainment of their learning goals. Adults who use co-viewing or shared media viewing techniques can expand children's learning while staying activity engaged with them.

Lisa Guernsey, author of *Screen Time: How Electronic Media—From Baby Videos to Educational Software—Affects Your Young Child*, suggests that both families and professionals apply the "Three Cs" when selecting and using technology. Adults should ask themselves:

- Content—How does this help children learn, engage, express, imagine, or explore?
- Context—What kinds of social interactions (such as conversations with parents or peers) are happening before, during, and after the use of the technology?
 Does it complement, and not interrupt, children's learning experiences and natural play patterns?
- The individual child—What does this child need right now to enhance his or her growth and development?
 Is this technology an appropriate match with this child's needs, abilities, interests, and development stage?



Use of Technology and Interactive Media with Infants and Toddlers

Very young children learn by exploring their environment. They need opportunities to learn about their world through the use of their senses: touching, smelling, seeing or looking, hearing and tasting. Technology usage may reduce children's direct interactions with materials and people and should be limited for children under 2. In fact, it is not recommended at all for children under 15-18 months.

The American Academy of Pediatrics explains, "Children younger than 2 years need hands-on exploration and social interaction with trusted caregivers to develop their cognitive, language, motor, and social-emotional skills. Because of their immature symbolic, memory, and attentional skills, infants and toddlers cannot learn from traditional digital media as they do from interactions with caregivers and they have difficulty transferring that knowledge to their 3-dimensional experience. The chief factor that facilitates toddlers' learning from commercial media (starting around 15 months of age) is parents watching with them and reteaching the content."

In other words, appropriate use of technology and interactive media for toddlers must be combined with individualized adult engagement. It is best used in a family or home environment and is discouraged in more formal early learning programs. Professionals and families, alike, can make decisions about media use by considering the 4 Pillars of Learning: Engaging, Actively Involved, Meaningful and Social. (Zero to Three. What the Research Says about The Impact of Media on Children Aged 0-3 Years Old, p.15)

- Look for content that both actively involves children while also helping them stay focused. Features that give children control over their experience can help keep children in minds-on mode.
- Lookfor content with familiar settings, strong storylines, and characters that your child can relate to. These features focus children's engagement on the learning goal. Avoid content with many "bells and whistles" that may distract children from the educational content or from understanding the story.
- Use repetition wisely. Repetition can be useful when the content is well-chosen. Just as children like to choose the same book many times, they also enjoy viewing other media content repeatedly. When interacting with media on repeated occasions, adults can point out different aspects of the touchscreen activity or TV show. For example, if the show is focused on counting fruits, focus on naming and describing the fruits during one viewing and on counting the next time you watch. Be cautious of auto-play options on streaming services.
- Look for content that encourages social interaction. This can take many forms, like programs or apps that encourage children's interactions with people in their own home.

Zero to Three offers additional strategies for family-sharing interactive media with very young children:

- · Adults should point out and name things children are seeing on the screen
- Engage children in activity while they are using media, such as dancing to music
- Connect what children see on TV to what's happening in their lives
- Answer and ask questions about what children are seeing on the screen to help them understand
- · Avoid using media to help children fall asleep

Technology and Interactive Media for Preschoolers (Children 2 to 5 years old)

Researchers tell us, "Appropriate technology and media use balances and enhances the use of essential materials, activities, and interactions in the early childhood setting, becoming part of the daily routine. (Anderson 2000; Van Scoter, Ellis, & Railsback 2001; Copple & Bredekamp 2009; NAEYC 2009a).

Technology and media should not replace activities such as creative play, real-life exploration, physical activity, outdoor experiences, conversation, and social interactions that are important for children's development. Technology and media should be used to support learning, not an isolated activity, and to expand young children's access to new content (Guernsey 2010a, 2011b).

Furthermore, the American Academy of Pediatrics tell us, "It is important to emphasize to parents that the higher-order thinking skills and executive functions essential for school success, such as task persistence, impulse control, emotion regulation, and creative, flexible thinking, are best

Technology and media should not replace activities such as creative play, real-life exploration, physical activity, outdoor experiences, conversation, and social interactions that are important for children's development.

taught through unstructured and social (not digital) play, as well as responsive parentchild interactions."

In the Early Learning Technology Brief, (2016) writes provide four guiding principles for use of interactive technology and media.

Guiding Principle #1: Technology—when used appropriately—can be a tool for learning. Children can use technology to solve problems and role play. They can explore new information and ideas, and engage in fun learning activities.

- Guiding Principle #2: Technology should be used to increase access to learning opportunities for all children. It can introduce children to new ideas or cultures, expand access to books or research, and allow them to seek answers to questions or problems beyond familiar adults.
- Guiding Principle #3: Technology may be used to strengthen relationships among parents, families, early educators, and young children. Programs can use technology to create digital portfolios of children's work; allow families to track children's progress and enhance; and to communicate with families about their children's accomplishments and daily experiences as well as provide information about the program.
- Guiding Principle #4: Technology is more effective for learning when adults and peers interact or co-view with young children. Children benefit when adults participate in children's use of technology. Adults can watch the content alongside children, interacting as the content is offered. They can introduce children to the content or story line before viewing and they can engage children in related activities after viewing, such as singing a song or reading a book.

Technology and Interactive Technology for Children with Unique Needs

Children who have disabilities may benefit from the use of assistance technology. "Technology can be a tool to augment sensory input or reduce distractions. It can provide support for cognitive processing or enhancing memory and recall. The variety of adaptive and assistive technologies ranges from low-tech toys with simple switches to expansive high-tech systems capable of managing complex environments. When used thoughtfully, these technologies can empower young children, increasing their independence and supporting their inclusion in classes with their peers. With adapted materials, young children with disabilities can be included in activities in which they once would have been unable to participate. By using assistive technology, educators can increase the likelihood that children will have the ability to learn, move, communicate, and create." (NAEYC and Fred Rogers Center: Technology and interactive media as tools in early childhood programs serving children from birth through age 3)

Digital resources can enhance the development of both hone language and English language skills for dual language learners. Professionals can translate materials, use speech-recording or playback and families can create their own stories to add to the classroom library.

References

American Academy of Pediatrics. Growing up digital: Media research symposium. (2015). Retrieved from. https://www.aap.org/en-us/ Documents/digital_media_symposium_proceedings.pdf

American Academy of Pediatrics Council on Communications and Media. Media and Young Minds. Pediatrics. (2016).138 (5); 20162591. Retrieved from https://pediatrics.aappublications.org/content/ pediatrics/138/5/e20162591.full.pdf

Barr, Rachel; McClure Elizabeth, Parlakian, Rebecca. Screen Sense: What the Research Says About the Impact of Media on Children Aged 0-3 Years Old. (2018). Zero To Three. Retrieved from https://www.zerotothree.org/resources/2536-screen-sense-what-the-research-says-about-the-impact-of-media-on-children-aged-0-3-years-old#downloads.

