

State of Maine Early Childhood Learning Guidelines



Maine Department of Education Maine Department of Health and Human Services

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Maine Department of Education

Maine Early Childhood Learning Guidelines

Maine Department of Health and Human Services

To Maine parents and early care and education professionals:

We are pleased to join our many state and local partners in presenting the *Maine Early Childhood Learning Guidelines* for children ages three to five years!

These voluntary guidelines were developed in response to President Bush's early childhood initiative *Good Start, Grow Smart*, which was launched in April 2002. This initiative stresses the importance of supporting learning for every child to reach his or her full potential.

The *Maine Early Childhood Learning Guidelines* serves as a guide for state and local early care and education practitioners' efforts to improve early childhood practice and programs for young children ages three through their entrance into kindergarten. The *Guidelines* are intended to effect greater collaboration and consistency across systems by aligning practices across all early childhood settings including public school pre-K programs.

We hope you will find this document useful in better understanding what you may expect to see in a child's learning and development, taking into consideration the individual differences and unique needs of every child. These guidelines recognize that learning in early childhood environments lays a critical foundation for the young child's later success in school, work, citizenship, and personal fulfillment.

By showing an interest in children's experiences, you join a dedicated group of caring individuals who acknowledge the importance of quality early care and education for our youngest citizens. With your commitment, we can all ensure a good start for Maine's children.

We hope you find this publication useful, and encourage you to share this information with other parents and early care and education practitioners.

Respectfully,

John Nicholas, Commissioner Maine Department of Health and Human Services

andy Uniss

Carolyn Brugge, Director Office of Child Care and Head Start Maine Department of Health and Human Services

Juson Hendron

Susan Gendron, Commissioner Maine Department of Education

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Task Force

The Office of Child Care and Head Start at the Maine Department of Health and Human Services would like to recognize the dedicated work of the Early Childhood Learning Guidelines Task Force. The work of these Task Force members was instrumental in completing this document. Their expertise is greatly appreciated.

The Guidelines are collaborative project of the Maine Department of Education and the Maine Department of Health and Human Services, Office of Child Care and Head Start. The following is a list of the Task Force members that participated in the development of the Early Childhood Learning Guidelines:

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Preface

The State of Maine Early Childhood Learning Guidelines serves as a guide for state and local early care and education practitioners' efforts to improve early childhood professional practice and programs for young children ages three through their entrance into kindergarten. This document considers the core elements contained in the State of Maine Learning Results (K-12). The Guidelines reflect current research on early learning and best practice in early education. The document can be used within and across a wide range of early learning settings-public preschool, Head Start, subsidized child care programs, private child care programs, nursery schools, family child care homes, and informal care settings. The Early Childhood Learning Guidelines are intended to promote greater collaboration and consistency across systems by aligning practice across all early childhood settings and the early grades.

These guidelines recognize that learning in early childhood environments lays a critical foundation for the young child's later success in school, work, citizenship, and personal fulfillment. Research in brain development has shown that crucial early neural development occurs at critical "windows of opportunity" during a child's early years. The child's environment and relationships with his/her family and other adults during the infant/toddler and preschool years will either support and nurture development or put it at risk.

The Task Force that developed the *State of Maine Early Childhood Learning Guidelines* (3-5) acknowledges that play, in concert with adult planning, guidance, support, and follow-up, is a vital experience of early development and promotes development of the whole child. It is important that children explore and apply new skills through experiences that are interesting, satisfying, and respectful of their desire to touch, hear, see, smell and taste. It is also important that we recognize their natural drive to use both their small and large muscles throughout each day. Through play in a content-rich environment, children not only develop social and motor skills, but also begin to make sense of the world around them, building the foundations they will need to become capable, enthusiastic learners and responsible, healthy adults.

The format of the Early Childhood Learning Guidelines includes indicators within domains with cross-reference to the State of Maine Learning Results by content area and/or cluster in the Appendix. The Task Force felt it important to point out this connection to clarify the importance of early learning as the groundwork for the child's learning from age five through the high school years. Early childhood professionals who use them will easily see these as the first steps on the child's kindergarten through 12th grade educational continuum. The Task Force also recognizes that children learn at their own pace, and that some of the expectations in each domain will be applicable to children at a younger developmental stage, while others will be appropriate for children closer to kindergarten entry.

Purpose

The Early Childhood Learning Guidelines are intended to:

- provide early childhood practitioners and families with guidance as they design learning environments, shape curriculum, lead professional development initiatives, build intentionality into teaching practice, and/or support children's learning at home. Since effective early childhood learning environments for young children incorporate an integrated, holistic approach to teaching children and address each child's social. emotional, physical and intellectual development, each of the Early Childhood Learning Guidelines' 8 domains and their indicators cannot be addressed in isolation. Learning goals must also consider that although developmental stages are predictable, each child develops at his/her own rate, for development is influenced by many factors: genetics, prenatal care, birth, temperament, attachment to families and outof-home caregivers, and early experiences.
- serve only as a guide for best practice, and are not intended to be used for any form of standardized assessment, to impose specific curriculum standards in a rigid manner, nor for comparison of one child to another.
- support and flow into the *State of Maine Learning Results* by identifying the knowledge and skills essential to prepare young children for school and giving them the tools they need to succeed socially, emotionally, physically, and intellectually. By creating guidelines that align with the *State of Maine Learning Results*, the Task Force hopes that schools will, in turn, be ready for young children when they enter kindergarten.

Background

The State of Maine Early Childhood Learning Guidelines Task Force began meeting in Fall 2002 in response to federal initiatives encouraging states to develop early learning guidelines that focus early childhood professionals on preparing young children to succeed in school. National legislation and initiatives the No Child Left Behind Act of 2001; the Good Start, Grow Smart Initiative; Head Start Child Outcomes Framework—point to the need to strengthen school readiness efforts across local, state, and federal early care and education systems.

As part of the Good Start, Grow Smart Initiative, the U.S. Department of Health and Human Services, Child Care Bureau has asked states to include in their biannual Child Care and Development Plan their progress in creating voluntary, quality-related guidelines that align with the State's K-12 educational standards. For early childhood education, this includes language, literacy, and pre-reading and numeracy. Good Start, Grow Smart also calls on states to coordinate early education programs with public school standards, to help prepare children to enter school.

Within this context, the Maine Department of Health and Human Services' Office of Child Care and Head Start convened an Early Childhood Learning Guidelines Task Force comprised of a diverse group of early education leaders, including representation from the Maine Department of Education. The group was charged with designing a developmentally appropriate set of early learning guidelines that would be grounded in best practice and research, while aligning what children are learning before they enter kindergarten with what is expected of them once they enter school. The Task Force drew from a rich array of existing professional standards and research on early learning and development, as well as from the expertise of its own members.

The document underwent rigorous review by a panel of 50 state and national experts with knowledge of early childhood development and teaching practice, as well as specific content areas. In addition, two forums were convened to solicit input from nearly 200 early childhood practitioners. Suggestions from each of these groups were incorporated into the final document.

The Early Childhood Learning Guidelines were piloted in three areas of the state. Practitioners from public pre-K programs, Head Start, child care centers, family child care homes and nursery schools were all part of the pilot project. A curriculum to train practitioners to implement the Early Childhood Learning Guidelines in their classrooms or homes was developed and evaluated. Members of the pilot also evaluated the age-appropriateness of the guidelines.

Structure

The organization of the State of Maine Early Childhood Learning Guidelines is designed with eight domains – Personal and Social Development, Approaches to Learning, Creative Arts, Early Language and Literacy, Health and Physical Education, Mathematics, Science, and Social Studies. Within each domain there are one or more domain elements, such as Numbers and Number Sense, Shape and Size, Mathematical Decision-Making and Patterns within the Mathematics domain. Indicators of what children should know and be able to do when they enter kindergarten are the next level.

The indicators in the *Early Childhood Learning Guidelines* are further clarified by the inclusion of examples that may be observed by adults working with children. These examples are offered as some of the possible ways in which children may demonstrate the indicators. Gender neutrality has been achieved by alternating the gender of the children in the examples between male and female. These examples are inclusive of children on the developmental continuum including those with special needs as well as those children who are learning English as a second language.

These indicators are cross-referenced to the State of Maine Learning Results (K-12) by content area and/or cluster. While the Early Childhood Learning Guidelines focus on some of the same content areas as the State of Maine Learning Results (K-12), they also recognize other aspects of development that are critical to young children's learning. Therefore, two additional areas, Personal and Social Development and Approaches to Learning, were added. Because these are viewed as the building blocks for all the other content areas, they are placed as the first two sections of these Early Childhood Learning Guidelines. For the young child, these areas are essential foundations for development and learning across the other domains.

