

# Nevada Pre-Kindergarten Standards Revised and Approved: 2010

Building a Foundation for School Readiness  
and Success in Pre K-12 and Beyond



This document is made possible through funding and support by



# Nevada State Board of Education

## Nevada State Board for Career and Technical Education

**Christopher Wallace, President**

**Gloria Bonaventura**

**Craig Wilkinson**

**Annie Yvette Wilson**

**Dave Cook, Clerk**

**Stavan Corbett**

**Dr. Cliff Ferry, Vice President**

**Willia Chaney**

**Sandy Metcalf**

**Adriana Fralick**

**Zhan Okuda-Lim, Ex Officio**

**Keith Rheault**

Superintendent of Public Instruction

**Gloria Dopf, Deputy Superintendent**

Instructional Research and Evaluation Services

**Greg Weyland, Deputy Superintendent**

Fiscal and Administrative Services

**Rorie Fitzpatrick, Director**

Office of Special Education, Elementary and Secondary Education,  
and School Improvement Programs

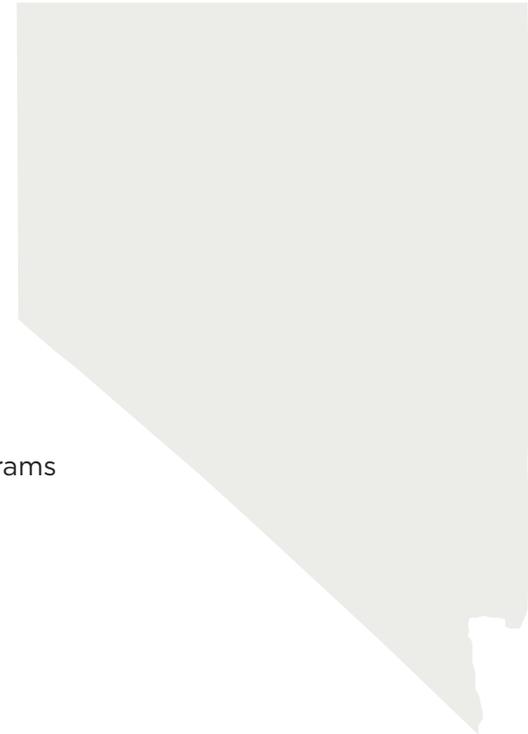
**Nevada Department of Education**

Office of Special Education, Elementary and Secondary Education, and School Improvement Programs

700 East Fifth Street, Suite 113

Carson City, NV 89701-5096

(775) 687-9171 Fax (775) 687-9250



# TABLE OF CONTENTS

Acknowledgements .....	3
Thanks and Recognition .....	4
List of Acronyms .....	5
Nevada Pre-K Content Standards Introduction .....	6
Purpose of the Pre-K Standards .....	6
History of the Nevada Pre-K Standards .....	8
Guiding Principles .....	9
Pre-K Content Standards Format .....	11
Common Core Standards .....	12
Nevada’s Early Childhood Comprehensive System .....	13
Professional Development System .....	15
Inclusive Learning Environments in Pre-K Programs .....	16
Culture, Diversity and Language.....	18
What is High Quality Pre-K? .....	18
School Readiness .....	19
Key to Standards Identification and Cross Referencing Links .....	20
Early Learning Guidelines and Pre-K Standards Alignment Crosswalk.....	21
Mathematics .....	22
Science .....	27
Language and Early Literacy .....	32
Social Studies / Social Emotional.....	42
Approaches to Learning: Creative Expression .....	52
Physical Development and Health .....	67
Nevada K-12 Content and Common Core Standards .....	77
Glossary .....	82
Appendix .....	87
References .....	100



# ACKNOWLEDGEMENTS

The Nevada Department of Education would like to thank the Nevada Pre-K Content Standards Revision Committee for their hard work and contribution to this document. The revised document has been designed to be a useful tool to help teachers with planning and implementing the standards into their curriculum. This document is also developed for parents. Material from the original parent and teacher guidebooks has been included in this document. Some of the original writing team members contributed to this revised version.

## 2010 Pre-K Content Standards Revision Committee

**Kathlene Banak\***, Clark County School District

**Dr. Cheryl Brecheisen**, College of Southern Nevada

**Dr. Melissa Burnham**, University Of Nevada, Reno

**Margot Chappel**, Head Start Collaboration

**Cindy Duarte**, Clark County School District

**Dr. Joanne Everts\***, Washoe County School District

**Tracy Gruber\***, Nevada Department of Education

**Sherry Halley\***, Nevada Department of Education

**Stephanie Hartman\***, Nevada Department of Education

**Lori Magnante**, Western Nevada Community College

**Lynette Macfarlan**, Great Basin College

**Cindy Johnson**, State of Nevada - Office of Early Care and Education

**Shelly Nye\***, The Nevada Registry

**Dawna Ogden**, Washoe County School District

**Connie Poulton\***, Nevada Department of Education

**Peggy Pulver\***, Washoe County School District

**Sue Turbow**, Truckee Meadows Community College

**Anna Severens\***, Nevada Department of Education

**Tina Schennum Springmeyer\***, Nevada Pre-K Standards

**Crystal Swank**, Truckee Meadows Community College

**Richard Vineyard\***, Nevada Department of Education

## Primary Authors

**Tina Springmeyer**, Nevada Pre-K Standards Program

**Anna Severens**, Nevada Department of Education

## Editor

**Terry Randolph**, Washoe County School District

\* Writing Team Participant



# We would like to thank and recognize the Nevada Pre-K Content Standards 2004 Original Writing Committee:

Keith Allred, Nevada Department of Education  
Rita Hemmert, Washoe County School District  
Mara Anderson, Kids Klub Preschool  
Joelene Holmes, Calvary Baptist Church Preschool  
Nancy Kay Arnold, Cottonwood Elementary School  
Pat Hunter, McCaw Elementary School  
Gilda Austin, Clark County School District  
Cindy Johnson, State of Nevada - Office of Early Care and Education  
Kathy Biagi, Head Start State Collaboration  
Debby LaRocca, Clark County School District  
Diane Branson, Special Children's Clinic  
Janie Lowe, Nevada Department of Education  
James Brandt, Nevada Department of Education  
Lori Magnante, Western Nevada Community College  
Meg Burns, Lyon County School District  
Sally Martin, University of Nevada, Reno Cooperative Extension  
Karen Dickinson, Up and Away Learning Center  
Christine Matiash, State of Nevada - Office of Early Care and Education  
Cindy Duarte, Clark County School District  
Diane Neese, Clark County School District  
Leanna Dyer, CSA Head Start

Diane Nicolet, Truckee Meadows Community College Child Care Center  
Mary Eldridge, Little People's Head Start  
Rebecca Noveroske, The Child Garden  
Eva Essa, University of Nevada, Reno  
Peggy Pulver, Washoe County School District  
Joanne Everts, Washoe County School District  
Cheryl Rowe, Community College of Southern Nevada  
Stacey Francois, Washoe Tribe of Nevada and California Head Start  
Paulette Scott, Economic Opportunity Board  
Diane Hardy, Classroom on Wheels  
Cindy Sharp, Nevada Department of Education  
Paula Hawkins, Bureau of Services for Child Care  
Barbara Sloan, Jacks Valley Elementary School  
Crystal Swank, University of Nevada, Reno & Cooperative Extension  
Lynn Turner, Clark County School District  
Laurel Swetnam, Southern Regional Early Childhood Services  
Mary Tyler, Pershing County School District  
Joan Taylor, Nevada Department of Education  
Sherry Waugh, University of Nevada, Reno  
Sue Turbow, Truckee Meadows Community College  
Dan Weigel, University of Nevada, Reno Cooperative Extension