Early Childhood STEM Working Group. Early STEM Matters: Providing High-Quality STEM Experiences for All Young Learners (January, 2017). *Retrieved from http://d3lwefg3pyezlb.cloudfront.net/docs/Early_STEM_Matters_FINAL.pdf.*

Epstein, Ann. Using Technology Appropriately in the Classroom. High Scope Extensions. Vol 28, No 1. Retrieved from https://ccie-media.s3.amazonaws.com/exchangefocus/001-exchangefocus.pdf.

Erikson Institute. Technology and Young Children in the Digital Age: A Report from the Erikson Institute. (2016). Retrieved *from https://www.erikson.edu/wp-content/uploads/2018/07/Erikson-Institute-Technology-and-Young-Children-Survey.pdf*.

National Association for the Education of Young Children and the Fred Rogers Center for Early Learning and Children's Media. Technology and interactive media as tools in early childhood programs serving children from birth through age 8. (January 2012). Retrieved from http://www.naeyc.org/files/naeyc/ PS_technology_WEB.pdf

Paciga, K.A., Donohue, C.D., Struble Myers, K., Fernandes, R., & Li, J. (2017). Carrying Fred Rogers' Message Forward in the Digital Age. Fred Forward Symposium Proceedings, May 14, 2017. Latrobe, PA: Fred Rogers Center for Early Learning and Children's Media at Saint Vincent College. Retrieved from https://www.fredrogerscenter.org/wp-content/uploads/2015/07/Carrying-Fred-Rogers-Message-Forward- in-the-Digital-Age-1.pdf

U.S. Department of Health and Human Services, Administration for Children and Families, Office of Head Start. Front Porch Series: Young Children's Learning with Digital Media. Washington D.C., January 23, (2012). Retrieved from https://eclkc.ohs.acf.hhs.gov/hslc/ttasystem/teaching/Broadcast%20Calls/LearningWithDig.htm

Zero To Three: Making Good Decisions About Television and Screen Time for Young Children. (Feb 2016). Retrieved from https://www.zerotothree.org/resources/318-making-good-decisions-about-television-and-screen-time-for-young-children#downloads

U.S. Departments of Education and Health and Human Services, Office of Educational Technology, (2016), Early Learning and Technology: Policy Brief. Retrieved from http://tech.ed.gov/netp/

APPENDIX SEVEN

Glossary

General Terms

Active learners: Children who learn by doing, participating, and/or playing.

Active physical play: Playful physical activities (structured or free-play) that promote physical fitness and motor development.

Accommodate: To make changes in materials, activities, interactions, or environments so all children can participate fully.

Adaptive equipment: Devices or equipment designed to be used to support development and learning by helping a child more easily participate in play, curriculum activities, and caregiving routines.

Age Appropriate: Learning opportunities, experiences, a physical learning environment, equipment, materials and interactions with that match a child's age and/or stage of growth and development.

Alignment: The relationship between content addressed in two sets or age levels of standards.

Assessment: The act of gathering information about a child's level of development and learning for purposes of making decisions that will benefit the child.

Assistive technology: A range of devices and strategies used to promote a child's access to and participation in learning opportunities, from making simple changes to the environment and materials to helping a child use special equipment.

Child-directed play: Allowing children to choose their own play in an environment that includes several options or choices.

Child-Initiated: Experiences which offer children choices among a wide range of opportunities for play and learning so that they can directly experience and manipulate new ideas and objects (e.g., choosing from a variety of activities throughout much of the day.

Developmental delay: When children's development in one or more domains lags behind what is typical for their age.

Developmental Indicator: Specific statement that defines what children are able to do at a particular age level.

Developmental stage: The typical progression in children's physical, social, emotional, and cognitive development, which includes developmental milestones or specific skills or tasks that most children can do in a certain age range.

Disability: A delay or impairment that is physical, cognitive, mental, sensory, emotional, or some combination of these.

Domain: One of the broad categories of learning and development in which goals and strategies are grouped, such as Physical Development and Health.

Dual Language Learner (DLL): Refers to children who are learning a second language at the same time they are continuing to develop their native or home language.

Engaged: To become involved or to be attentive.

Family: the closest relationships that a child has, including the child's mother, father, foster or adoptive parents, grandparents, and/or others who are the primary caregivers in a child's life.

Evidence-Based Practice: Designing program practices based on the findings of current best evidence from well-designed and respected research and evaluation (e.g., better understanding of preschool children's mathematics capabilities as a function of recent research).

Goal: Statement that describes a general area or aspect of development that children make progress on throughout the birth through age five period.

Hands-on learning experiences: Learning activities that enhance children's understanding of a concept through activities that they do with materials, toys, etc., rather than just listening to an adult or practicing isolated skills or knowledge.

Home language: The language that a child's family typically speaks and that the child learns first.

Imagination: the ability to form a picture in your mind of something that you have not seen or experienced; the ability to think of new things.

Imitate: To copy, pretend or practice the activity of another individual.

Impulse: A sudden spontaneous action based on needs or wants.

Inclusion: attitude and knowledge that encourages the enrollment and participation of all children, including children with disabilities.

Inclusive setting: The environment, facilitated through the organization and provision of space, (e.g., preschool children learn concepts through their play or in an activity like a project; early primary children work as a team on a project that includes literacy, math and science or the arts).

Integrated Approach: Children's learning activities, experiences and projects that involve multiple domain areas of the curriculum, instead of constant isolated study of content areas.

Interest areas: Areas in a childcare environment where similar materials, such as dramatic play materials, are grouped together to capture children's interest and engage them in play and learning activities.

Model: The act of teaching others (children) through the example of doing the desired behavior.

Modeled and Shared Writing: The teacher demonstrates how writing works.

Parallel talk: Adults talking to a child, describing what the child is doing.

Redirect: A teaching strategy used to re-focus a child's attention on an alternative object, feature in the environment, and/or activity rather than directly correcting the child's behavior.

Reinforce: To strengthen a response with some type of physical, emotional, or verbal reward.

Responsive: Warm, sensitive, well-timed, and appropriate to the child's needs; used to describe caregiver-child interactions that promote healthy development.