The indicators are also cross-referenced to the *Head Start Child Outcomes Framework* that includes indicators that are already being used in Maine Head Start programs. These cross- references to *Maine Learning Results* and the Head Start outcomes are found in Appendix A.

The following outcomes developed for Early Intervention programs by the Early Childhood Outcomes Center at the Frank Porter Graham Center at the University of North Carolina are also included in these *Guidelines*:

- Children have positive social relationships
- Children acquire and use knowledge and skills, and
- Children take action to meet their needs.

Essential Practices

The Whole Child—An Integrated Approach

edge,

childhood

The Whole Child

While the division of learning into domains is necessary to organize the guidelines, learning for the young child is not isolated by domains, but occurs across areas. Because the domains are interconnected, and because children learn by constructing new knowledge from existing knowlprofessionals and families must approach the Early Childhood Learning Guidelines with an interdisciplinary and constructivist perspective. The design of the learning environment and curriculum should consider and support the development of the whole child—intellectually, physically, socially, and emotionally.

In high quality early learning environments, both learning and assessment are successfully te interconnected, and because chil the near by constructing the same time. For examp a science project m also build literat math skil the same time. For examp a science project m also build literat math skil the same time. For examp a science project m also build literat math skil the same time. For examp a science project m also build literat math skil the same time. For examp a science project m also build literat math skil the same time. For examp a science project m also build literat math skil the same time. For examp a science project m also build literat math skil the same time. For examp a science project m also build literat math skil the same time. For examp a science project m also build literat math skil the same time. For examp a science project m also build literat math skil the same time. For examp a science project m also build literat math skil the same time. For examp a science project m also build literat math skil the same time. For examp a science project m also build literat math skil the same time. For examp a science project m also build literat math skil the same time. For examp a science project m also build literat math skil the same time. For examp a science project m also build literat math skil the same time. For examp a science project m also build literat the same time. For examp a science project m also build literat the same time. For examp a science project m also build literat the same time. For examp a science project m also build literat the same time. For examp a science project m also build literat the same time. For examp a science project m also build literat also build literat also build literat also b integrated across several domains at the same time. For example, a science project may also build literacy, skills.

communication, and social skills as children document and track their experimentation and observations.

Early education practitioners are encouraged to approach the *Early Childhood Learning Guidelines* from a multidisciplinary perspective when designing their curriculum and planning activities. Young children engaged in active learning will integrate knowledge and skills across domains.

For All Children

One of the most important considerations in the development of the Early Childhood Learning Guidelines was ensuring that it would apply to all children from three years of age to their entrance into kindergarten. These Learning Guidelines present goals and a continuum for what all children-including young children with unique learning needs and those with disabilities-should be able to do. Children develop at different rates and have different physical, emotional, and intellectual The early learning environment abilities. should incorporate appropriate adaptations to meet the needs of each individual child and enable them to achieve to the maximum level of their abilities.

In order to provide young children with ageappropriate opportunities to develop the attitudes, skills, and knowledge for school and life success, early childhood professionals have an important responsibility to design environments, curriculum, and assessment and to adjust their teaching practices to meet the needs of a diverse group of children. It is critical for the early childhood professional to implement a comprehensive, individualized approach to observing, assessing, and planning for each child and his/her unique needs, culture, and abilities. In today's diverse communities, young children have varied family, cultural, and linguistic experiences. Children whose home language is not English face the challenge of experiencing an early childhood learning environment that may not be consistent with their home culture and language. As early childhood professionals work to incorporate practices that support all of the *Early Childhood Learning Guidelines*, they should demonstrate a respect for and appreciation of the language skills, knowledge, and culture that the young child learning English brings to the early childhood environment, while encouraging the development of the child's home language.

Children communicate in a variety of ways including through spoken words, gestures, symbols, pictures, and/or signs. When observing how children demonstrate what they know and can do, the full spectrum of communication options including the use of American Sign Language and other low technology and high technology augmentative/assistive communication systems should be considered.

Children with diagnosed disabilities have rights under federal and state special education law, including the right to a free appropriate public education in the least restrictive setting and access to the general education curriculum. A continuum of services and supports, and appropriate adaptations and modifications to the environment, materials, and teaching approaches are necessary to ensure that all learners, including young children with disabilities, can demonstrate what they know and can do. In working with a child with disabilities, as with all children, the early childhood professional should demonstrate an ability to design alternative ways for each child to best meet the expectations, using information based on each child's way of attending, organizing information, communicating and interacting.

Learning Happens Within Relationships

Young children's social and emotional development is the foundation for their cognitive development. Children learn best in an environment where their psychological needs are being met because they feel safe, valued as unique individuals, while they are actively engaged in acquiring new skills and knowledge. Early learning is enhanced by curiosity, creativity, independence, cooperativeness, and persistence.

Children are dependent upon their interactions with peers and adults to construct a sense of self and to view themselves as learners. Early childhood practitioners are aware of the importance of children developing a strong and positive self-concept as well as appropriate selfcontrol and growth in their awareness of their responsibilities when interacting with others. Children are more likely to do well in school when they have a positive sense of personal well-being, developed through consistent caring relationships in their early years. Children also do better in school settings when they have the social skills and behaviors that enable them to develop meaningful relationships with adults and peers.

Experiential Learning

Children are active learners. Children learn through experiences with people, objects and things in their world. Experiences through play, knowledge, curiosity and sense of wonder are foundations for children's learning. The early childhood environment should provide opportunities for children to explore materials and engage in concrete activities and to interact with peers and adults to construct their own understanding about the world around them. The best foundation for later learning is provided when children have multiple and varied opportunities to interact with their environment.

Play, as noted on page 2, is the vehicle for learning and development across domains. It is a dynamic process that allows children to practice skills they will need later in life. Early childhood practitioners are encouraged to create environments that support meaningful play as the key medium for learning.

Intentionality

The Early Childhood Learning Guidelines provide a common framework for developmentally appropriate expectations for children ages three and four. Individual early childhood practitioners can develop curriculum and plan assessment appropriate to their setting and related to the expectations. They are not locked into a set curriculum but rather can design activities within any number of topics that will give children opportunities to meet the indicators individually and at their own pace. The indicators can be used to help early childhood practitioners define what they want young children to know and be able to do. Learning activities can then be designed to help children reach the indicators.

Partnerships with Families

The early childhood practitioner is most effective when young children are viewed in the context of their families and culture. It is within the family that children's attitudes toward learning and their understanding of the world begin. The language and culture that children bring with them to the early learning environment is the prism through which they view the world around them and through which they interpret and learn. Through ongoing communication with families, early childhood professionals expand on what children are learning in the home and support the development of families as equal partners in the child's education. Viewing families with respect and equality fosters and maximizes cooperative involvement critical to the child's school success.

The Early Childhood Learning Guidelines are intended for families, as well as practitioners. Families can draw on the domains and indicators to guide them as they support their child's development at home and partner with practitioners.

Assessment

These Learning Guidelines are just one part of ensuring high-quality early childhood learning environments for children in the State of Maine. The implementation of research-based, appropriately applied child assessment is also critical to ensuring quality. Multiple approaches to assessment (e.g., portfolios, observation and narratives) provide professionals and families with the information they need to individualize their work with children and to adapt curriculum and daily activities to meet the needs and abilities of each child. It is essential that each early childhood learning environment and its professionals carefully design systems and multiple approaches-including alternative approaches adapted to children with disabilities-to assess children and obtain information that enhances teaching strategies and curriculum.

Implementation and Resources

Implementation of the *Early Childhood Learning Guidelines* may vary, as each early education setting is unique. Early childhood professionals and families will establish their own unique approach to such issues as curriculum development, child assessment, planning, child observation, professional development, and designing the learning environment. A "crosswalk" between these *Guidelines* and the *Maine Learning Results* and the *Head Start Path to Positive Child Outcomes* defines clearly how the indicators in this document not only align with indicators already being used in Head Start programs but also provide the foundation for later learning.

The Early Childhood Learning Guidelines contains a rich bibliography that professionals and families can draw on to guide their practice. It is important to note that the Learning Guidelines is not a curriculum. A full curriculum contains detail about what children should and scaffolded approaches know and sequences to helping children gain skills and knowledge. It often prescribes materials and methods. These Learning Guidelines describe child outcomes for all young children for practitioners and families to draw on as they design and shape curriculum and child assessment approaches.