# THANK YOU

# List of Acronyms



<b>ARRA</b>	American Reinvestment and Recovery Act	<b>IRA</b>	International Reading Association
<b>CCDF</b>	Child Care and Development Fund	<b>K-12</b>	Kindergarten through 12th Grade
<b>CCSSO</b>	Council of Chief State School Officers	<b>NAEYC</b>	National Association for the Education of Young Children
<b>CKA</b>	Core Knowledge Areas	<b>NASPE</b>	National Association for Sports and Physical Education
<b>CNAEA</b>	Consortium of National Arts Education Associations	<b>NCTM</b>	National Council of Teachers of Mathematics
<b>CSN</b>	College of Southern Nevada	<b>NDE</b>	Nevada Department of Education
<b>DEC</b>	Division for Early Childhood	<b>NECTAC</b>	National Early Childhood Technical Assistance Center
<b>DHHS</b>	Department of Health and Human Services	<b>NevAEYC</b>	Nevada Association for the Education of Young Children
<b>ECAC</b>	Early Childhood Advisory Council	<b>NGA</b>	National Governors Association
<b>ECCS</b>	Early Childhood Comprehensive System	<b>NRC</b>	National Research Council
<b>ECE</b>	Early Care and Education	<b>NIEER</b>	National Institute for Early Education Research
<b>ELA</b>	Early Literacy Activities	<b>Pre-K</b>	Pre-Kindergarten
<b>ELG</b>	Early Learning Goals	<b>QRIS</b>	Quality Rating and Improvement System
<b>GBC</b>	Great Basin College	<b>TMCC</b>	Truckee Meadows Community College
<b>ICC</b>	Interagency Coordinating Council	<b>UNLV</b>	University of Nevada, Las Vegas
<b>IDEA</b>	Individuals with Disabilities Education Act	<b>UNR</b>	University of Nevada, Reno
<b>IEP</b>	Individualized Educational Program	<b>WCSD</b>	Washoe County School District
<b>IM</b>	Institute of Medicine	<b>WNC</b>	Western Nevada College

## Nevada Pre-Kindergarten Content Standards Introduction

Welcome to the 2010 revised edition of the Nevada Pre-Kindergarten (Pre-K) Content Standards, which provides the framework for curriculum and instruction in all of Nevada's Pre-K classrooms. The revised standards include the content standards as well as resources and materials that were previously printed in the teacher and family guidebooks. The content standards are used for planning curriculum, assessing growth and development, and for sharing important information with families. This document is a joint effort supported by the Nevada Department of Education's (NDE) Office of Special Education, Elementary and Secondary Education, and School Improvement Programs, aligning with the Nevada K-12 Content Standards, as well as the Nevada Department of Health and Human Services (DHHS) and the Child Care and Development Fund (CCDF).

"A child's most important  
brain development occurs  
before age 5."  
~Pre-K Now

Recent information about children's development and learning underscores the importance of high-quality early education and care. Research has revealed overwhelming evidence that young children are learning from their earliest months and years. We know that high-quality educational experiences have a positive impact on learning in later years. In addition, research has shown that young children who live in circumstances that increase their risk of school failure are much more likely to be successful in school if they participate in high-quality early learning programs. As the nation looks to its future in a global society, especially to its need for an educated and skilled workforce, economists have also calculated the benefits of increased investments in early education. Their findings show a greater likelihood that young people will become economic and social contributors to society; that federal, state, and local governments will be able to reduce investments in remediation, incarceration, and welfare; and that a better-educated workforce will be able to support the nation's continuing economic growth (PreKNow 2009).

### Purpose of the Pre-Kindergarten Standards

The Nevada Pre-K Standards describe appropriate outcomes for children at the end of their preschool experiences and entering kindergarten. Therefore, when reading the standards one should think in terms of the child's final learning outcome before entering kindergarten. The standards are guidelines to be used with all children in any early education setting, such as childcare centers, family childcare homes, Head Start, preschools and school district Pre-K programs. As the importance of early childhood education continues to grow, new initiatives and research are recognizing pre-kindergarten as a foundation of school success. This paradigm shift can be seen by the following recent collaborations and focus on early childhood. The current administration, US Department of Education and US Department of Health and Human Services have a new level of collaboration with an unprecedented level of attention on early childhood. They are encouraging states to make early childhood a priority through recent initiatives such as the American Reinvestment and Recovery Act (ARRA), Race to the Top, Early Learning Challenge Grants, Early Childhood Advisory Councils, and P-20 Councils.

In a world where the  
achievement gap starts  
before kindergarten, we  
must work to close the  
gap where it starts.

P-20 can best be defined as a system in which education partners work together to align each level of education---preschool, elementary, middle school, high school, two-year and four-year colleges, and post-graduate education as well as workforce training. The P-20 initiatives are gaining in attention and identify the need to connect the early childhood and K-12 systems and, furthermore, to be a crucial link to school reform and school improvement.

The State of Nevada has a new focus and a commitment to providing high quality early childhood programs and services. This has led to a broader vision of an integrated P-3 system. The state's plans for a comprehensive P-3 system will link children's experiences in preschool with kindergarten and primary grades largely through; alignment of curricula, the development of Pre-K standards and ongoing joint professional development for principals and teachers. Nevada's Division of Early Childhood Education and other early childhood stakeholders have designated the creation of a P-3 system as a priority.

Research continues to focus on the importance of learning in the early years. Publications such as *Eager to Learn*, *Preventing Reading Difficulties in Young Children*, and *From Neurons to Neighborhoods* have detailed research that supports the importance of the early years in future student achievement. The No Child Left Behind legislation focuses on the need for accountability in supporting student achievement for all children. The standards movement in the U.S. has articulated key benchmarks for student achievement at each grade level Pre-K-12 in academic content areas. These standards have impacted the quality of educational programs and have improved student achievement across the country. The standards movement continues to move forward, with the majority of states now having Pre-K Standards; and more than half report having Infant-Toddler early learning guidelines.

Over the past few years, organizations such the National Association for the Education of Young Children (NAEYC), the International Reading Association, and The National Council for the Teachers of Mathematics have provided forums and policy statements concerning the development of standards for Pre-K learning. Through the No Child Left Behind legislation and the Good Start, Grow Smart Initiative, programs supported by CCDF and NDE are linked through the development of standards. These standards are to be used in preschool programs supported and operated through NDE as well as child care programs supported through the CCDF.