Reciprocal: Refers to something that goes both ways or to something that is done in return for a similar behavior (e.g., mom blows a kiss to her child and the child responds by blowing a kiss back to mom).

Routines: A pattern of events or interactions planned and occurring on a regular basis.

Safe environments: Environments where children can be actively involved in things that interest

Scaffolding: Teacher's use their knowledge of children's Zones of Proximal Development (ZPD) to support and guide children's learning to build upon their emerging abilities and interests.

Self talk: Narrating your own actions. Talking about what you are doing, seeing, eating, touching, or thinking when your child is present.

Sensory: Related to the senses: hearing, seeing, touching, tasting, and smelling.

Sensory impairments: Vision or hearing losses or other sensory disabilities that may require specialized assistance or early intervention.

Sensory materials: Materials and experiences that stimulate at least one of the five senses: hearing, seeing, touching, tasting, and smelling.

Separation anxiety: The stress experienced by a child when separated from a parent or primary caregiver.

Setting: Any place where children receive care.

Special needs: Developmental disabilities that may require specialized care.

Stimulation: Any number of sounds, textures, temperatures, tastes, or sights that impact a child's senses or development.

Strategies: Suggested activities, materials, and ways of interacting that promote development and learning in the areas described by the Goals and Developmental Indicators.

Subdomain: Subtopics that fall within a domain, such as "Healthy Habits" which is included in the Physical Development and Health domain.

Symbol: Something that represents something else by association.

Transition: To move or change from one activity or location to another activity or location.

Turn-taking games: Games between adults and young children where an adult makes a sound or action and waits for the child to mimic or copy them. Once the child responds, the adult makes a sound or action.

Universal Design for Learning (UDL): A set of principles is intended to assist educators and others to design flexible learning opportunities that provide children with: (1) multiple means of representation; (2) multiple means of expression; and, (3) multiple means of engagement.

Zone of Proximal Development (ZPD): The difference between what a learner can do without help and what he or she can do with help or between a learner's ability to perform a task independently versus with guidance.

SECTION

Relationships and Connections Glossary

Family and Community Engagement

Collaboration: actively working together to achieve a common goal.

Culturally Sensitive: being aware that people may have different backgrounds or experiences without assigning a value to them, such as negative or positive or good or bad or better or worse.

Family-centered approach: supporting children's positive learning experience through engagement with the whole family that builds on families' strengths.

Family Engagement: a shared, interactive process, when families and early learning adults work together to support children's growth and development and success.

Family Involvement: the amount of participation that a family member has with the child's school and learning.

Formal Information Sharing: Planned information exchanges such as conferences or home visits, family handbooks, written incident reports.

Home-school connections: partnerships built between families and schools to focus on student progress and success.

Home visits: a service that is provided within the home of families with their young children.

Informal Information Sharing: casual and unofficial ways to transmit information, often spontaneously. Examples include an update when children are being picked-up or delivered, a quick reminder note or social media postings.

Parent volunteers: parents who volunteer their time to their children's school.

Partnership: a relationship created between 2 or more people or groups to achieve a common goal through an expressed or implied commitment.

Reciprocal: mutual, two-way, give and take between family members and program adults.

Referrals: the process or steps school staff members take to acquire additional assistance for students with whom they work directly on a regular basis.

Strength-based Approach: focus on families' abilities, talents and resources.

Transition: Movement from one activity or program to the next.

Two-way communication: occurs when both the sender and receiver share information and feedback.

Social Emotional Development

Attach/Attachment: The strong emotional tie children feel with special people in their lives (family members and other caregivers).

Co-regulation: the warm, responsive interactions and support, structure, coaching, and modeling provided by caregivers to foster self-regulation development in children (Pahigiannis, Rosanbalm, & Murray, 2019)

Cultural responsiveness: Equitable, unbiased, and culturally conscious supports and practices (CASEL, 2018).

Emotional Literacy: The ability to label emotions and regulate them in socially appropriate ways.

Empathy: the ability to recognize, respond and share in another's emotions, thoughts or feelings.

Executive function: the ability to display inhibitory control, working memory, and attention such as the set of mental processes that enable a person to plan, remember, focus, and balance multiple tasks. (Center for Development of the Child, Harvard, 2017)

Pro-social behavior: voluntary behaviors designed to help another person, such as cooperating, sharing, helping, informing, comforting, and increasing capabilities to initiate engagement with peers and adults in child's environment. (Eisenberg et al., 2006; Early Social Development Lab, Brownell, 2016)

Self-awareness: Being aware of oneself, including feelings, behaviors, and characteristics.

Self-care routines: Tasks or routines carried out to take care of health and hygiene needs.

Self-identity: the way in which people view themselves and their role in the world.

Self-regulation: the ability to recognize and control and cope with emotion, changes, etc., and cooperate in relationships with peers and adults. (Center for Development of the Child, Harvard, 2017)

Temperament: The unique way a child responds to the world.

Trauma-informed teaching: the ability to recognize childhood trauma, stressors, mental health, etc. and respond appropriately to the child's needs in the classroom and potentially connect to resources outside the classroom. (Child Trends, National Center for Children in Poverty, Barlett, Smith, & Bringewatt, 2019)

Social Studies

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.

Community Helpers: Any group or individual who plays a role in the community such as doctors, nurses, dentists, teachers, parents, fire fighters, police officers, trash collectors, animal control officers.

Culture: A way of life of a group of people, including the behaviors, beliefs, values, traditions, religion, and symbols that are typical for the group and generally done/ accepted without thinking about them.

Diversity: Refers to the variety of characteristics that make individuals (and/or families) unique (e.g., culture, ethnicity, education, religion, economic background, etc.).

Ecology: the study of how living things interact with and rely on other living and non-living things in the environment where they live.

Economics: A social science dealing with the production, distribution and consumption of goods and services.

Environment: the surroundings or conditions in which a person, animal, or plant lives or operates.

Geography: The natural features of a region; a science that deals with the natural features of the earth and the climate, products and inhabitants.

History: A branch of knowledge that records and explains past events.

Landform: a natural feature of the earth.

Natural Resources: Something that is found in nature and is necessary or useful to humans, such as a forest, mineral deposits, or fresh water.

Resource: A source of supply or support; a natural source of wealth or revenue; a source of expertise or information.



Exploration and Critical Thinking Glossary

Approaches to Play and Learning

Attentiveness: The ability to focus and maintain attention on one topic or thing.

Approach: a way of looking or thinking about something.

Disposition: frequent and voluntary habits of thinking and doing; a pattern of behavior that is repeated regularly (Katz, 1993).