Fully meeting the *Learning Guidelines* will present challenges even for the most highly skilled early childhood practitioner. They can be most fully exercised through sound developmentally appropriate practice that encourages children's play, natural curiosity, and enthusiasm for learning. With the creation of the *Learning Guidelines*, practitioners are challenged to consider ways to build greater intentionality into their practice, observe and assess children's development, implement scaffolded learning strategies, design a rich learning environment, offer varied and stimulating play experiences, and select age-appropriate materials to support children's learning and school readiness.

The *Early Childhood Learning Guidelines* should generate ongoing discussion among early childhood professionals. Such discussion and reflection about practice serves to deepen knowledge and understanding about how the Learning Guidelines can be deep-rooted in curriculum, teaching practice, planning, and assessment.



Personal and Social Development

A ccording to Maslow's Hierarchy of Needs, the foundations for each individual's personal and social development lie in providing

basic physiological (food, shelter)

relationship (belonging/love)

and safety (security/stability) and

Maslow's Hierarchy of Needs

CULTURAL

Self-Actualization Fulfilment, reaching greater potential

Esteem

Feeling competent and recognized for abilities

Love Feeling loved, needed, belonging

needs early in life. Maslow's theory suggests that all people need a safe and nurturing environment to achieve their full potential. When the environment in which a child develops is safe and nurturing, the building blocks for learning are laid. Such a foundation enables a child to become a full contributing member of the community with a healthy sense of self and social skills to navigate a complex society. The personal and social skills gained in the early years, through play, exploration, and interaction, enable the child to become a responsible and respectful member of a group while developing their own skills, interests, and ambitions.

Safety Security, stability, consistency

Physiological Physical needs (food, water, air, sleep, etc.)

Personal and Social Development

Children develop:

· Seeks adult help when needed for Child moves close to teacher when sad A) Self Control emotional support or upset • Demonstrates increasing competency Child gives a peer who tries to take in recognizing own and others' emoaway her doll another one. tions • Demonstrates increasing competency Child says "I'm excited because we're in describing own and others' emogetting a new puppy tonight" tions Child lets another child finish peeling • Shows progress in expressing feelings, needs, and opinions in difficult his carrot before asking for a turn. situations and conflicts without harming themselves, others, or property • Demonstrates increasing capacity to Child is able to quietly look at books or follow rules and routines play with small toys on her mat during rest time while other children are sleeping. • Uses materials and equipment pur-When asked to clean up, child puts posefully, safely, and respectfully materials back where they belong. **B)** Self Concept • Develops and communicates a growing Child on swing says, "Look I'm pumping awareness of self as having certain abiliall by myself!" or shows pride in achieveties, characteristics, preferences, and ment by clapping for himself or smiling. rights (e.g., makes choices during the day based on personal interests) • Separates from family to participate Child waves goodbye to parent, greets her in early education setting teacher and peers and joins the daily routine. • Increases ability to adjust to new situ-Child can continue with daily routine ations when there is a substitute. • Explores and experiments with new Child participates in areas of the room interests where materials and activities have been changed. • Develops a growing understanding of Child offers a hug to another child who is how own actions affect others upset. • Begins to accept the consequences of Child helps rebuild the block tower he knocked down. own actions • Expresses pride in accomplishments Child brings a finished picture to her teacher and smiling, describes the draw-

Indicators

Examples You

These indicators refer to children three to kindergarten age. It is important to adapt activities to each child's physical, emotional, cognitive, and social abilities and to the culture and language of their home environment.

ing to the teacher.

Personal and Social Development

Children develop:

C) Social Competence

• Demonstrates an understanding of and follows through with basic responsibilities (e.g., dressing, cleanup)

Indicators

- Interacts appropriately with familiar adult(s)
- Interacts with one or more children
- Interacts respectfully and cooperatively with adults and peers
- Increases abilities to participate successfully as a member of a group through sustaining interactions with peers (e.g., helping, sharing, and discussing)
- Listens with interest and understanding to directions
- Listens with interest and understanding during conversations
- Shows increasing abilities to use compromise and discussion in play, and resolution of conflicts with peers
- Demonstrates some understanding of others' rights, uniqueness, and individuality

Child throws his trash away after snack.

Examples You

Child talks with teacher about something she saw on the way to preschool.

While playing at the water table, a child hands a pail to another child and then pours water into it.

Child listens to others and waits his turn during circle time.

Child sets table and sits down to eat with one or more peers.

Child puts crayons away, puts paper in cubby and joins group.

During a group discussion about pets, child shares that she has a pet by getting the picture of her dog out of her cubby or saying "I have a black dog."

Child offers a suggestion to peers by getting a piece of yellow paper to use as the sun when the yellow placemat they want is being used by another child.

One child advocates for another child by saying, "She had that first and he took it away."

Approaches to Learning

he young child is, by nature, curious and inquisitive. A well-designed, intentional learning environment is one in which early childhood professionals play a key role in facilitating children's play and in assessing



and building on their strengths, interests, learning, and knowledge. Such learning environments, with family support and involvement, stimulate children to explore, initiate, and problem solve, extending the child's curiosity and encouraging further questions and reflection. In such an environment, and together with meaningful communication with families, children develop the learning attitudes and skills needed to succeed in school and to remain active learners through their entire life.

Approaches to Learning

State o

Children develop:		Play Observe
A) Initiative and Curiosity	• Expresses (verbally or nonverbally) an eagerness to participate in and learn about a widening range of top- ics, ideas, and tasks	Child gets on the ground and asks, "Why are there worms after the rainstorm?"
	• Finds more than one solution to a question, task, or problem	Child experiments with different objects to balance a scale.
	• Recognizes and solves problems through active exploration, includ- ing trial and error, and interactions and discussions with peers and adults	Child completes a difficult puzzle work- ing with peers and adults.
	• Approaches tasks and activities with increasing flexibility, imagination, and inventiveness	Child uses different paintbrushes and selects different colors to create designs.
	• Engages in individual or group activ- ities that express real life experi- ences, ideas, knowledge, feelings, and fantasy	Child plays in dramatic play area.
	• Participates in an increasing variety of tasks and activities	Child chooses to read, paint and build with legos.
B) Persistence and Reflection	 Persists in and completes an increasing variety of tasks, activities, projects, and experiences 	Child continues to work on a puzzle even when he cannot easily complete it.
	 Sets goals, develops plans, and com- pletes tasks 	Child says, "Joey and I are going to make a tunnel in the sand box. We're going to use these special shovels" and then does it.
	• Demonstrates a capacity to maintain concentration for a meaningful peri- od of time on a task, set of direc- tions, or interactions, despite dis- tractions and interruptions	Child completes a collage as children and teacher come and go from the art area.
	• Applies prior experiences, senses, and knowledge to new learning situ- ations	Child remembers the sequence of ingre- dients in a cooking project.
	• Considers and implements different approaches to carrying out a task	Child loads blocks in a wagon rather than carrying them one by one.

These indicators refer to children three to kindergarten age. It is important to adapt activities to each child's physical, emotional, cognitive, and social abilities and to the culture and language of their home environment.

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Approaches to Learning

Children develop:

B) Persistence and Reflection (cont.)



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- Recognizes and solves problems independently through trial and error and by interacting with peers and adults
- Seeks help appropriately from another child or an adult when encountering a problem
- Discusses or documents important aspects of an experience and identifies what was learned
- Demonstrates new understanding by changing his/her approach and/or behavior

Child finally succeeds in getting block structure to stand by not adding the block that would cause it to fall.

Exampl

Child asks peer to hold base of block structure while selecting another block.

Child asks teacher, "Will you tie my shoe?" or indicates she needs her shoe tied by making eye contact with an adult and pointing to her untied shoe.

Child contributes to a classroom chart titled, "What we saw on our trip to the apple orchard."

Child asks through spoken words, gestures, symbols, pictures and/or signs if he can join the game instead of knocking it over.

These indicators refer to children three to kindergarten age. It is important to adapt activities to each child's physical, emotional, cognitive, and social abilities and to the culture and language of their home environment.

Creative Arts

he creative arts (music, visual arts, dance, theater) appeal to young children's different senses and are expressed through different materials and activities offered daily in the early childhood learning environ-



ment. The arts offer an outlet for emotional, creative, and physical expression, and also help young children to understand their world, acquire verbal and non-verbal abilities, problem solve, and develop confidence, self-esteem, cooperation, discipline, and self-motivation. Experience in the arts lays a foundation for lifelong use and enjoyment of many of expressive, analytical, and developmental tools valuable in their daily lives. Yet, most importantly, young children should experience the arts as a source of enjoyment, expression, and creativity.