**The table below identifies a few of the benefits and pitfalls when implementing standards:**

<b>Pros to Early Learning Standards</b>	<b>Cons or “pitfalls” to AVOID</b>
<ul style="list-style-type: none"> <li>• Provide richness to teacher/adult conversations about children’s growth and learning.</li> <li>• Can match standards to what we are doing in the classroom.</li> <li>• Can be linked to K-12 standards so that we are indeed contributing to school readiness.</li> <li>• Help identify next steps and transitions</li> <li>• Strategy for professionalizing the field</li> <li>• Help communicate across the grades, among teachers, and with the public.</li> <li>• Help us to have higher, developmentally appropriate expectations for children.</li> <li>• Result in authentic assessments that tie to standards</li> <li>• Provide accountability</li> </ul> <p>(Gronlund, 2006)</p>	<ul style="list-style-type: none"> <li>• May lead to teaching to the standards only in a cookie-cutter style curriculum. Then the uniqueness of early childhood education is lost.</li> <li>• They bring a pressure of accountability with the risk of a push-down in curriculum and inappropriate expectations for younger children.</li> <li>• Direct instruction is assumed as the only way to guarantee that standards are addressed. The children’s learning in self-directed, exploratory ways is not trusted.</li> <li>• They can contribute to a “we/they” mentality between preschool and elementary teachers.</li> <li>• They take time for early educators to learn and work through, to figure out how to integrate into best practices. There is a need for reflection and interaction among colleagues in order to do so.</li> <li>• They can result in testing and other inappropriate assessment methods being used.</li> <li>• There is little money to support education and training of early educators in the standards and how best to use them.</li> </ul>

# History of the Nevada Pre-K Standards

A group of early childhood professionals representing Nevada from the Nevada Department of Education (NDE) and local school districts, Head Start and child care attended the U.S. Department of Education Early Childhood Educator Academy in Los Angeles in November 2002. This core group of professionals became the nucleus for the Steering Committee for the development of Nevada Pre-K State Standards. The Steering Committee met in December 2002 to design a framework and timeline for the development of Nevada's standards. The NDE and the Office of Early Care and Education (OECE) provided leadership and funding for this development process through CCDF quality funding. The committee collected and reviewed standards from other states, as well as Head Start standards and standards developed by CTB/McGraw-Hill.

The Steering Committee developed a list of stakeholders across the state to be invited to participate in the development and implementation of the Pre-K Standards. Invitations to attend the first meeting were sent out to over 150 early childhood educators representing:

<p>Childcare providers (for profit and non profit)          Family childcare providers          Nevada Department of Education Early Childhood          Nevada Department of Education Early Childhood Special Education          Nevada Council for K-12 Standards Committee members          All school district superintendents and early childhood education representatives          Kindergarten teachers          Early Childhood Special Education teachers          Community College Early Childhood faculty</p>	<p>Nevada Welfare Childcare Assistance staff          Childcare Licensing staff          Head Start          Head Start Collaboration          Tribal Head Start program staff          Nevada Early Childhood Special Education Services staff          Childcare Resource and Referral agencies          Family to Family Connection          University of Nevada - Reno Cooperative Extension          University Early Childhood faculty</p>
--	---

The participants were given copies of standards from other states to review as well as a copy of the Nevada Academic Standards and Indicators of Progress for Kindergarten. They identified the following content areas/domains: Language/Literacy; Physical Development/Health; Creative Arts; Science; Math; and Social Emotional/Social Studies.

Writing teams were divided into the content areas/domains and draft standards were developed, refined and reviewed. Diverse input from Nevada early childhood educators was collected through focus groups, written responses and e-mail. Focus groups were held in Las Vegas, Carson City, Elko, Ely and Reno. Input was reviewed by the Steering Committee. The Pre-K Standards were then finalized by the Steering Committee in December 2003.

Members of the original steering committee met in the fall 2009 to discuss the Nevada Pre-K Standards revision process. A workgroup, facilitated by NDE Early Childhood Education Consultant and the State Pre-K Standards Coordinator, was assigned to come up with a draft with the following goals:(1) design a user-friendly document that combines the valuable information and resources provided in the previous teacher and family guidebooks and standards in one comprehensive document; (2) Re-align the Pre-K Standards with appropriate K-12 revisions by working with NDE K-12 curriculum specialists to maintain linkages to kindergarten and the primary grades; and (3) Review documents from other states to come up with an appropriate format that will easily integrate and connect state infant-toddler early learning guidelines currently being developed. After completion, the draft was reviewed by the original steering committee and sent out to other early childhood professionals across the state for input and feedback via written responses and e-mail. The Revised Nevada Pre-K Standards were finalized by the Steering Committee in February 2010 and were adopted by the The Department Of Education in June 2010.

# Guiding Principles

The Pre-K Content Standards are guidelines for teachers and other adults to use when developing learning experiences for young children that are grounded in the following guiding principles:

## 1. Children are Active Learners

Children are not passive learners. Instead, they learn through physical, social, and mental activities (Piaget & Inhelder, 1969; Bredekamp & Copple, 1997). Because children learn through firsthand actions with objects and things in their world, their learning occurs and is linked to the overall environment and their cultural experiences (Vygotsky, 1986).

As active learners, young children need opportunities to observe things and events in their here and now world, develop their own ideas, try them out, find out what happens, and come up with their own answers (Dewey, 1944; Glassman, 2001).

Play is how children find out about their world. All types of play manipulative play, play with games, rough-and-tumble play, and socio-dramatic play – provide children with opportunities to try things out, see what happens, and learn (Rubin, Bukowski & Parker, 1998).

Organizing children's learning spaces through centers of interest is a good way to help children learn. Centers are clearly marked, organized play and work areas with a theme. Centers encourage children to make decisions, learn new skills, practice skills previously gained, as well as interact with others.

Centers offer children and teachers a great deal of flexibility. Because they do so, centers may support the needs of the children, especially diverse learners. For example, the needs of children with physical disabilities can be accommodated by providing pathways, low tables, or other necessary adjustments. Those children who need privacy or less stimulation can be offered quiet, protected centers and spaces for active learning.

## 2. Development and Learning are Interrelated

Learning about oneself, developing social skills and achieving motivation are all part of intellectual development. Children's ideas about themselves affect not only interactions with others, but also how they understand themselves as learners (Ladd, 1990). In turn, children's intellectual abilities and their control over language are also linked to their social skills. Children who can use language well in social situations, or those who can understand another person's point of view, are more likely to be those with strong social skills.

Likewise, learning to write and read depends in great part on how children feel about themselves and their ability to achieve (Bandura, 1997). Children who believe they can learn, and expect to achieve, do so (Seefeldt, Denton, Galper & Younosa, 1999).

## 3. Growth and Learning are Sequential

Growth and learning move in a basic sequence (Berk, 2001). For instance, learning generally proceeds from the concrete to the abstract. The early years are when children learn best from concrete, firsthand experiences. These firsthand experiences will help children with their ability to express their ideas through drawing, painting, and verbal and written descriptions (Bredekamp & Copple, 1997; Piaget & Inhelder, 1969).

#### 4. Each Child is an Individual learner

Each child is an individual. Each will grow, develop, and learn at his or her own pace. Because children's development is due to both biological maturity and the environment, the rate of their development and learning varies. Therefore, actual age is not the best sign of where a child should be developmentally.

Even though development and learning occur in an orderly way, development is often uneven. Some children will move ahead in language learning while being behind in physical or motor development. Others will demonstrate a skill one day and not repeat it for another month.

A child's genetic makeup may be related to healthy growth and development, but an environment that does not provide good nutrition or language experiences may slow down healthy growth. Severe disabilities affect normal growth and development as well. Children with disabilities may benefit more from early intervention than those without these disabilities.



#### 5. Development and Learning are Embedded in Culture

Culture, the social context in which children learn, grow, and develop, is defined as the language, knowledge, beliefs, art, moral, laws, customs, and ways of living that are passed on to future generations (Cole, 1999). Social groups, the family, neighborhood, religious or ethnic groups within a society pass on their customs, values, or moral principles to the young.