Executive function: the ability to display inhibitory control, working memory, and attention such as the set of mental processes that enable a person to plan, remember, focus, and balance multiple tasks. (Center for Development of the Child, Harvard, 2017)

Habits of Mind: A cluster of traits reflect thoughtful, individual approaches to learning, acting, creating, and problem solving.

Inventiveness: The ability to invent or create with one's imagination.

Independence: The child's ability to do, think, and learn on his/her own with little or no help.

Initiative: The inclination or ability to start or begin an activity.

Persistence: Continued effort; steadfastness.

Play: Spontaneous actions chosen by children and considered by them to be fun and meaningful.

Problem-solving: Behaviors practiced by young children that allow them to explore questions or situations and try different solutions.

Social Dispositions: A cluster of selected positive behaviors that have value in society and allow children to participate and interact more effectively with others.

Trial and error: Attempting to solve a problem by randomly trying different approaches.

Science Exploration and Thinking

Discovery learning: children find out for themselves by looking into problems and asking questions.

Earth and sky: the study of earth and sky. They way children explore and interact with the earth and sky.

Experiment: an organized and detailed series of steps or investigation that is conducted to validate or reject a hypothesis.

Exploration: investigation or study.

Hypothesis: an idea or theory that can be tested or evaluated.

Inquiry: research into a topic to gain knowledge and insight.

Investigation: to study something using close examination and systematic inquiry.

Life science: the study of life and things. The way children interact with things in the natural environment.

Matter: anything that has weight and takes up space (i.e. all items children interact with).

Physical thinking: the way children explore and interact with matter in the environment.

Prediction: a forecast, what someone thinks will happen.

Property (of an object): something that can be observed using the five senses or can be measured without changing the matter.

Scientific inquiry: The way children naturally explore the world.

Engineering and Technology

Abstraction: See what is different between all the problems. (see computational thinking)

Algorithms: Write out a sequence of instructions using. (see computational thinking)

Computational thinking: the process of approaching a problem in a systematic manner and creating and expressing a solution such that it can be carried out by a computer and has 4 stages: decomposition, pattern location, abstraction, and algorithms.

Decomposition: Analyze the problem and break it up into smaller problems. (see computational thinking)

Digital citizenship: teaching students to be responsible, respectful with online tools and interactive and social media with the support of adults.

Digital Literacy: The ability to use, understand and explore both technology and various types of interactive media.

Digital Technology Tools: (include interactive multitouch screens, iPads, tablets, television, computers.

Media literacy: the ability to access and create media with the support of adults.

Pattern Location: See patterns that are common in all the problems. (see computational thinking)

Technology Literacy: the ability to responsibly use appropriate technology to communicate, solve problems, and access, manage, integrate, evaluate, and create information to improve learning in all areas of learning and to acquire lifelong knowledge and skills in the 21st century.

Technology tools: simple tools (e.g. toy hammer, toy cell phone, toy shovel)

Tools: Anything used or created to accomplish a task or purpose.or

Mathematics

Algebraic Thinking: learning to recognize patterns, make generalizations, and then use symbols to represent problems and their solutions.

Attribute: characteristics or qualities of objects, such as color, position, shape or size.

Classification: Knowledge of grouping objects by attribute (ex: cows, pigs, and dogs are animals). (Kamii, Miyakawa, Kato, 1996)

Cardinality: The ability to count a set and match numeral to set without recounting (NTCM, 2019).

Directionality: the ability to identify where things are and understand where they in relationship to those things.

Geometry: the area of mathematics that involves shape, size, position, direction, and movement.

Graphs: a way to display information.

Logical Thinking: (mental relationships) that occurs within a child's mind which combines the following types of knowledge: social-conventional, physical, spatio-temporal knowledge, and classification relationships. (Inhelder & Piaget, 1964; Piaget, 1974; Kamii, 2004).

ObjectPermanence: The ability to locate an object that is hidden (typically 7-10 months of age) (ex: hiding a ball under blanket, infant removes blanket and finds ball) . (Piaget, 1963)

One-to-one correspondence: The ability to match each item in one set to another item within a different but equal set (e.g., matching a set of socks with a set of shoes).

Non-Standard Measurement: unit of measure whose values may vary, such as a person's foot length, paper clips, paces, or blocks.

Numeral: A written symbol used to represent a number.

Operations: mathematical processes, like addition or subtraction.

Patterns: regular or repetitive forms, orders, or arrangements of objects, sounds, or movements.

Physical Knowledge: Knowledge of how objects move and function in the observable world (Piaget, 1974; Kamii, 2004). (ex: knowledge that a cylinder block will roll, a piece of paper will tear).

Reasoning: the ability to understand how to solve a problem and then apply strategies to reach a solution; thinking in a logical way to form a conclusion.

Rote count: Counting in sequence (e.g. 1, 2, 3, 4, 5, etc.) without assignment of number to object (i.e. rational counting).

Sets: a group of objects.

Social-Conventional Knowledge: Knowledge that people create over-time (Piaget, 1974; Kamii, 2004) (ex: words such as one, two, three, the numeral one, days of the week, etc.).

Spatial-temporal Knowledge: Knowledge of spatial relationships and ordinal relationships in situations, objects, or during problem solving (ex: in pick up sticks, if I move this stick first, then I can move that stick next) (Inhelder & Piaget, 1959, 1964).

Standard unit of measurement: measurements whose values don't change, such as an inch or a pound standard unit of measure, such as inch or pound, whose values do not vary.

Subitize: The ability to name a set of objects without individually counting each object (ex: * * * child looks at stars and immediately says, "there are four stars") (Clements, 1999)/

Two-dimensional shape: a flat image of the shape.

Three-dimensional shape: a three-dimensional shape appears to have width and height and allows for rotation and depth.

3 Communication Glossary

Language and Literacy

Alphabetic principle: The understanding that letters and letter patterns represent the sounds of spoken language.

Book knowledge: Knowledge of the basic features of a book such as the cover, title, author, etc.

Communication: The act of understanding and/or expressing wants, needs, feelings, and thoughts with others. Forms of communication may include crying, vocalizing, facial expressions, speech, gestures, sign language, pictures, and/or objects.

Critical Period of Language: The first few years of life constitute the time during which language develops readily and after which (sometime between age 5 and puberty) language acquisition is much more difficult and ultimately less successful.

Decoding: The ability to apply knowledge of letter-sound relationships, including knowledge of letter patterns, to correctly pronounce written words. Understanding these relationships gives children the ability to recognize familiar words quickly and to figure out words they haven't seen before.

Early literacy: Describes the foundations of reading and writing that begin to develop in infancy and continue to emerge through the toddler, preschool, and kindergarten age periods.