Creative Arts

Children develop skills, knowledge and appreciation of the arts by:

Participating with increasing interest and enjoyment in a variety of music, movement, visual arts, drama activities (e.g., singing, finger plays, easel painting, and dramatic play)



Examples You May Observe

• Moves in time to music

- Shows increasing ability in keeping/moving in time to different patterns of beat and rhythm in music
- Uses different art media and materials
- Progresses in abilities to create drawings, paintings, and other art creations that reflect more detail, creativity, and/or realism
- Identifies shapes, textures, and colors
- Tells about and/or role-plays characters from stories, people in own or imagined community, people and events from own or imagined experience
- Uses props to enhance role playing and dramatic play
- Begins to understand and develop the vocabulary to share opinions about artistic creations and experiences

Child taps foot while listening to music.

Child plays triangles, bongo drum or claps to various musical works.

Child uses glue and tissue paper to make a collage.

Child paints a self portrait

Child responds to computer's spoken command by clicking on the objects that are round and red.

Child is painting and says, "I'm an artist like my uncle."

Child gets blocks to use as a table for her dolls.

Child looks at another child's painting and says, "I like the design you made."



Early Language & Literacy

o develop good thinking strategies, the early learning environment must engage young children as active learners. Young children form a strong foundation for English language arts when their emergent literacy skills (reading, writing, and speaking) are developed to build their beginning reading and writing abilities. Hands-on exposure to books and language arts, creative expression through play, and guided encouragement from adults develop the child's verbal and writing skills as well as a love of reading and the spoken word. They provide the child not only with the tools for lifelong learning, but also with the ability to become a



critical thinker and effective communicator. The early childhood learning environment provides children with opportunities to explore and understand the basic elements of spoken and written language and the ways in which these are used.

To succeed in school and life, young children must develop linguistic and cultural skills to communicate successfully in a diverse society. Language and communication are at the heart of the human experience, whether communication takes place face-to-face, in writing, or across the centuries through the reading of literature.

The early learning environment should integrate language experiences throughout the curriculum building children's vocabulary, skills in constructing sentences (grammar) and composing their thoughts (content). While some children whose home language is English may be

interested and ready to learn words of another language, many children in today's early childhood settings are English language learners—speaking a language other than English in their homes. The goal of all early childhood learning environments is to help all children gain proficiency in English, while honoring their home language and culture.

Early Language & Literacy



related to.		
A) Communicating and Listening	 Asks and answers simple questions about self and family by using learned phrases and recalled vocabulary 	Child says, "My baby sisters were just born; they're identical twins."
	• Develops increasing abilities to under- stand and use language to communi- cate information, experiences, ideas, feelings, opinions, needs, questions, and for other varied purposes	Child points to a picture of a sad face when asked, "How do you feel about going outside today?"
	 Communicates clearly enough to be understood by familiar and unfamiliar listeners 	Classroom visitors understand by child's signs and/or verbalizations that she wants more juice.
	 Uses an increasingly complex and var- ied spoken vocabulary 	Child says, "The caterpillar will form a chrysalis after it eats a lot of milkweed."
	• Progresses in listening to and under- standing the English language while maintaining home language, when the two are not the same	Child learning English responds appropri- ately to simple spoken directions (i.e. "please hang up your coat.")
	• Demonstrates increased proficiency in home and English languages (English Language Learner)	Child points to a book on the shelf and says, "I call this at my house."
B) Book Knowledge and Appreciation	• Seeks out and enjoys experiences with pictures, books, and other print materials	Child asks for a story to be read or looks at pictures in a magazine.
Understanding and appreciation that	• Handles and cares for books	Child picks up a book from the floor and returns it gently to the shelf with the cover facing out.
books and other forms of print have a purpose	• Listens to and communicates infor- mation about favorite books	When shown two different books, child selects the caterpillar book and sits down to read it.
	• Knows that books provide informa- tion about the world	After a nature walk, child looks in the non-fiction books for a picture that matches the leaves he collected.
	• Understands that a book has a title, author and illustrator	Child says, "That looks like a book by Eric Carle."
	• Knows to view one page at a time in sequence from front to back	When reading with another peer, child assists another in identifying the book's sequence by showing that a page was skipped or by saying to peer, "you skipped a page."
	• Incorporates some literacy activities into dramatic play	When playing with the telephone a child says, "I'm going to take a message" and scribbles on paper.

These indicators refer to children three to kindergarten age. It is important to adapt activities to each child's physical, emotional, cognitive, and social abilities and to the culture and language of their home environment.

Early Language & Literacy

Children develop related to:



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Early Language & Literacy Children develop knowledge and skills related to:	licitators (Examples You May Observe
E) Print Concepts Understanding that words they see in print and words they speak and hear are related.	 Recognizes own written name Identifies some labels and signs Recognizes that letters are grouped to form words. 	Child can find own name card in a bas- ket filled with name cards. Child can identify "Stop" and "Exit" signs. Child spells out the word "dog" while playing with magnetic letters.
F) Alphabet Knowledge Recognizing that sounds are associated with letters of the alphabet and that they form words.	• Identifies some letters of the alphabet	Child identifies and names letters while doing an alphabet puzzle.
G) Early Writing Using symbols to represent words and ideas.	 Understands that writing is a way of communicating Tells about experiences and discoveries, both orally and in writing, which could include child's own invented, emergent writing Experiments with growing variety of writing tools, materials, and resources, including adaptive communication and writing devices Copies or prints own name Engages in writing using letter-like symbols to make letters or words 	<text><text><text><text><text></text></text></text></text></text>

These indicators refer to children three to kindergarten age. It is important to adapt activities to each child's physical, emotional, cognitive, and social abilities and to the culture and language of their home environment.

Health & Physical Education

oung children begin to learn that health practices can affect their health and set a pattern for their lives. Adult modeling and discussion about good health practices helps equip young children with the knowledge and skills to thrive physically, men-



tally, emotionally, and socially. This helps young children meet the challenges of growing up understanding the benefits of safety, prevention, good hygiene, and appropriate medical care. Through health education, young children become aware of the dimensions of good health: physical soundness and vigor, mental alertness and ability to concentrate, expressing emotions in a healthy way, resiliency, and positive relations with others.

Health & Physical Education Children develop knowledge and skills related to:	Indicators	Examples You May Observe
A) Healthy Habits	 Makes known health-related needs and/or interests and considers possible options 	Child says through spoken word, ges- tures, symbols, pictures, and/or sign, "I'm thirsty. I need a drink."
	• Uses basic personal hygiene practices and understands that those practices help to maintain good health	While washing hands, child says "I'm getting rid of the germs before I eat."
	• Tries a variety of nutritious foods and knows the difference between health- ful foods and those with little nutri- tional value	When cooking in dramatic play, child says, "We have to eat our vegetables to keep our bodies healthy."
	• Regularly participates in active games, outdoor play and other forms of exer- cise that enhance physical fitness	Child is active when on the playground.
	 Practices safety skills for different situations 	In dramatic play, child lines up chairs and says, "sit down and put on your seat belts."
	• Links particular community helpers with given situations/needs	While playing child says, "Dial 911 and get the firefighters, the house is burning down."
B) Gross and Fine Motor Skills	• Moves with an awareness of person- al space in relationship to others	Child moves away from others during a dancing activity to avoid getting bumped or pushed.
	• Demonstrates progress with non- locomotor skills	Child can stand on one foot.
	 Shows increasing levels of proficien- cy, control and balance in walking, climbing, running, jumping, hop- ping, skipping, marching, and gal- loping 	Child walks along a crack in the side- walk
	• Demonstrates increasing abilities to coordinate movements in throwing, catching, kicking, bouncing balls, and using the slide and swing	Child kicks a ball to a friend or catches a soft toy when thrown to her.
	 Makes successful transitions between sequential motor skills 	Child completes an obstacle course that includes crawling through tunnels, walking on a balance beam, and jump- ing over a rope on the floor.

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Health & Physical Education

Children develop knowledge and skills related to:

B) Gross and Fine Motor Skills (cont.) • Demonstrates cooperative skills (following rules, taking turns, sharing equipment, etc.) while participating in

Indicato

• Grows in eye-hand coordination in building with blocks, putting together puzzles, reproducing shapes and patterns, stringing beads and using scissors

physical activities

- Develops increasing strength, dexterity, and control needed to use tools (e.g., scissors, paper punch, and stapler)
- Progresses in abilities to use writing, drawing and art tools including pencils, markers, chalk, paint brushes, and various types of adaptive technology as needed
- Uses standard and/or adaptive early childhood motor equipment safely and appropriately

Child asks peer to pull him in the wagon.

Examp

Child strings small beads.