Beginning at birth, the culture socializes children to become members of a society. But, children are not just products of the culture they grow in. As children grow, they may decide what to model from the cultural influences they are exposed to, shaping their cultural context over time (NRC & IM, 2001).

#### 6. Family Involvement is Necessary

To develop a close attachment between young children and their families demands family involvement. Teachers should consider each child's unique circumstances, respect each family, and encourage involvement between families and preschools to help with a child's academic success and later school achievement (NRC, 2001a).

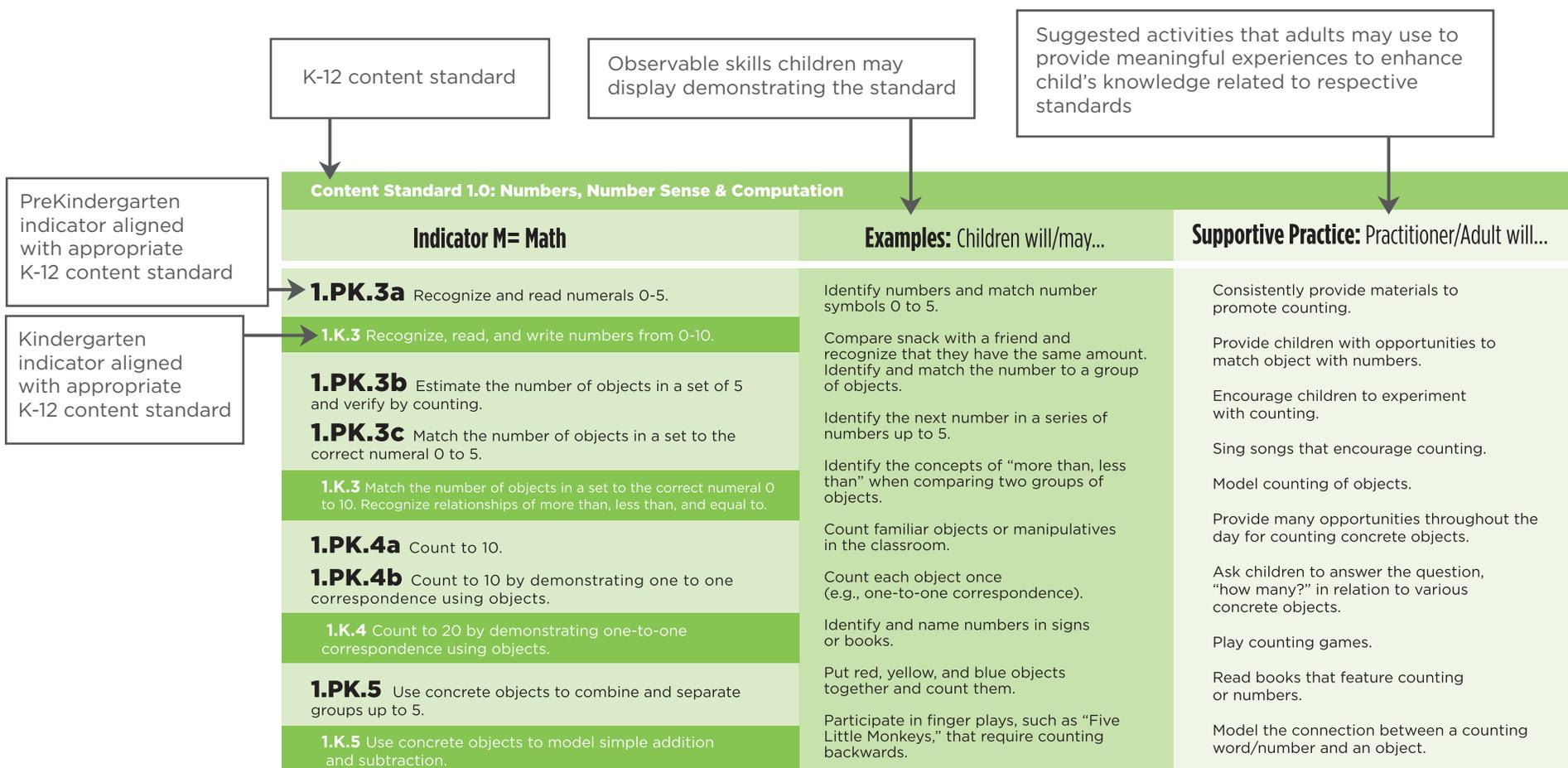
Family members and teachers must work together. Preschool experiences build on and extend what children learn at home. In turn, children's learning in school is extended and continued in the home.

#### 7. Children's Learning can be Clarified, Enriched, and Extended

Appropriate early educational experiences can extend, expand, and clarify the ideas, concepts, language and social skills children gain spontaneously. With the guidance of highly knowledgeable, trained, and skilled adults who understand both children and what children need to know, children can learn more than they could on their own (Vygotsky, 1986).

# Pre-K Content Standards Format

The format of the revised Nevada Pre-K Standards has changed. The teacher and family guidebooks have been integrated into the Standards document. This revised version is more user-friendly, and has been developed to meet the needs of teachers, parents and Early Childhood Education (ECE) professionals. Science, Social Emotional/Social Studies, and Language and Early Literacy content standards have expanded content headings to align with the revised K-12 standards. The document is formatted such that the first column includes the Pre-K Content Standards, with the kindergarten standard listed and italicized below. The middle column lists the observable traits that children may perform in order to demonstrate their understanding of the standards. The last column suggests activities that will help teachers and parents provide meaningful experiences to enhance children’s knowledge of the Pre-K Content Standards. The original standards included social emotional standards with social studies. The Social Studies and Social Emotional content standards are linked, and common strands of standards that relate to both are identified.



# Common Core Standards

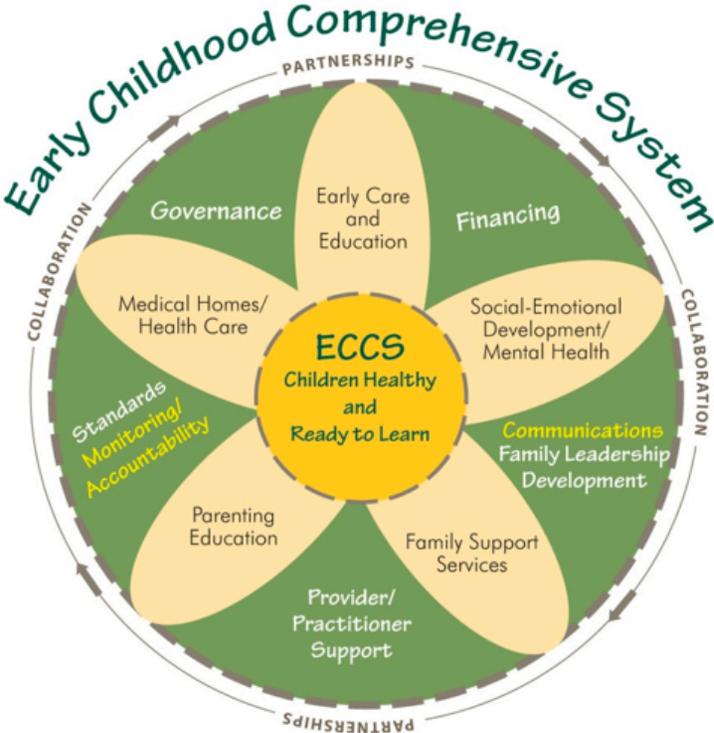
This is a state-led effort coordinated by the National Governors Association Center for Best Practices (NGA Center) and the Council of Chief State School Officers (CCSSO) and is a significant and historic opportunity for states to collectively develop and adopt a core set of academic standards. Governors and state commissioners of education from 48 states and three territories committed to developing a common core of state standards in English-language arts and mathematics for grades K-12, which were finalized in early 2010. This initiative builds directly on recent efforts of leading organizations and states and ensures that these standards are evidence and research based. Nevada adopted these standards in August 2010. In addition, early childhood specialists across the country will be working directly with CCSSO in regard to appropriate implementation of and alignment with states' Pre-K Standards.