Environmental Print: The print seen in our immediate surroundings and used in our everyday lives. Environmental print awareness is the ability to recognize signs, symbols, and words that occur frequently in the environment (Westwood, 2004).

Expressive language: The ability to use words or gestures to communicate meaning.

Grammatical construction: Words that are put together according to the conventional rules of grammar to form sentences.

Informational text: A type of non-fiction writing that conveys factual information about the natural or social world.

Language: Words, signs, and symbols used by a group of people to communicate.

Literacy: the ability to read and write.

Modeled and Shared Writing: The teacher demonstrates how writing works

Onset and Rime: Parts of monosyllabic words in spoken language that are smaller than syllables—onset is the initial consonant sound of a syllable (the onset of 'bag' is 'b'); rime is the part of a syllable that contains the vowel and all that follows it (the rime of 'bag' is '-ag').

Phonological awareness: The ability to detect, manipulate, or analyze the auditory aspects of spoken language (including the ability to distinguish or segment words, syllables, or phonemes) independent of meaning; breaking the stream of language into smaller and smaller parts.

Print awareness: Awareness of the purposes of print, the conventions of print and book handling skills; children discovering print as organized in fun and meaningful ways.

Print conventions: The concept of the basic features of print, including what a letter is, the concept of words, and the understanding of the directionality of print.

Reading behaviors: An understanding of the reading process, including the developmental skills and strategies children need to become proficient readers.

Receptive Language: What children can understand from the communication around them; understanding what is said and understanding what is read (once you are a reader).

Segmenting: pulling words apart into syllables and sounds.

Vocabulary: The collection of words that a child understands or uses to communicate.

Word awareness: Knowledge that words have meaning. Students with word awareness can discriminate individual words in a passage read to them. Beginning readers must have this skill before they can extract meaning from what they read.

Writing conventions: Generally accepted rules for writing, such as spelling, punctuation, and capitalization.

Creative Arts

Visual effects: Results of a child's artistic efforts that can be seen by others.

Rhythm: A musical term that refers to the repeated pattern of sounds or silences. Also referred to as the "beat" of a song.

Dramatic play: Refers to the various kinds of play where children can take on roles and act them out (e.g., pretending to be a parent or using dolls to tell a story).

Creativity: The ability to move beyond the usual ideas, rules, patterns, or relationships.

Creative arts: activities that engage the child's imagination through art, dance, music, or dramatic play.

Tempo: the speed at which music should be played.

Melody: a pleasant or agreeable sequence or arrangement of single notes.

Storytelling: the art of using words and actions to tell a story that captures the listener's imagination.

Performing Arts: creative activities that are performed in front of an audience.

Imagination: the ability to form a picture in your mind of something that you have not seen or experienced; the ability to think of new thing.

SECTION

Physical Development and Health Glossary

Large muscle control: Ability to use the large muscle groups, such as the muscles in the arms and legs, in a relatively coordinated manner.

Manipulatives: Materials that allow children to explore, experiment, and interact by using their hands, such as beads, puzzles, small blocks, or snap beads.

Dexterity: Skill and grace in physical movements.

Motor coordination: Various parts of the body working together in a smooth, purposeful way.

Natural reflexes: The body's automatic response to specific stimuli (leg kicks upward when knee is tapped).

Eye-Hand coordination: The ability to coordinate vision and hand movement in order to accomplish a task.

Locomotor: movement that causes the body to move from one place to another or travel, such as walking, running, hopping, or marching.

Non-locomotor: body movement without causing the body to travel. They may be specific body parts or the whole body, such as swinging arms, twisting, bending, or stretching.

Pincer grasp: Putting the index finger and the thumb together.

Self-Help Skills: Adaptive skills that enable children to take care of themselves and move toward independence in activities related to eating, dressing, toileting, washing hands, etc.

Small muscle control: Ability to use the small muscles of the hands in a relatively coordinated manner.

Stamina: The ability to maintain prolonged physical or mental effort.

APPENDIX EIGHT

Resources

General Resources

Catherine Scott-Little, Ph.D.; Sharon Lynn Kagan, Ed.D.; Jeanne L. Reid, Ed.D.; Teressa Cameron Sumrall, M.A. Emily A. Fox, B.A. Common Early Learning and Development Standards Analysis for the North Carolina EAG Consortium - SUMMARY REPORT. Build Initiative.

Daily, S., Burkhauser, M., and Halle, T. (2010). A review of school readiness practices in the states: Early Learning Guidelines and Assessment. Early Childhood Highlights: Child Trends, Vol. 1 Issue 3. June 17, 2010.

Division for Early Childhood (2014) DEC Recommended Practices in Early Intervention/ Early Special Education 2014. Retrieved from http://dec-sped.org/recommendedpractices

Division for Early Childhood (2010). Responsiveness to Family Cultures, Values, and Languages: Position Statement. Retrieved January 2014, from Division of Early Childhood www.dec-sped.org

Early Childhood Learning and Knowledge Center: The Head Start Early Learning Outcome Framework. (2015). Retrieved from https://eclkc.ohs.acf.hhs.gov/hslc/hs/sr/approach/pdf/ohs-framework.pdf

Early Learning Guidelines Resource: Recommendations and Issues for Consideration when Writing or Revising Early Learning Guidelines. Catherine Scott-Little, Ph.D.; Sharon Lynn Kagan, Ed.D. Victoria Stebbins Frelow.

Education Development Center (EDC). Supporting Emergent Bilingual Children in Early Learning. https://www.edc.org/sites/default/files/Emerging-Bilingual-Promising-Practices. pdf

Greenman, J. (2007). Caring Spaces, Learning Places: Children's Environments that Work. Redmond: Exchange Press, Inc.

Lally, J. R. and Signer, S. (2008). WestEd, The Program for Infant/Toddler Care. Retrieved March 2008, from The Program for Infant and Toddler Care: http://www.pitc.org

National Association for the Education of Young Children and the National Association of Early Childhood Specialists in State Departments of Education (2002). Early Learning Standards: Creating the Conditions for Success. Washington, DC: Author.

National Association for The Education of Young Children (2009). Responding to Linguistic and Cultural Diversity: Recommendations for Effective Early Childhood Education. Position Statement. Washington, DC: NAEYC. Retrieved January 2014 from http://www.naeyc.org/files/naeyc/file/ positions/diversity.pdf

National Center on Early Childhood Development, Teaching, and Learning. Alignment Self-Assessment Tool: State Early Learning Standards-Head Start Child Outcomes.