Child uses scissors to cut roughly in a line or around a picture.

Child paints at the easel using big and small brushes to create dots, lines and circular strokes.

When signaled to cleanup, child puts away all the woodworking toys and finds an adult to store the saw properly.

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he early learning environment should provide young children with rich opportunities to discover fundamental mathematical concepts and math's relevance to daily life. Learning environments should offer a variety



of tools, such as measuring cups, balance scales, blocks, cubes, and other hands-on materials. Skillful early childhood professionals help children understand the usefulness of such tools and encourage their problem-solving skills. Such teaching practices lead to the enjoyment and appreciation of mathematics through purposeful activities, and prepare young children for a future in which mathematics and problem-solving strategies will be increasingly important in all areas of endeavor.

Mathematics

Children develop knowledge and skills related to:

A) Numbers and Number Sense

Indicators

- Demonstrates an increasing ability to count in sequence to 10 and beyond
- Matches a number of objects with written numeral
- Understands that numbers have multiple uses [e.g., measurement, recipes, prices, and ages (self and peers), phone numbers and street numbers]
- Demonstrates increasing interest and awareness of numbers and counting as a means for solving problems and determining quantity
- Identifies positions of objects in a sequence
- Uses one-to-one correspondence in counting objects and matching groups of objects
- Shows growth in matching, sorting, putting in a series, and regrouping objects according to one or two attributes such as color, shape, or size
- Demonstrates understanding of concepts whole and part
- B) Shape and Size • Builds increasing understanding of directionality, order and position of objects and words such as up, down, inside, outside, next to, in front of, behind, on top of, under
 - Recognizes, names, matches, and sorts simple shapes
 - Matches two dimensional geometric shapes
 - Recognizes and compares objects based on differences in length, volume, weight, width (thick and thin) longer?"

Child counts to ten using spoken words, signs, gestures, or pictures.

Examples You

Mav Observe

Child matches one dog to the written numeral "1".

Child says, "I live at 309 Congress Street."

Child says, "We need three more cups at the snack table" or indicates the need for three more cups by bringing them over to the snack table.

Child says, "I'm first in line, she's second"

Child touches or points to objects such as crackers while using or hearing phrases such as "one for mommy, one for daddy, one for me."

Child puts all the small red legos together.

Child puts two triangle blocks together to make a square.

Child puts the fork on top of the nap-

kin when asked to do so.

Child puts blocks away by size and shape.

Child uses pattern blocks to complete a design.

Child chooses the longer of the two blocks when asked, "Which one is

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Mathematics Children develop knowledge and skills related to:	Indicators	Examples You May Observe
B) Shape and Size (cont.)	• Uses non-standard units of measure- ment (e.g., books, hands, blocks) to measure objects	Child says, "The tiles on the floor are 10 legos long."
	 Recognizes some basic concepts of time and sequence (e.g., morning, afternoon, yesterday, today, tomorrow, before, after) 	Child says, "My mom picks me up after nap."
	• Describes simple navigation activities	Child says, "We go down the hall past the bathroom to get to our playground."
C) Mathematical Decision-making	• Responds to questions that can be answered with information gained through data analysis	Child responds through spoken words, gestures, symbols, pictures, and/or sign with appropriate answer to the ques- tion "How many children have sneak- ers with Velcro?"
	• Makes two and three dimensional depictions, such as graphs and charts, of information gathered from immediate surroundings	Child uses Popsicle sticks to represent number of family members on a class graph.
	• Uses planning to acquire a desired out- come (e.g., selecting appropriate types and quantities of materials)	Child brings 4 marbles to 4 friends who are waiting to use the marble maze.
D) Patterns	 Begins to recognize, copy, extend, and create simple patterns (e.g., sounds, objects, shapes) 	Child is making a blue star-white cir- cle, blue star-white circle necklace. After stringing a white bead she indi- cates the need for a blue star by sign- ing, pointing to, saying, or selecting the blue one.
	• Matches and sorts objects	Child puts all animals with stripes in one pile and other animals in another pile.

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he early childhood learning environment offers many opportunities for young children to explore, experience and question, thereby laying the foundation for an understanding of the scientific and technological aspects of their world. A rich science cur-



riculum provides children with the tools and techniques of early science inquiry, and stimulates them to construct theories and knowledge about the world around them through every day experience. The early childhood professional encourages active learning through both individual and cooperative exploration, building on children's innate curiosity and desire to understand the world in which they live. Through inquiry and experimentation, children also build literacy, math skills, and communication skills as they pose questions and formulate and explore their theories about the physical world in which they live.

Science

Children develop knowledge and skills related to:

A) Scientific Knowledge



- Knows differences between living and non-living things
- Sorts living things by characteristics such as movement, environment or body covering (e.g., hair, feathers, scales)
- Knows that animals live in different habitats on earth
- Knows that living things are made up of different parts
- Recognizes that most things are made of parts and that they may not work if parts are missing
- Identifies body parts and knows their functions
- Knows that plants and animals need food, water, air, and sun to survive
- Shows interest in and discovers relationships and patterns
- Expands knowledge of and respect for their environment

B) Scientific Process

- Demonstrates curiosity about the natural environment
- Explores and experiments with different materials, objects and situations
- Asks questions and proposes ways to answer them

Given a collection of pictures, child can sort objects into two groups- living and nonliving.

Child correctly separates fish from birds by looking at their feathers and scales.

Child uses a touch screen on a computer to put all animals in their corresponding homes or says, "Elephants live in the jungle and sharks live in the ocean."

When given flannel board pieces of a tree, child is able to assemble the trunk, branches and leaves correctly.

Child says, "The wagon doesn't roll because one wheel is missing."

Child points to his nose and selects the picture of a child smelling a flower.

Child alerts teacher that no one has fed the classroom pet that day.

Child matches leaves from the same kind of trees

Child tells a peer not to throw trash on the ground.

Child observes the fog and says, "It's not rain, but it feels wet."

Using a water wheel at the sensory table, a child makes the wheel go fast and slow with various amounts of water.

Child asks, "Does this magnet work under water?" and then proceeds to test it in the water table.

Science

Children develop knowledge and skills related to:

B) Scientific Process (cont.)



- Identifies problems and proposes ways to solve them
- Makes predictions and tests them
- Observes and discusses changes that occur in their world [e.g., plant growth, colors of foliage, stages of living things (caterpillar/butterfly), night and day, seasons, weather, a new building in the community]
- Observes and describes the physical properties of objects
- Observes, describes and investigates changes in materials and cause and effect relationships (e.g., cooking eggs, melting ice, making playdough)
- Uses simple tools such as measuring devices to observe differences, similarities, and change
- Develops growing abilities to collect, describe, and record information through a variety of means including observation, discussion, drawings, maps, and charts
- Makes generalizations or conclusions based on experiences

Child says, gestures, or signs, "I'm stuck," when her truck is stuck in the sand and then gets an adult to push her from behind.

Child says, "I think the boat will sink with all these animals on it," and tests the hypothesis at the water table.

Child says, "It's dark when I go home now, but in summer it was day time."

At group time, children generate a list of attributes of the tadpole.

Child experiments with red, blue, green, and yellow paint to see what colors can be created.

Child uses a stick to see how much snow fell during a weekend storm.

A child draws pictures of the changes from seed to plant.

Child shows a peer that by clicking on the sun on the computer screen, the computer will then say the word "sun."

Social Studies

Young children's neighborhoods and communities help them to form an understanding about the larger world. Their understanding of and ability to



participate cooperatively in family and group settings enables children to develop, practice, and apply skills required to be full participants in a democratic society.

Social Studies

Children develop understanding of the larger world through activities related to:

Families and Communities



- Develops understanding of self as part of a family, group, community, and culture
- Demonstrates a beginning understanding family/non-family
- Demonstrates a beginning understanding of the concept of generations
- Demonstrates a beginning understanding of past, present, and future
- Understands and discusses why certain responsibilities are important (e.g., cleaning up, caring for pets)
- Demonstrates the knowledge and skills needed to perform particular jobs and tasks
- Notices and expresses interest in different careers and workers' roles
- Dramatizes the ways people work and various aspects of their jobs
- Explores and discusses various ways people communicate, how they travel and how they live/work
- Identifies tools and technology used at home, school, and work
- Demonstrates interest in simple maps and other visuals to describe geographic location, direction, distance, size, and shape

Child draws a picture of his family and indicates the name of each member by saying, signing, or pointing to them.

Child says, "I have friend named Jose and a brother named Jose."

Child says, "My mom and I are going to visit my grandmother. She's my mommy's mommy."