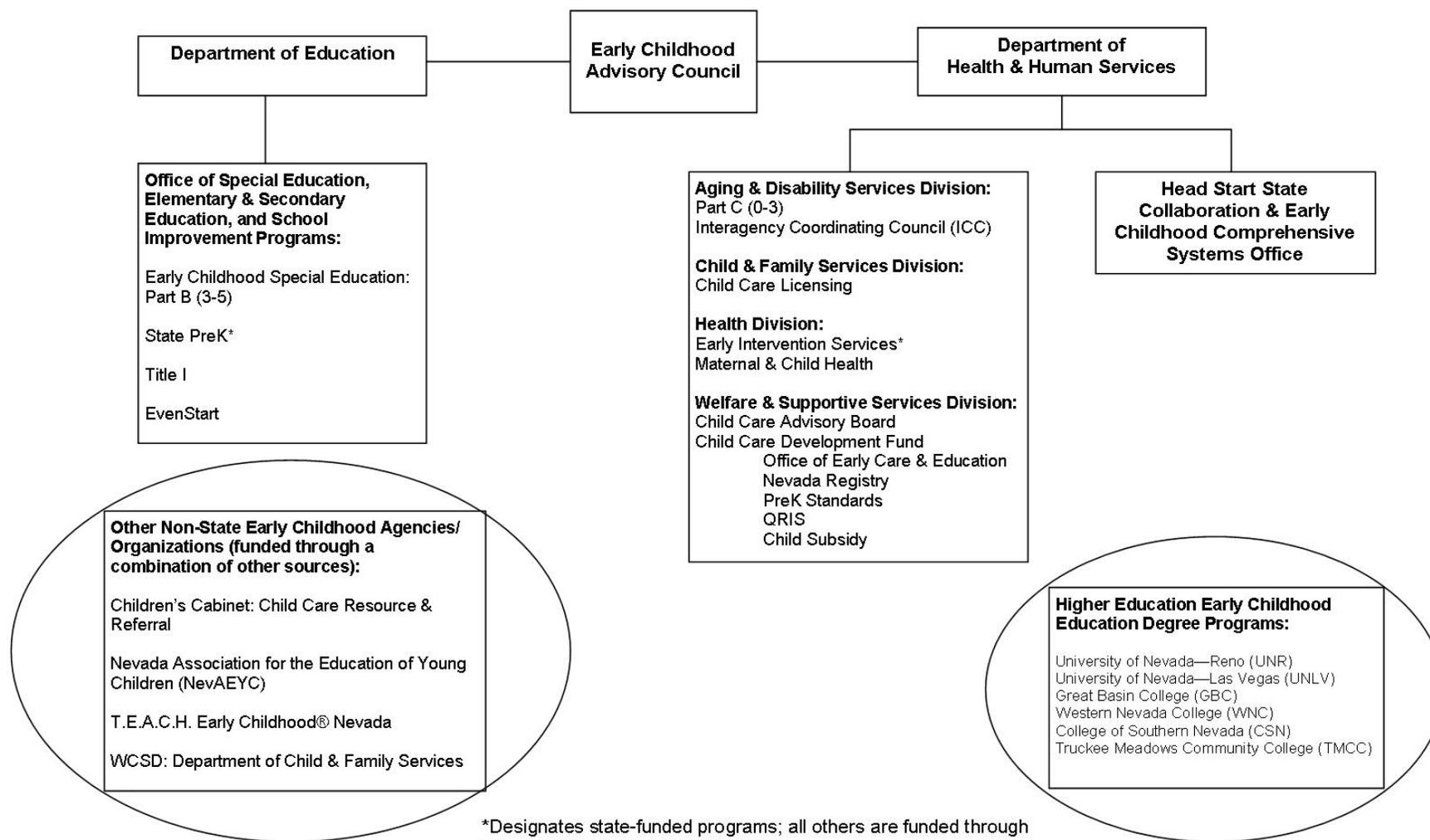
# Nevada's Early Childhood Comprehensive System

Due to limited resources, early childhood programs have traditionally operated in “silos” across the country depending on the variety of funding streams. In 2007, Congress approved legislation requiring each state to create or designate a “state advisory council” to build a statewide system of early education and care for children. As information about the importance of high-quality early education and care has grown, so, too, have federal, state and local government investments in early childhood programs. Therefore, these silos have developed separately with program-specific regulations, funding streams, delivery systems, eligibility requirements, professional development systems, and accountability measures. As programs grow in number and complexity, states and localities are challenged to create the greatest value for limited public dollars while expanding access and ensuring program quality to create the greatest benefit for young children (PreKNow 2009).

Efforts to develop an Early Childhood Advisory Council (ECAC) in Nevada were funded in part by a grant from the National Governors Association submitted last spring by Governor Gibbons’ D.C. office. In September 2009, Governor Gibbons signed an executive order establishing Nevada’s Early Childhood Advisory Council and empowering the DHHS Director’s Office as the appointing authority. Nevada’s ECAC consists of 13 members, including required representatives from the Head Start Act. The graph below represents the components of a comprehensive early childhood system, while the graph on the following page identifies all of the different agencies, programs, and funding streams that must work together to best serve young children and families in Nevada.



## Nevada Early Childhood System

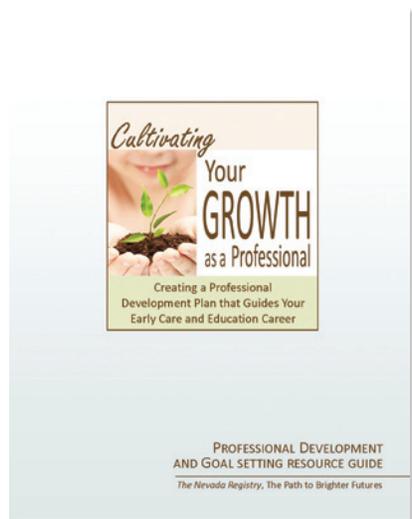


# Professional Development System

The Nevada Registry serves as a clearinghouse of information for the early childhood workforce in Nevada and is an integral part of the pathway helping to establish a professional development system in Nevada for the field of Early Care and Education (ECE). Serving as the sole approval entity for all informal, not-for-college-credit training offered in the state of Nevada, The Nevada Registry strives to raise the status of the ECE profession through support of professional growth and recognition, a standardized training approval system and the collection of valuable data on the ECE workforce.