States' Early Learning Standards and Guidelines

SECTION



Resources: Relationships and Connections

Family and Community Engagement

Delgado-Gaitan, C., (2001). The power of community: Mobilizing for family and schooling. Boulder, CO: Riwman & Littlefield.

National Standards for Family-School Partnerships. PTA https://www.pta.org/home/run-your-pta/National-Standards-for-Family-School-Partnerships

NEA Policy and Practice Department, Center for Great Public Schools. NEA Policy Brief. Parent, Family, Community Involvement in Education. Retrieved from http://www.nea.org/assets/docs/PB11_ParentInvolvement08.pdf

U.S Department of Health and Human Services and U.S. Department of Education. (2016) Family Engagement: From the Early Years to the Early Grades. Retrieved from https://www2.ed.gov/about/inits/ed/earlylearning/files/policy-statement-on-family-engagement.pdf

U.S. Department of Health and Human Services, Administration for Children and Families, Office of Head Start, National Center on Parent, Family, and Community Engagement. (2011). *The Head Start Parent, Family, and Community Engagement Framework:*Promoting familyengagement and school readiness, from prenatal to age 8. Retrieved from https://eclkc.ohs.acf.hhs.gov/hslc/standards/im/2011/pfce-framework.pdf

WIDA. (2014). ABCs of Family Engagement: Key Considerations for Building Relationships with Families and Strengthening Family Engagement Practices. Wisconsin Center for Education Research. Retrieved from https://wida.wisc.edu/sites/default/files/resource/ABCs-Family-Engagement.pdf

Social Emotional Development

Collaborative for Academic, Social, and Emotional Learning. (n.d.). [Website]. Retrieved from http://www.casel.org/

Center on the Social and Emotional Foundations for Early Learning. http://csefel.vanderbilt. edu/

Dombro, A. L., Jablon, J., & Stetson, C. (2011). *Powerful interactions: How to connect with children to extend their learning.* Washington, D.C.: National Association for the Education of Young Children.

Dusenbury, L. et al. (2011) State Learning Standards to Advance Social Emotional Learning: The State Scan of Social and Emotional Learning Standards, Preschool through High School. University of Illinois at Chicago Social and Emotional Research Group.

Epstein, A. (2009). *Me, you, us: Social-emotional learning in preschool.* Ypsilanti, MI: HighScope Press.

Fostering Healthy Social & Emotional Development in Young Children: Tips for EARLY Childhood Teachers and Providers

Rosanbalm, K.D., & Murray, D.W. (2017). OPRE Brief # 2017-79. Washington, DC: Office of Planning, Research, and Evaluation, Administration for Children and Families, US. Department of Health and Human Services

U.S. Department of Health and Human Services, Administration for Children and Families. Head Start Effective Practice Guides. Social Emotional Development. https://eclkc.ohs.acf.hhs.gov/school-readiness/effective-practice-guides/social-emotional-development

Social Studies

Epstein, A. Social Studies in Preschool? Yes! (2014). Young Children.

Fromboluti and Seefeldt.(1999). Early Childhood: Where Learning Begins-Geography. Retrieved from http://teacherlink.ed.usu.edu/tlresources/reference/geography.pdf.

Hachey, AC & Butler, D. (2013). *Science education for preschoolers through gardening and nature-based play.* Spotlight on Young Children: Exploring Science. Washington, DC: NAEYC.

Koralek, D., & Mindes, G. (Eds.) (2006). *Spotlight on young children and social studies.* Washington, : NAEYC.

Mindes, Gayle. (2005) Social Studies in Today's Early Childhood Curricula. Beyond the Journal. Young Children on the Web.

National Council of Social Studies (2019). Early Childhood in the Social Studies Context. Retrieved from https://www.socialstudies.org/early-childhood-social-studies-context

National Association for the Education of Young Children, (2005). Exploring Social Studies through Children's Books. *Young Children*, 60(5), 1-5.

NAEYC Position Paper. Responding to Cultural and Linguistic Diversity: Recommendations for Effective Early Childhood Education (NAEYC 1995) NAEYC Position Paper Update. Where We Stand: On Responding to Cultural and Linguistic Diversity (NAEYC 2009)

National Council of Social Studies. (2010) National Curriculum Standards for Social Studies. Retrieved from https://www.socialstudies.org/standards

Shaffer, LF, Hall, E., Lynch, M. (2013). *Toddlers' scientific explorations: Encounters with insects*. Spotlight on Young Children: Exploring Science. Washington, DC: NAEYC.

Sparks, L.D., Edwards, J.O. (2010). Anti-bias education for young children and ourselves. Washington, DC: National Association for the Education of Young Children (NAEYC).



Resources: Exploration and Critical Thinking (STEM Skills)

Approaches to Play and Learning

Ackerman, Debra J., Friedman-Krauss, Allison H. (2017) Preschoolers' Executive Function: Importance, Contributors, Research Needs and Assessment Options.

Center on the Developing Child at Harvard University (2011). Building the brain's "air traffic control" system: How early experiences shape the development of executive function: Working Paper No. 11. Retrieved from www.developingchild.harvard.edu

Center on the Developing Child (2012). *Executive Function* (InBrief). Retrieved from www.developingchild.harvard.edu.

Galinsky, E. (2010). Mind in the making: The seven essential life skills every child needs. New York: Harper Collins.

Ginsburg, K. (2007). The importance of play in promoting healthy child development and maintaining strong parent/child bonds. *Pediatrics* 119;182 Available at http://pediatrics.aappublications.org/content/119/1/182.full.html

Hyson, M. (2008). Enthusiastic and engaged learners: Approaches to learning in the early childhood classroom. New York, Teachers College Press and Washington, DC: NAEYC

Hyson, Marilou, Ph.D. (retrieved 2019) The Role of Play in Promoting Children's Positive Approaches to Learning. https://www.researchconnections.org/files/childcare/pdf/ PlayandApproachestoLearning-MarilouHyson-1.pdf National Association for the Education of Young Children. (2011). Fostering critical thinking and problem-solving skills. *Young Children*.

Peterson, S. (2012, Sept.). Approaches to learning: Supporting brain development for school success. Zero to Three. 33(1), 24-27.

Sue Robson & Victoria Rowe (2012) Observing young children's creative thinking: engagement, involvement and persistence, International Journal of Early Years Education, 20:4, 349-364, DOI: 10.1080/09669760.2012.743098

Twardosz, S. (2010). Effects of experience on the brain: The role of neuroscience in early development and education. *Early Education and Development*, *23*: 96–119.