Child points to the calendar and counts through spoken words, gestures, symbols, pictures, and/or signs the number of days until her special trip.

Child says, "We have to clean the guinea pig cage or it will smell."

Child washes hands before the cooking activity and gets the bowl, spoons, measuring cup and recipe to begin the project.

Child observes a man with a jackhammer and says, "He's making a hole in the road."

During circle time, children dramatize movements of people in different occupations (e.g. hammering like a carpenter, stirring like a cook, etc.)

In a book about another culture, child comments, "They sit on the floor when they eat."

Child says, "My dad has a computer just like this one at his office."

On a map of the neighborhood, child says, "There's the park across the street" or child is able to correctly point to a familiar landmark when asked, "Where is the park?"

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Social Studies

Children develop understanding of the larger world through activities related to:

Families and Communities (cont.)



- Understands that there are other cultures with different languages, foods, art, music, forms of shelter
- Appreciates the dress, holidays, and music of a country or region with a different language
- Identifies unique products of another culture such as toys, food, songs, currency, and crafts
- Knows and discusses where some products come from
- Understands the basic relationship of money to the purchase of food, shelter, goods, and services
- Demonstrates awareness of the need to protect the natural environment

Child says, "Deux is how you say two in French."

Child dances to African drum music

Child says, "This is money from my daddy's trip to Canada."

Child says, "Milk comes from a cow" or when shown several animals and asked, "Where does milk come from?" child correctly points to the cow.

While playing in the dramatic play area, child gives a peer 3 coins and gestures for him to give her the bag of apples.

Child reminds friend, "Put scrap paper in the recycle bin."
Adaptive Equipment: Equipment designed to provide children with special needs the accommodation necessary to master skills.

Glossary

Cause/Effect: Understanding how action creates a change in the environment.

Comprehension: Understanding the meaning of spoken and written languages.

- **Constructivist:** The idea that learners actively construct new knowledge and ideas for themselves based on what they already know.
- **Curriculum:** The framework for the philosophy, goals and expectations for guiding children's learning and engaging families in their children's development.

Developmentally Appropriate Practice: The manner in which children are provided opportunities to learn and practice newly acquired skills, offering challenges just beyond their present level of mastery and taking place in a setting where children are safe, valued and where physical and psychological needs are met.

Fine Motor: Using and coordinating the small muscles in the hands and wrists with dexterity.

Gross Motor: Moving the large muscles in the body, especially the arms and legs, consciously and deliberately.

Holistic: Emphasizing the importance of the whole and the interdependence of its parts.

Learning Environment: The structure of the setting that makes it possible for practitioners to guide children in their development and learning.

Least Restrictive Environment (LRE): The requirement in federal law that children with disabilities receive their education, to the maximum extent appropriate, with nondisabled peers and that children in special education are not removed from regular classes unless, even with supplemental aids and services, education in regular classes cannot be achieved satisfactorily.

Literacy: Using vocabulary, oral language, phonological awareness, letters, words, print, comprehension, books, and other print materials to help children explore, expand, and participate in their world.

Practitioner: Professional charged with guiding children's learning including teachers, caregivers, and assistants.

Predict: Use of prior knowledge to guess what an outcome will be.

- Scaffolding: An instructional technique whereby the teacher models the desired learning strategy or task, then gradually shifts responsibility to the student.
- Symbols: Scribbling, scribble writing, letter like forms, letters, numbers, and pictures used to represent sounds, words, ideas and feelings.

Visual Arts: Painting, drawing, collages, modeling, and sculpting with various materials.

Resources

American Association for the Advancement of Science. (1993). *Benchmarks for science literacy*. [Electronic version]. Retrieved on January 30, 2003, from <u>http://www.project2061.org/tools/benchol/bolframe.htm</u>

American Association for the Advancement of Science. (1999). *Dialogue on early childhood science, mathematics, and technology education*. Washington, DC: Author.

American Association for Health Education. (n.d.). *National health education standards: For students*. Retrieved April 2, 2003 from <u>http://www.aahperd.org/aahe/pdf_files/standards.pdf</u>

Bodrova, E., Leong, D. J., Paynter, D. E., Semenov, D. (2000). *A framework for early literacy instruction: Aligning standards to developmental accomplishments and students behavior. Pre-k through kindergarten* (Rev. ed.). Aurora, CO: Mid-continent Research for Education and Learning.

Bodrova, E., Paynter, D. E., Leong, D. J. (2001). Standards in the early childhood classroom [Electronic version]. *Principal, 80*(5). Retrieved April 11, 2003, from <u>http://www.naesp.org/comm/p0501d.htm</u>

Bowman, B., Donovan, M., & Burns, M. (2001). *Eager to learn: Educating our preschoolers*. Washington, DC: National Academy Press.

Bredekamp, S., & Copple, C. (1997). *Developmentally appropriate practice in early childhood programs*. Washington, DC: National Association for the Education of Young Children.

Conezio, K., & French, L. (2002). Science in the preschool classroom: Capitalizing on children's fascination with the everyday world to foster language and literacy development. *Young Children* 57(5), 12-18.

Consortium of National Arts Education Associations. (1994). National standards for arts education. Reston, VA: Author.

Consortium for Policy Research Education. (1993). *Developing content standards: Creating a process for change* (Policy Brief). New Brunswick, NJ: CPRE. Retrieved March 15, 2003 from http://:www.ed.gov/pubs/CPRE/rb10stan.html

Copley, J. V. (2000). *The young child and mathematics*. Washington, DC: National Association for the Education of Young Children.

Georgia Office of School Readiness. (2001). *Georgia prekindergarten program learning goals*. Atlanta, GA: Author

Helm, J. H., & Gronlund, G. (2000). Linking standards and engaged learning in the early years. *Early Childhood Research & Practice,* 2(1). Retrieved on January 14, 2003, from <u>http://ecrp.uiuc.edu/v2n1/helm.html</u>

Kendall, J. S. (2003). Setting standards in early childhood education. *Educational Leadership*, 60(7), 64-68.

Kennebec Valley Community Action Program Child and Family Services. (n.d.). *Head Start learning results*. Waterville, ME: Author

Maine Department of Education. (1997). State of Maine learning results. Augusta, ME: Author.

Maslow, A. H. (1998). Toward a psychology of being (3rd ed.). New York: John Wiley & Sons.

Minnesota Department of Children, Families & Learning. (2000). *Minnesota early childhood indicators of progress: A resource guide*. Roseville, MN: Author

National Association for the Education of Young Children & International Reading Association. (1998). Learning to read and write: Developmentally appropriate practices for young children (A joint position statement). Retrieved January 10, 2003 from <u>http://www.naeyc.org/resources/position_statements/earlylearn.pdf</u>

National Association for the Education of Young Children & National Association of Early Childhood Specialists in State Departments of Education. (2002). *Early learning standards: Creating conditions for success* (A joint position statement). Retrieved February 19, 2003 from <u>http://www.naeyc.org/resources/position_statements/position_statement.pdf</u>

National Association for the Education of Young Children & National Council for Teachers of Mathematics. (2002). *Early childhood mathematics: Promoting good beginnings* (A joint position statement). Retrieved January 10, 2003 from http://www.naeyc.org/resources/position_statements/psmath.pdf

National Council for Geographic Education. (n.d.). *The eighteen national geography standards*. Retrieved February 20, 2003, from <u>http://www.ncge.org/publications/tutorial/standards/</u>

National Council of Teachers of Mathematics. (2000). *Principles and standards for school mathematics*. [Electronic version]. Retrieved April 21, 2003, from <u>http://standards.nctm.org/document/index.htm</u>

National Pre-K Standards Panel. (2002). *Pre-kindergarten standards: Guidelines to teaching and learning*. Monterey, CA: CTB/McGraw Hill.

Neuman, S. B. (2002). What research reveals: Foundations for reading instruction in preschool and primary education. Washington, DC: U.S. Department of Education.

Payne, J. N. (Ed.). (1990). Mathematics for the young child. Reston, VA: National Council of Teachers of Mathematics.

Rhode Island Department of Elementary and Secondary Education. (2003). *Rhode Island early learning standards. Final draft.* Providence, RI: Author

Shepard, L., Kagan, S. L., & Wurtz, E. (2001). Principles and recommendations for early childhood assessments. *The State Education Standard*, 2(2), 5-12.

Shonkoff, J. P., & Phillips, D. A. (Eds.). (2000). From neurons to neighborhoods: The science of early childhood development. Washington, DC: National Academy Press.

State of Maine. (n.d.). *Maine personalized alternative assessment portfolio performance indicator rubrics*. Augusta, ME: Author.