The Nevada Registry has developed Core Knowledge Areas (CKA) and Competencies for ECE professionals as part of the growing professional development system in Nevada. The CKA and Competency levels support the framework of the Nevada Early Care and Education Professional Career Ladder and provide the foundation for the professional development system. They provide a roadmap for individual professional growth that becomes increasingly more specialized as higher levels of formal education are achieved. Completion of formal education in ECE results in advancement along the Career Ladder.

The CKA are also an important part of Nevada's training approval system and are reflected in all training that is approved by The Nevada Registry; this also includes Pre-K Standards trainings. Knowledge of the Pre-K Content Standards is also embedded within the Core Competencies. While the Pre-K Standards act as a guide for child outcomes, the Core Competencies focus on the preferred outcomes for the adults who care for young children. Research has long-established that early childhood teachers who have more formal education will provide more high quality learning environments (Whitebook, 2003). Early childhood classrooms that support best practices will provide experiences for young children that will help them meet the goals set forth in the Nevada Pre-K Standards.



**The Ladder to Success.**

The following Career Ladder is tailored specifically to the field of Early Care and Education (ECE). There are 7 levels that represent various combinations of formal education, training and direct experience (up to 4000 hours). By following this path, you'll know exactly what you need to accomplish before advancing to the next level.

**Level 1**

- 1.1 Meet Child Care Licensing requirements and a minimum of 1000 hrs. of direct experience
- 1.2 All of 1.1 plus a high school diploma/GED
- 1.3 All of 1.1, 1.2 and 1 ECE college credit or 15 hrs. approved training

**Level 2**

- 2.1 Current CDA or 8 ECE college credits and 2000 hrs. direct experience, or high school diploma/GED, 120 hrs. of approved CKA training, and 2000 hrs. direct experience
- 2.2 12 ECE college credits and 3000 hrs. direct experience

**Level 3**

- 3.1 Apprenticeship Certificate or 20 ECE college credits and 4000 hrs. direct experience
- 3.2 1-year ECE certificate or 30 college credits with 24 in ECE and 4000 hrs. direct experience

**Level 4**

- 4.1 Associate's degree in ECE or Associate's degree in another field with 30 or more ECE college credits
- 4.2 All of 4.1 and 4000 hrs. direct experience

**Level 5**

- 5.1 Bachelor's degree in ECE or Bachelor's degree in another field with a state teaching licensing containing an ECE endorsement or a Bachelor's degree in another field with 30 or more ECE college credits
- 5.2 All of 5.1 and 4000 hrs. direct experience

**Level 6**

- 6.1 Master's degree in ECE or Master's degree in another field with a state teaching licensing containing an ECE endorsement or a Master's degree in another field with 30 or more ECE college credits
- 6.2 All of 6.1 and 4000 hrs. direct experience

**Level 7**

- 7.1 Doctorate in ECE or Doctorate in another field with a state teaching licensing containing an ECE endorsement or Doctorate in another field with 30 or more ECE college credits
- 7.2 All of 7.1 and 4000 hrs. direct experience



# Inclusive Learning Environments in Pre-K Programs

Children develop compassionate attitudes and understand different abilities when they are in inclusive classrooms with a diverse array of children including those with disabilities. Inclusion teaches children about differences and acceptance of others. Pre-K programs that include children with special needs in early childhood programs are seen as an example of best practice. Children need respectful teachers, and they need contact with children with different abilities (Derman-Sparks & Edwards, 2009).

Under the Individuals with Disabilities Education Act (IDEA), “To the maximum extent appropriate, children with disabilities, including children in public and private institutions or other care facilities, are educated with children who are not disabled, and special classes, separate schooling or other removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability of a child is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily” 20 USC, Section 612 (a) (5).

Therefore, when an Individual Education Program (IEP) team is determining placement options, it is important that the team consider the general education classroom and determine what accommodations, modifications and supplementary aids and services are needed for the child’s success in the general education setting as a first priority. Children should be given the opportunity to attend the school they would ordinarily attend in their home area or neighborhood with their age and grade peers in the general education classrooms, whenever possible. Best practice encourages Pre-K teachers to incorporate adaptations into their daily routine to create a quality inclusive environment, which benefits both the children with disabilities and the typically developing children in the classroom.

A 2009 joint position statement of the Division for Early Childhood (DEC) and NAEYC defined inclusion as, “Early childhood inclusion embodies the values, policies, and practices that support the right of every infant and young child and his or her family, regardless of ability, to participate in a broad range of activities and contexts as full members of families, communities, and society.” 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.



Researchers at the Early Childhood Research Institute on Inclusion identified eight categories of modifications and supports for successful preschool inclusion. They included:

**Environmental support:** altering the physical environment to increase participation.

**Materials adaptation:** modifying materials to promote independence.

**Activity simplification:** breaking down a complicated task into smaller parts or steps.

**Child preferences:** capitalizing on a child's favorite activities.

**Special equipment:** using adaptive devices to facilitate participation.

**Adult support:** employing direct adult intervention to support the child's efforts.

**Peer support:** utilizing classmates to help children learn by modeling.

**Invisible support:** arranging naturally occurring events to assist inclusion.

Resources and websites have been provided in the appendix to assist you in providing quality preschool education to all children and on adapting Nevada Pre-K Content Standards to include children of varying ability levels. If a child has an IEP, Pre-K teachers should always consult with parents and Early Childhood Special Education staff regarding specific goals and benchmarks, adaptations and modifications, and specially designed instruction to meet the individual needs of the child.



# Culture, Diversity and Language

Culture, diversity and language are important issues in early childhood classrooms. Providing a classroom that is rich in language and that embraces the culture of the program is key to helping children develop positive culture identity (Derman-Sparks, Edwards, 2009). Young children begin to develop a greater understanding about themselves, their families and their communities in classrooms that foster this approach. Providing children with opportunities to learn about other cultures gives them experiences where they can learn about the similarities and the differences among them.

Modeling respect for each other, tolerance, and acceptance of different points of view helps young children to understand and promotes a true anti-bias classroom. Understanding and respecting others will help to develop a compassionate attitude.



Early childhood programs that model acceptance and respect of a child's native language will help them to feel more included in the classroom. A program that supports the use of a child's home language sends the message that their culture is important while exposing them to an enriched bilingual environment. Language barriers exist when we fail to provide support for children to be successful (Howes, 2009).

## What is High-Quality Pre-K?



When you walk into a high-quality pre-kindergarten program, you immediately see that learning is taking place. Children are engaged in small groups reading books, building interesting structures with blocks, and determining what sinks and what floats at the water table. Teachers are asking questions, rewarding successes and guiding learning. The room has a sense of purpose, organization, and excitement.

High-quality Pre-K classrooms can be found in many settings: child care centers, schools, faith-based centers, and Head Start Programs. However, without a commitment from states to building and supporting high-quality systems, families often struggle to find well-designed programs that prepare their children for kindergarten, elementary school, and beyond.