U.S. Department of Health and Human Services, Administration for Children and Families. Head Start Effective Practice Guides. Approaches to Learning. https://eclkc.ohs.acf.hhs.gov/school-readiness/effective-practice-guides/approaches-learning

Science Exploration and Knowledge

Early Childhood STEM Working Group. (2017). Early STEM Matters. Retrieved from http://d3lwefg3pyezlb.cloudfront.net/docs/Early STEM Matters FINAL.pdf

Education Development Center (EDC). Integrating Technology into Early Learning. Retrieved from https://www.edc.org/sites/default/files/Integrating-Technology-Brochure English.pdf

Erikson Institute Technology in Early Childhood Center. http://teccenter.erikson.edu

McClure, E. R., Guernsey, L., Clements, D. H., Bales, S. N., Nichols, J., Kendall-Taylor, N., & Levine, M. H. (2017). *STEM starts early: Grounding science, technology, engineering, and math education in early childhood.* New York: The Joan Ganz Cooney Center at Sesame Workshop

National Association for the Education of Young Children and the Fred Rogers Center for Early Learning and Children's Media. (2012). Technology and Interactive Media as Tools in Early Childhood Programs Serving Children from Birth to Age 8. Retrieved from: www.naeyc.org/files/naeyc/PS technology WEB.pdf

National Association for the Education of Young Children and the Fred Rogers Center for Early Learning and Children's Media at Saint Vincent College. (2012). Selected Examples of Effective Classroom Practice Involving Technology Tools and Interactive Media

NGSS Lead States. 2013. Next Generation Science Standards: For *states, by states*. Washington, DC: National Academies Press.

National Science Teaching Association. Position Statement: Early Childhood Science Education. Retrieved from https://www.nsta.org/about/positions/earlychildhood.aspx

Preschool Development Grant (PDG). STEM for Early Learning Modules. https://pdg.grads360.org/#program/stem-in-early-childhood

U.S. Department of Health and Human Services, Administration for Children and Families. Head Start Effective Practice Guides. Cognition. https://eclkc.ohs.acf.hhs.gov/school-readiness/effective-practice-guides/cognition

Zan, B., & Geiken, R. (2010, Jan.). Ramps and pathways: Developmentally appropriate, intellectually rigorous, and fun physical science. *Young Children*.

Mathematics

DREME Development and Research in Early Mathematics Education. https://dreme.stanford.edu/projects/early-math-resources-teacher-educators

Erikson Institute: Early Math Collaborative. https://earlymath.erikson.edu

Greenberg, J. (2012). *More, All Gone, Empty, Full: Math Talk with Infants and Toddlers—Every Day, in Every Way.* Spotlight on Young Children: Exploring Math. Washington, DC: NAEYC.

Mathematics learning in early childhood: Paths toward excellence and equity. Committee on Early Childhood Mathematics, ChristopherT. Cross, Taniesha A. Woods, and Heidi Schweingruber, Editors. Center for Education, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press

NAEYC and the National Council of Teachers of Mathematics (2010). Position Statement: Early Childhood Mathematics: Promoting Good Beginnings. Washington, DC: NAEYC.

National Association for the Education of Young Children. (2009). Mathematics. Young Children.

Moomaw, S., Carr, V., Boat, M., & Barnett, D. (2010, Feb.). Preschoolers' number sense. Teaching Children Mathematics.

NAEYC/NCTM Joint Position Statement: Early Childhood Mathematics - Promoting Good Beginnings.

http://www.naeyc.org/files/naeyc/file/positions/psmath.pdf

NAEYC & NCTM. (2003). *Learning Paths and Teaching Strategies in Early Mathematics*. Spotlight on Young Children: Math, 29-31. Washington, DC: NAEYC.

National Council of Teachers of Mathematics. Executive Summary: Principles and Standards for School Mathematics. Retrieved from https://www.nctm.org/uploadedFiles/Standards_and_Positions/PSSM_ExecutiveSummary.pdf

NCSL. (2015). Early Mathematics Education. Retrieved from http://www.ncsl.org/ Portals/1/Documents/educ/Early Mathematics Education Weyer FINAL.pdf National Mathematics Advisory Panel. (2008). Foundations for success: The final report of the National Mathematics Advisory Panel. Jessup, MD: U.S. Department of Education. Retrieved from

http://www2.ed.gov/about/bdscomm/list/mathpanel/report/final- report. pdf

National Research Council. (2009). Mathematics learning in early childhood: Paths toward excellence and equity. Washington, DC: National Academy Press.

U.S. Department of Health and Human Services, Administration for Children and Families. Head Start Effective Practice Guides. Cognition.

https://eclkc.ohs.acf.hhs.gov/school-readiness/effective-practice-guides/cognition

SECTION 3

Resources: Communication

Language and Literacy

Early Literacy: Policy and Practice

http://www.readingrockets.org/article/early-literacy-policy-and-practice-preschool-years

Learning to Read and Write (NAEYC)

https://www.naeyc.org/sites/default/files/globally-shared/downloads/PDFs/resources/position-statements/PSREAD98.PDF

National Board for Professional Teaching Standards http://nbpts.org/wp-content/uploads/EMC-LRLA.pdf

National Center for Family Literacy. What Works: An Introductory Teacher Guide for Early Childhood Language and Emergent Literacy Instruction. 2009Center for Early Literacy Learning

http://www.earlyliteracylearning.org/pgpracts.php

The National Center for Family Literacy. (2008). Developing early literacy: Report of the National Early Literacy Panel. Jessup, MD: National Institute for Literacy

National Council of Teachers of English and the International Reading Council Standards http://www.ncte.org/library/NCTEFiles/Resources/Books/Sample/StandardsDoc.pdf

The National Early Literacy Panel. (2009). Early beginnings: early literacy knowledge and instruction: A guide for early childhood administrators and professional development providers. Jessup, MD: National Institute for Literacy.

National Early Literacy Panel and Preschool Literacy Instruction. (2011). Green Lights, Caution Lights and Red Lights. Young Children.

Parlakian, R., Lerner, C., & Im, J. (2008). Getting ready to read: Helping your child become a confident reader and writer from birth. (pamphlet) Washington, DC: Zero to Three

Preschool Development Grant (PDG) Modules on Early Literacy https://pdg.grads360.org/#program/early-learning-language-and-literacy-series

Schickedanz, J. & Collins, M. (2013). So much more than the ABCs: The early phases of reading and writing. Washington, DC: NAEYC.

Schickedanz, J. & Casbergue, R. (2009). Writing in preschool: Learning to orchestrate meaning and marks (2nd ed). Washington, DC: International Reading Association and Zero to Three.