Task Force on Children's Learning and the Arts, & Bruce, C. (1998). Young children and the arts: Making creative connections. Washington, DC: Arts Education Partnership.

U.S. Department of Health and Human Services. (2001). Head Start child outcomes framework. Washington, DC: Author.

Wheatley, K. F. (2003). Promoting the use of content standards: Recommendations for teacher educators. *Young Children*, 58(2), 96-102.

White House. (2002). Good Start, Grow Smart: *The Bush Administration's early childhood initiative. Executive summary.* Retrieved February 28, 2003, from *http://www.whitehouse.gov/infocus/earlychildhood/earlychildhood.pdf*

Wyoming Department of Education. (n.d.). Early childhood readiness standards (draft). Cheyenne, WY: Author.

Appendix A

Personal and Social Development Children develop:	Indicators	Crosswalk to Head Start Child Outcomes Framework	Crosswalk to Maine Learning Results by Content Area or Cluster
A) Self Control	 Seeks adult help when needed for emotional support Demonstrates increasing competency in recogniz- ing own and others' emotions Demonstrates increasing competency in describ- ing own and others' emotions Shows progress in expressing feelings, needs, and opinions in difficult situations and conflicts without harm- ing themselves, others, or property Demonstrates increasing capacity to follow rules and routines Uses materials and equipment purposefully, safely, and respectfully 	Social and Emotional Development Self Concept Self Control	Career Preparation English Language Arts 2) Writing and Speaking Health and Physical Education 2) Health Skills
B) Self Concept	 Develops and communicates a growing awareness of self as having certain abilities, characteristics, preferences, and rights (e.g., makes choices during the day based on personal interests) Separates from family to participate in early education setting Increases ability to adjust to new situations Explores and experiments with new interests Develops a growing understanding of how own actions affect others 	Social and Emotional Development Cooperation	Career Preparation English Language Arts 2) Writing and Speaking Health and Physical Education 2) Health Skills

Personal and Social Development Children develop: B) Self Concept (cont.)	 Indicators Begins to accept the consequences of own actions Expresses pride in accomplishments 	Crosswalk to Head Start Child Outcomes Framework Social and Emotional Development Cooperation	Crosswalk to Maine Learning Results by Content Area or Cluster Career Preparation English Language Arts 2) Writing and Speaking Health and Physical Education 2) Health Skills
C) Social Competence	 Demonstrates an understanding of and follows through with basic responsibilities (e.g., dressing, clean-up) Interacts appropriately with familiar adult(s) Interacts with one or more children Interacts respectfully and cooperatively with adults and peers Increases abilities to participate successfully as a member of a group through sustaining interactions with peers (e.g., helping, sharing, and discussing) Listens with interest and understanding to directions Listens with interest and understanding dur- ing conversations Shows increasing abili- ties to use compromise and discussion in play, and resolution of con- flicts with peers Demonstrates some understanding of oth- ers' rights, uniqueness, and individuality 	Social and Emotional Development	Career Preparation English Language Arts 2) Writing and Speaking Health and Physical Education 2) Health Skills

Approaches to Learning Children develop:	Indicators	Crosswalk to Head Start Child Outcomes Framework	Crosswalk to Maine Learning Results by Content Area or Cluster
A) Initiative and Curiosity	 Expresses (verbally or nonverbally) an eager- ness to participate in and learn about a widening range of topics, ideas, and tasks Finds more than one solution to a question, task, or problem Recognizes and solves problems through active exploration, including trial and error, and inter- actions and discussions with peers and adults Approaches tasks and activities with increasing flexibility, imagination, and inventiveness Engages in individual or group activities that express real life experi- ences, ideas, knowledge, feelings, and fantasy Participates in an increasing variety of tasks and activities 	Approaches to Learning Initiative and Curiosity	Career Preparation



Approaches to Learning Children develop:	Indicators	Crosswalk to Head Start Child Outcomes Framework	Crosswalk to Maine Learning Results by Content Area or Cluster
B) Persistence and Reflection	 Persists in and completes an increasing variety of tasks, activities, projects, and experiences Sets goals, develops plans, and completes tasks Demonstrates a capacity to maintain concentra- tion for a meaningful period of time on a task, set of directions, or inter- actions, despite distrac- tions and interruptions Applies prior experi- ences, senses, and knowledge to new learn- ing situations Considers and imple- ments different approaches to carrying out a task Alters approach to tasks when initial approach does not work Recognizes and solves problems independently through trial and error and by interacting with peers and adults Seeks help appropriately from another child or an adult when encountering a problem Discusses or documents important aspects of an experience and identifies what was learned Demonstrates new learn- ing by changing his/her approach and/or behav- ior 	Approaches to Learning Engagement and Persistence	Career Preparation

Creative Arts	Indicators	Crosswalk to	Crosswalk to Maine
Children develop skills,		Head Start	Learning Results by
knowledge and appreciation		Child Outcomes	Content Area or
of the arts by:		Framework	Cluster
Participating with increas- ing interest and enjoy- ment in a variety of music, movement, visual art, drama activities (e.g., singing, finger plays, easel painting, and dramatic play)	 Moves in time to music Shows increasing ability in keeping/moving in time to different patterns of beat and rhythm in music Uses different art media and materials (e.g., paint, crayons, Play dough, paper, glue) in a variety of ways for creative expression and presenta- tion Progresses in abilities to create drawings, paint- ings, and other art cre- ations that reflect more detail, creativity, and/or realism Identifies shapes, tex- tures, and colors Tells about and/or role- plays characters from stories, people in own or imagined community, people and events from own or imagined experi- ence Uses props to enhance role playing and dramat- ic play Begins to understand and develop the vocabulary to share opinions about artistic creations and experiences 	Creative Arts Music Movement Art Dramatic Play	Visual and Performing Arts



Early Language and Literacy Children develop knowledge and skills related to:	Indicators	Crosswalk to Head Start Child Outcomes Framework	Crosswalk to Maine Learning Results by Content Area or Cluster
A) Communicating and Listening	 Asks and answers simple questions about self and family by using learned phrases and recalled vocabulary Develops increasing abilities to understand and use language to communicate information, experiences, ideas, feelings, opinions, needs, questions, and for other varied purposes Communicates clearly enough to be understood by familiar and unfamiliar listeners Uses an increasingly complex and varied spoken vocabulary Progresses in listening to and understanding the English language while maintaining home language, when the two are not the same Demonstrates increased proficiency in home and English Language Learner) 	Language Development Speaking and Communicating	2) Writing and Speaking
B) Book Knowledge and Appreciation Understanding and appre- ciation that books and other forms of print have a purpose.	 Seeks out and enjoys experiences with pic- tures, books, and other print materials Handles and cares for books Listens to and communi- cates information about favorite books Knows that books pro- vide information about the world Understands that a book has a title, author and illustrator 	Literacy Book Knowledge and Appreciation	1) Reading and Viewing

Early Language and Literacy Children develop knowledge and skills related to:	Indicators	Crosswalk to Head Start Child Outcomes Framework	Crosswalk to Maine Learning Results by Content Area or Cluster
 B) Book Knowledge and Appreciation (cont.) Understanding and appreciation that books and other forms of print have a purpose. 	 Knows to view one page at a time in sequence from front to back Incorporates some litera- cy activities into dramatic play 	Literacy Book Knowledge and Appreciation	1) Reading and Viewing
C) Comprehension Understanding that spoken and written words have meaning	 Identifies objects from books Retells information from a story Demonstrates understanding of basic plots of simple stories in a variety of ways (e.g., retelling, role play, illustrating, responding to questions) Make reasonable predictions about what will happen next or how things might have turned out differently in a story Makes observations about the use of words and pictures Understands the main idea of simple information 	Literacy Print Awareness and Concepts	1) Reading and Viewing
D) Sounds in Spoken Language Phonological Awareness (the ability to hear and work with the sounds of spoken language) Phonemic Awareness (understanding that spoken words are made up of sep- arate, small sounds)	 Recites simple poems or nursery rhymes Develops an awareness of word sounds and rhythms of language Knows that different words can begin with the same sound Recognizes that sounds are associated with let- ters of the alphabet and that they form words Recognizes characteristic sounds and rhythms of language, including the relationship between sounds and letters 	Language Development Listening and Understanding	1) Reading and Viewing 2) Writing and Speaking

Early Language and Literacy Children develop knowledge and skills related to:	Indicators	Crosswalk to Head Start Child Outcomes Framework	Crosswalk to Maine Learning Results by Content Area or Cluster
E) Print Concepts Understanding that words they see in print and words they speak and hear are related	 Recognizes own written name Identifies some labels and signs Recognizes that letters are grouped to form words 	Literacy Early Writing Alphabet Knowledge	1) Reading and Viewing 2) Writing and Speaking
F) Alphabet Knowledge Recognizing that sounds are associated with letters of the alphabet and that they form words	• Identifies some letters of the alphabet	Literacy Alphabet Knowledge	1) Reading and Viewing
G) Early Writing Using symbols to represent words and ideas	 Understands that writing is a way of communicating Tells about experiences and discoveries, both orally and in writing, which could include child's own invented, emergent writing Experiments with growing variety of writing tools, materials, and resources, including adaptive communication and writing devices Copies or prints own name Engages in writing using letter-like symbols to make letters or words. 	Literacy Early Writing	2) Writing and Speaking 3) Integrated Literacy

Health and Physical Education Children develop knowledge and skills related to:	Indicators	Crosswalk to Head Start Child Outcomes Framework	Crosswalk to Maine Learning Results by Content Area or Cluster
A) Healthy Habits	 Makes known health- related needs and/or interests and considers possible options Uses basic personal hygiene practices and understands that those practices help to main- tain good health Tries a variety of nutri- tious foods and knows the difference between healthful foods and those with little nutri- tional value Regularly participates in active games, outdoor play and other forms of exercise that enhance physical fitness Practices safety skills for different situations Links particular commu- nity helpers with given situations/needs 	Physical Health and Development Health Status and Practice	1) Health Knowledge 2) Health Skills



Health and Physical Education Children develop knowledge and skills related to:	Indicators	Crosswalk to Head Start Child Outcomes Framework	Crosswalk to Maine Learning Results by Content Area or Cluster
Motor Skills	 Moves with an awareness of personal space in rela- tionship to others Demonstrates progress with non-locomotor skills Shows increasing levels of proficiency, control and balance in walking, climbing, running, jump- ing, hopping, skipping, marching, and galloping Demonstrates increasing abilities to coordinate movements in throwing, catching, kicking, bounc- ing balls, and using the slide and swing Makes successful transi- tions between sequential motor skills Demonstrates coopera- tive skills (following rules, taking turns, shar- ing equipment, etc.) while participating in physical activities Grows in eye-hand coor- dination in building with blocks, putting together puzzles, reproducing shapes and patterns, stringing beads and using scissors Develops increasing strength, dexterity, and control needed to use tools (e.g., scissors, paper punch, and stapler) Progresses in abilities to use writing, drawing and art tools including pen- cils, markers, chalk, paint brushes, and vari- ous types of adaptive technology as needed Uses standard and/or adaptive early childhood motor equipment safely and appropriately 	Physical Health and Development	3) Physical Education Knowledge and Skills

Mathematics Children develop knowledge and skills related to:	Indicators	Crosswalk to Head Start Child Outcomes Framework	Crosswalk to Maine Learning Results by Content Area or Cluster
A) Numbers and Number Sense	 Demonstrates an increasing ability to count in sequence to 10 and beyond Matches a number of objects with written numeral Understands that numbers have multiple uses [e.g., measurement, recipes, prices, and ages (self and peers), phone numbers and street numbers] Demonstrates increasing interest and awareness of numbers and counting as a means for solving problems and determining quantity Identifies positions of objects in a sequence Uses one-to-one correspondence in counting objects and matching groups of objects Shows growth in matching, sorting, putting in a series, and regrouping objects according to one or two attributes such as color, shape, or size Demonstrates understanding of concepts whole and part 	Mathematics Numbers and Operations	1) Numbers and Operations
B) Shape and Size	• Builds increasing under- standing of directionality, order and position of objects and words such as up, down, inside, out- side, next to, in front of, behind, on top of, under	Mathematics Geometry and Spatial Sense	2) Shape and Size

• Recognizes, names, matches, and sorts simple shapes

• Matches two dimensional geometric shapes

Mathematics	Indicators	Crosswalk to	Crosswalk to Maine
Children develop		Head Start	Learning Results by
knowledge and skills		Child Outcomes	Content Area or
related to:		Framework	Cluster
B) Shape and Size (cont.)	 Recognizes and compares objects based on differences in length, volume, weight, width (thick and thin) Uses non-standard units of measurement (e.g., books, hands, blocks) to measure objects Recognizes some basic concepts of time and sequence (e.g., morning, afternoon, yesterday, today, tomorrow, before, after) Describes simple navigation activities 	Mathematics Geometry and Spatial Sense	2) Shape and Size

C) Mathematical Decision-making	• Responds to questions that can be answered with information gained through data analysis	Mathematics	3) Mathematical Decision-making
	 Makes two and three dimensional depictions, such as graphs and charts, of information gathered from immedi- ate surroundings 		
	• Uses planning to acquire a desired outcome (e.g., selecting appropriate types and quantities of materials)		

 D) Patterns Begins to recognize, copy, extend, and create simple patterns (e.g., sounds, objects, shapes) Matches and sorts objects 	Mathematics Patterns and Measurements	4) Patterns
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Science	Indicators	Crosswalk to	Crosswalk to Maine
Children develop		Head Start	Learning Results by
knowledge and skills		Child Outcomes	Content Area or
related to:		Framework	Cluster
A) Scientific Knowledge	 Knows differences between living and non- living things Sorts living things by characteristics such as movement, environment, or body covering (e.g., hair, feathers, scales) Knows that animals live in different habitats on earth Knows that living things are made up of different parts Recognizes that most things are made of parts and that they may not work if parts are missing Identifies body parts and knows their functions Knows that plants and animals need food, water, air, and sun to sur- vive Shows interest in and discovers relationships and patterns Expands knowledge of and respect for their environment 	Science Scientific Knowledge	 1) Life Science 2) Physical Sciences 3) Earth and Space Sciences 4) Nature and Implications of Science



Science	Indicators	Crosswalk to	Crosswalk to Maine
Children develop		Head Start	Learning Results by
knowledge and skills		Child Outcomes	Content Area or
related to:		Framework	Cluster
B) Scientific Process	 Demonstrates curiosity about the natural environment Explores and experiments with different materials, objects and situations Asks questions and proposes ways to answer them Identifies problems and proposes ways to solve them Makes predictions and tests them Observes and discusses changes that occur in their world [e.g., plant growth, colors of foliage, stages of living things (caterpillar/butterfly), night and day, seasons, weather, a new building in the community] Observes and describes the physical properties of objects Observes, describes and investigates changes in materials and cause and effect relationships (e.g., cooking eggs, melting ice, making playdough) Uses simple tools such as measuring devices to observe differences, sim- ilarities, and change Develops growing abili- ties to collect, describe, and record information through a variety of means including obser- vation, discussion, draw- ings, maps, and charts Makes generalizations or conclusions based on experiences 	Science Scientific Skills and Methods	 1) Life Science 2) Physical Sciences 3) Earth and Space Sciences 4) Nature and Implications of Science

Social Studies Children develop knowledge and skills related to:	Indicators	Crosswalk to Head Start Child Outcomes Framework	Crosswalk to Maine Learning Results by Content Area or Cluster
Families and Communities	 Develops understanding of self as part of a family, group, community, and culture Demonstrates a begin- ning understanding fami- ly/non-family Demonstrates a begin- ning understanding of the concept of genera- tions Demonstrates a begin- ning understanding of past, present, and future Understands and discuss- es why certain responsi- bilities are important (e.g., cleaning up, caring for pets) Demonstrates the knowl- edge and skills needed to perform particular jobs and tasks Notices and expresses interest in different careers and workers' roles Dramatizes the ways people work and various aspects of their jobs Explores and discusses various ways people communicate, how they travel and how they live/work Identifies tools and tech- nology used at home, school, and work Demonstrates interest in simple maps and other visuals to describe geo- graphic location, direc- tion, distance, size, and shape Understands that there are other cultures with different languages, foods, art, music, forms of shelter 	Social and Emotional Development Knowledge of Families and Communities	 Career Preparation Civics and Government History Geography Economics

Social Studies	Indicators	Crosswalk to	Crosswalk to Maine
Children develop		Head Start	Learning Results by
knowledge and skills		Child Outcomes	Content Area or
related to:		Framework	Cluster
Families and Communities (cont.)	 Appreciates the dress, holidays, and music of a country or region with a different language Identifies unique products of another culture such as toys, food, songs, currency, and crafts Knows and discusses where some products come from Understands the basic relationship of money to the purchase of food, shelter, goods, and services Demonstrates awareness of the need to protect the natural environment 	Social and Emotional Development Knowledge of Families and Communities	 Career Preparation Civics and Government History Geography Economics







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