Vukelich, C. & Christie, J. (2009). Building a foundation for preschool literacy: Effective instruction for children's reading and writing development (2nd ed). Newark, DE: International Reading Association.

U.S. Department of Health and Human Services, Administration for Children and Families. Head Start Effective Practice Guides. Language and Literacy. https://eclkc.ohs.acf.hhs.gov/school-readiness/effective-practice-guides/language-literacy

Creative Expression

Mills, Hannah. (2014). The Importance of Creative Arts in Early Childhood Programs. Texas Child Care Quarterly. Retrieved from https://www.childcarequarterly.com/pdf/summer14 <a href="https://www.childcarequarterly.com/pdf/s

National Endowment for the Arts. (2015). The Arts in Early Childhood: Social and Emotional Benefits of Arts Participation. Retrieved from https://www.arts.gov/sites/default/files/arts-in-early-childhood-dec2015-rev.pdf

National Core Arts Standards. https://www.nationalartsstandards.org

O'Connor, D. (2014) Developing Creativity in Early Childhood: The Role of Educators. In O'Connor, D. (Ed.) Creative Engagements with Children: Educational Tales of the Unexpected. Oxford: Inter-Disciplinary Press.

The College Board, Child Development and Arts Education: A Review of Recent Research and Best Practices, New York, N.Y., January 2012. Retrieved from https://www.nationalartsstandards.org/sites/default/files/College%20Board%20 Research%20-%20Child%20Development%20Report.pdf



Resources for Section Four: Physical Development and Health

Blythe, Sally. MSc, FRSA Director. The Right to Move Assessing Neuromotor Readiness for Learning Why physical development in the early years supports educational success. The Institute for Neuro-physiological Psychology (INPP), Chester, UK

Caring for Our Children: National Health and Safety Performance Standards, Guidelines for Out-of-Home Child Care Programs, 2nd Edition http://cfoc.nrckids.org/

Practical Strategies for Developing Fine Motor Skills.

https://connectability.ca/2011/03/21/ practical-strategies-for-developing-fine-motor-skills/

National Board for Professional Teaching Standards. Physical Education Standards for Teachers of Students, 3-18+, 2nd Edition. 2014.

Practical Strategies for Developing Fine Motor Skills. https://connectability.ca/2011/03/21/practical-strategies-for-developing-fine-motor-skills/

U.S. Department of Health and Human Services, Administration for Children and Families. Head Start Effective Practice Guides. Perceptual, Motor and Physical Development. https://eclkc.ohs.acf.hhs.gov/school-readiness/effective-practice-guides/perceptual-motor-physical-development

U.S Department of Health and Human Services. Physical Activity Guidelines for Americans, 2nd edition. Washington D.C. U.S. Department of Health and Human Services, 2018 https://drive.google.com/drive/folders/1jgXkEexlix MX3qptq89CfJjQuRC6q6G

Wright, P.M., & Stork, S. (2013). Recommended practices for promoting physical activity in early childhood education settings. *Journal of Physical Education, Recreation & Dance*, *84*(5), 40-43.

Zero to Three. (2004). On the Move: The Power of Movement in the Child's First Three Years. Retrieved from https://www.zerotothree.org/resources/316-on-the-move-the-power-of-movement-in-your-child-s-first-three-years

APPENDIX NINE

Acronyms

Acronym	Full Name
ADA	American Disabilities Act
AlaKiDS	Alabama Kindergarten Inventory of Developing Skills
ALSDE	Alabama State Department of Education
ANFRC	Alabama Network for Family Resource Centers
APC	Alabama Partnerships for Children
ASELD	Alabama Standards for Early Learning and Development
ASQ	Ages and Stages Questionnaire
ASQ-SE	Ages and Stages -Social Emotional Questionnaire
ASRA	Alabama School Readiness Alliance
ASSIST	Additional Support Systems and Instructional Strategies for Teachers
CACFP	Child and Adult Food Program
CCDBG	Child Care Development Block Fund
CCR &R	Child Care Resource and Referral
CDA	Child Development Associate
CFTF	Children's First Trust Fund
CLASS	Classroom Assessment Scoring System
CNP	Children's Nutrition Program
COR	Child Observation Record (High Scope
CTF	Children's Trust Fund
DAP	Developmentally Appropriate Practice
DEC	Division for Early Childhood
DECA	Deveraux Early Childhood Assessment
DECE (AL)	Department of Early Childhood Education
DHR (AL)	Alabama Department of Human Resources
DPH (AL)	Alabama Department of Public Health
ECAC	Early Childhood Advisory Council
ECE	Early Childhood Education
ECERS-R	Early Childhood Environment Rating Scale
ECLKC	Early Childhood Learning and Knowledge Center
EHS	Early Head Start
El	Early Intervention

Acronym	Full Name
EITC	Earned Income Tax Credit
EPSDT	Early and Periodic Screening, Diagnostic and Treatment
FCCERS-R	Family Child Care Environment Rating Scale
HMG	Help Me Grow
HS	Head Start
HV	Home Visiting
IDEA	Individuals with Disabilities Act
IECMH	Infant and Early Childhood Mental Health
IEP	Individual Education Plan
IFSP	Individualized Family Service Plan
IRR	Inter-rater Reliability
ITERS-R	Infant Toddler Environment Rating Scale
KEA	Kindergarten Entry Assessment
LEA/SEA	Local Education Agency/State Education Agency
MIECHV	Maternal Infant and Early Childhood Home Visiting
NAEYC	National Association for the Education of Young Children
NIEER	National Institute for Early Education Research
OSEP	Office of Special Education
OSR (AL)	Office of School Readiness
PAL	Parent Assistance Line
PAS	Program Administration Scale
PBIS	Positive Behavioral Support
PD	Professional Development
PDG B-5	Preschool Development Grant, Birth to 5
PITC	Program for Infant Toddler Care
QRIS	Quality Rating Improvement System
SF	Strengthening Families
SLDS	State Longitudinal Data System
SNAP	Supplemental Nutrition Assistance Program
T/TA	Training and Technical Assistance
TANF	Temporary Assistance for Needy Families
TEACH	Teacher Education and Compensation Helps
VFC	(Alabama) Vaccines for Children
WIC	(Alabama) Women Infant and Children Program



Publications or audiovisual media must include the following disclaimer: "The Alabama Standards for Early Learning and Development was made possible by grant number 90TP0065-01-00. Its contents are solely the responsibility of the authors and do not necessarily represent the official view of the United States Department of Health and Human Services, Administration for Children and Families." [HHS Grants Policy Statement, page II-31].

children.alabama.gov

In partnership with