Research shows that children who attend high-quality Pre-K programs perform better in school. They have more advanced language and math skills and enter kindergarten with an understanding of the classroom environment. The National Institute for Early Education Research (NIEER) has created a ten-point checklist that evaluates the quality of Pre-K programs nationwide. The key components of a high-quality program include:

**Well-Educated Teachers:** The professional development of teachers, both before they enter the classroom and once they are there, is intimately related to the quality of early-childhood programs. The most effective Pre-K teachers have earned bachelor's degrees and have additional, specialized training in early-childhood education. Once hired, Pre-K teachers who receive salaries and benefits comparable to K-12 teachers are incentivized to perform at a high level and to pursue continuing education. Highly educated and fairly compensated Pre-K teachers are more likely to develop strong, responsive, interpersonal relationships with their students, which affects each child's motivation to learn, social competence, and school achievement. Pre-K classroom aides should, at a minimum, have a child development associate credential, and both the teacher and aide should devote at least 15 hours per year to improving their skills through comprehensive, well-designed professional development opportunities.

**Low Teacher-Child Ratios and Small Class Sizes:** Young children learn best in small groups of no more than 20 children in which they can ask questions and receive individualized attention from the teacher. In such environments, children are more likely to initiate activities on their own. Teachers with fewer children to manage are less restrictive and controlling, are more supportive of each child's learning style, and have time to develop students' language skills, guide their social interactions, and encourage exploration and problem solving. A ratio of one teacher for every ten or fewer children is crucial to the success of everyone in the classroom.

**Research-Based Curriculum Aligned to K-12 Standards:** A thorough but flexible curriculum helps teachers organize daily learning activities. While no one curriculum has been identified as best, high-quality Pre-K programs are consistently built around curricula with specific goals that integrate learning across all aspects of a child's development: cognitive, physical, social, and emotional. Superior curricula provide a variety of daily opportunities for language and reasoning, science, math, block play, dramatic play, art, and music. Each day, children have occasion to participate in whole class activities, small groups, and individual interactions with the teacher. In this way, a strong curriculum provides opportunities for each child to reinforce individual strengths and cultivate new skills and enables teachers to meet the realities of diverse languages and cultural groups.

**Engaged Families:** Parents and extended family members are an integral part of any high-quality Pre-K program. The most common component of family engagement is direct communication with classroom teachers. Through parent conferences, home visits, and regular reports, families and teachers can exchange information about a child's strengths and successes, favorite activities, and learning progress. In addition, high-quality programs encourage even more family involvement and a variety of avenues for that participation are typically available. These might include opportunities to: serve on a governing board or committee, assist in the classroom, help with field trips, or share expertise. Most importantly, high-quality Pre-K programs respect the role of families as a child's first and most important teacher and support efforts toward greater learning at home.

**Focus on the Whole Child and Family:** Children cannot learn when their basic needs are unmet or when special needs go undiagnosed. If a child is undernourished, cannot see the pictures in a book or hear what is said to them, learning cannot take place. High-quality Pre-K programs should screen children's vision, hearing, and general health in order to identify problems and make appropriate referrals early. Pre-K programs should offer children breakfast and/or lunch in order to ensure proper nutrition. When needed, families should be given access to social services or to information about nutrition, parenting, and family support. For such support services to be effective, it is crucial that they be administered by trained professionals and not be solely the responsibility of teachers who may lack the necessary expertise, extra time, and specialized resources (www.PreKNow.org, 2010).

## School Readiness

Research confirms that children's readiness for school is multi-faceted, encompassing the whole range of physical, social, emotional and cognitive skills that children need to thrive. Recent neuro-scientific research strongly supports the belief that young children's learning before they enter formal education is an essential foundation for later school success. Increasingly, state policy makers across the country are addressing readiness for school by improving the learning opportunities for young children before they enter school, particularly those who are enrolled in early care and education programs. In addition, many children require necessary family health support to thrive developmentally. Despite widespread agreement on the importance of school readiness, the nation has struggled to define what being "ready for school" means. The National Education Goals Panel brought together a group of early childhood experts to provide a conceptual framework for readiness, and recommend how readiness should be assessed. Based upon this group's work, the Goals Panel adopted the following five domains of children's early development and learning that must be considered when defining school readiness: **Health and Physical Development; Emotional Well Being and Social Competence (Social/Emotional); Approaches to Learning; Communicative Skills; and Cognition and General Knowledge.**

# Key to Standards Identification & Cross-Referencing Links

The five domains, as identified by the National Goals Panel, are listed below. They are coded and aligned with the Nevada K-12 Content Standards. For cross-linking and individual identification purposes, the following key and letter codes should be used along with the specific numbering system used to identify the specific standard. For example, a coding of M1.PK.5 would be the code for Math Standard 1: Numbers, Number Sense & Computation; Indicator 1.PK.5- Use concrete objects to combine and separate groups up to 5; which aligns to Kindergarten Standard 1.K.5. Nevada Pre-K Content Standards can be cross-referenced across domains as they have been aligned with all appropriate K-12 Standards.

## **Cognitive Development: Math & Science**

N- Nature of Science  
E- Earth Science  
P- Physical Science  
L- Life Science  
M- Math

## **Language Development & Communication**

ELA- English Language Arts/ Language & Literacy  
WA- Word Analysis  
RS- Reading Strategies  
LT- Literary Text  
ET-Expository Text  
EW- Effective Writing  
TW- Types of Writing  
LS-Listening  
S-Speaking

## **Social Studies/Social Emotional Development**

G- Geography  
H- History  
Ec- Economics  
C- Civics  
SE- Social Emotional

## **Health & Physical Development**

PD- Physical Development  
He- Health

## **Approaches to Learning: Creative Expression**

VA- Visual Arts  
MM- Music & Movement  
D- Dramatic Play  
CT- Creative Thinking



# Early Learning & Pre-Kindergarten Standards Alignment Crosswalk

This revision of the Nevada Pre-Kindergarten Standards has been revised to include the school readiness domains as identified in the previous paragraph above while also maintaining alignment with the Nevada K-12 Standards as indicated in the following table:

<b>Infant/Toddler (0-48 mo)</b> <b>ELG Domains &amp; Content Standards</b>	<b>Pre-Kindergarten (48-60 mo) ELG Domains &amp; Content Standards</b>		<b>K-12</b>
<b>Cognition &amp; General Knowledge</b> <ul style="list-style-type: none"> <li>• Discovering the World</li> <li>• Discover and Learn: Mathematical Exploration and Learning</li> <li>• Discover and Learn: Scientific Exploration and Learning</li> </ul>	<b>Cognitive: Mathematics (M)</b> <ul style="list-style-type: none"> <li>• Numbers, Number Sense &amp; Computation</li> <li>• Patterns, Functions, &amp; Algebra</li> <li>• Measurement</li> <li>• Spatial Relationships, Geometry &amp; Logic</li> <li>• Data Analysis</li> </ul>	<b>Cognitive: Science</b> <ul style="list-style-type: none"> <li>• Nature of Science (N)</li> <li>• Earth &amp; Space Science (E)</li> <li>• Physical Science (P)</li> <li>• Life Science (L)</li> </ul>	<b>K-12 Content Standards</b>
<b>Language Development &amp; Communication</b> <ul style="list-style-type: none"> <li>• Communicating &amp; Understanding</li> <li>• Pre-Reading</li> <li>• Pre-Writing</li> </ul>	<b>English Language Arts (ELA)</b> <ul style="list-style-type: none"> <li>• Word Analysis (WA)</li> <li>• Reading Strategies (RS)</li> <li>• Literary Text (LT)</li> <li>• Expository Text (ET)</li> </ul>	<ul style="list-style-type: none"> <li>• Effective Writing (EW)</li> <li>• Types of Writing (TW)</li> <li>• Listening (LS)</li> <li>• Speaking (S)</li> </ul>	
<b>Personal &amp; Social/Emotional</b> <ul style="list-style-type: none"> <li>• Developing Sense of Self and Others</li> <li>• Emotional Expression</li> <li>• Pro-Social Behaviors</li> <li>• Self Regulation &amp; Self Control Skills</li> </ul>	<b>Social Emotional (SE)</b> <ul style="list-style-type: none"> <li>• Self-Confidence</li> <li>• Self Direction</li> <li>• Identification &amp; Expression of Feelings</li> <li>• Interaction with Other Children &amp; Adults</li> <li>• Pro-Social Behaviors</li> <li>• Attending &amp; Focusing Skills</li> </ul>	<b>Social Studies (SS)</b> <ul style="list-style-type: none"> <li>• History (H)</li> <li>• Geography (G)</li> <li>• Economy (EC)</li> <li>• Civics (C)</li> </ul>	
<b>Approaches to Learning: Creative Expression/ Experiences</b> <ul style="list-style-type: none"> <li>• Creativity, Curiosity &amp; Critical Thinking</li> <li>• Visual &amp; Sensory Arts</li> <li>• Music/Movement</li> <li>• Dramatic Play</li> </ul>	<b>Approaches to Learning: Creative Expression/ Experiences (CE)</b> <ul style="list-style-type: none"> <li>• Creative Thinking (CT)</li> <li>• Music/Movement: Singing, Playing instruments, Improvisation, Listening, Evaluation, Application to life, &amp; Cross-Curricular (MM)</li> <li>• Dramatic Play (D)</li> <li>• Visual Arts: Knowledge, Application, Content, Context, Interpretation &amp; Cross-Curricular (VA)</li> </ul>		
<b>Physical Development &amp; Health</b> <ul style="list-style-type: none"> <li>• Coordinate Movements</li> <li>• Gross Motor Coordination</li> <li>• Fine Motor Control</li> <li>• Health</li> </ul>	<b>Physical Development (PD)</b> <ul style="list-style-type: none"> <li>• Development of Motor skills, Locomotor, Non-locomotor, Manipulative skills, Cardio-respiratory (health enhancing), Personal Responsibility, Positive Social Interaction, and Fine Motor</li> </ul> <b>Health Education (He)</b> <ul style="list-style-type: none"> <li>• Health Promotion/Disease Prevention</li> <li>• Health Enhancing Behaviors</li> <li>• Interpersonal Communication to Enhance Health</li> </ul>		

# Mathematics Introduction

Young children are natural mathematical learners (NAEYC and NCTM, 2002). They naturally look for pattern and shape, make comparisons, and explore relationships within their environment. In early childhood mathematics education, children need to be actively engaged in meaningful and purposeful activities. These activities should capitalize on children's natural curiosity and need for understanding the world around them. Young children should engage in activities that help them develop and use key mathematical concepts, language, and processes. These activities should enable children to expand their understanding of number, shape, size and pattern as they have meaning in the world around them.

## Goals of Pre-Kindergarten Mathematics:

Children develop an understanding of number and number sense.

Children develop knowledge of spatial concepts; e.g., shapes and measurement.

Children develop understanding of patterns and relationships.

Children develop knowledge of sequence and temporal awareness.

Children develop the ability to use mathematical knowledge to sort, classify, represent, communicate, and solve problems.

To achieve these goals, children's exploration of mathematics should not be isolated but rather imbedded in rich, authentic tasks that allow them to integrate new understanding with language development and other developmentally appropriate learning needs. Mathematics is integrated into all aspects of daily routines. Early educators provide these experiences through individual and small-group choices and transitions, and they also allot time for in-depth planned small-group experiences that include interaction, problem-solving and reflection. There must be a strong connection between and among math and literacy and the other content areas. The ultimate goal is to provide children a foundation and the tools to achieve mathematical proficiency in what the National Research Council's "Helping Children Learn Mathematics" (August 2002) outlines and describes as understanding, computing, applying, reasoning, engaging and useful.



# Pre-Kindergarten Standards: Mathematics

## Content Standard 1.0: Numbers, Number Sense & Computation

Indicator M= Math	Examples: Children will/may...	Supportive Practice: Practitioner/Adult will...
<b>1.PK.3a</b> Recognize and read numerals 0-5.	Identify numbers and match number symbols 0 to 5.	Consistently provide materials to promote counting.
↩ <b>1.K.3</b> Recognize, read, and write numbers from 0-10.	Compare snack with a friend and recognize that they have the same amount. Identify and match the number to a group of objects.	Provide children with opportunities to match object with numbers.
<b>1.PK.3b</b> Estimate the number of objects in a set of 5 and verify by counting.	Identify the next number in a series of numbers up to 5.	Encourage children to experiment with counting.
<b>1.PK.3c</b> Match the number of objects in a set to the correct numeral 0 to 5.	Identify the concepts of “more than, less than” when comparing two groups of objects.	Sing songs that encourage counting.
↩ <b>1.K.3</b> Match the number of objects in a set to the correct numeral 0 to 10. Recognize relationships of more than, less than, and equal to.	Count familiar objects or manipulatives in the classroom.	Model counting of objects.
<b>1.PK.4a</b> Count to 10.	Count each object once (e.g., one-to-one correspondence).	Provide many opportunities throughout the day for counting concrete objects.
<b>1.PK.4b</b> Count to 10 by demonstrating one to one correspondence using objects.	Identify and name numbers in signs or books.	Ask children to answer the question, “how many?” in relation to various concrete objects.
↩ <b>1.K.4</b> Count to 20 by demonstrating one-to-one correspondence using objects.	Put red, yellow, and blue objects together and count them.	Play counting games.
<b>1.PK.5</b> Use concrete objects to combine and separate groups up to 5.	Participate in finger plays, such as “Five Little Monkeys,” that require counting backwards.	Read books that feature counting or numbers.
<b>1.K.5</b> Use concrete objects to model simple addition and subtraction.		Model the connection between a counting word/number and an object.

## Content Standard 2.0: Patterns, Functions & Algebra

Indicator M=Math	Examples: Children will/may...	Supportive Practice: Practitioner/Adult will...
<b>2.PK.1</b> Sort objects by similar attributes (e.g., size, shape, and color).	Sort toys by size, color, shape or category. Match items that are similar (e.g., sort cars from small trucks).	Provide real objects for children to sort, count and pattern with in the classroom.
↩ <b>2.K.1</b> Identify attributes used to sort objects.	Match objects such as pictures of adult animals with their babies.	Read books to children containing pattern relationships.
↩ <b>4.K.9</b> Sort and classify objects by color and shape.	Give reasons for placement of objects in groups.	Use transitions as a time to incorporate math concepts (sort children by clothing, gender, eye color, etc.).

**2.PK.2** Recognize and replicate simple patterns (e.g., ABAB).

**2.PK.3** Compare sets of objects. Determine which set has more or less.

↩ **2.K.3** Identify and create sets of objects with unequal amounts, describing them as greater than or less than.

Identify patterns that repeat themselves (e.g. red, orange, red, orange).

Repeat a pattern according to color, size, shape, etc., while using manipulatives or stringing beads.

Predict what comes next when shown a simple AB pattern.

Sort a group of objects more than one way.

Explain why they sorted a group of objects a certain way.

Provide many containers for children to use for sorting (egg cartons or muffin tins).

Provide opportunities for children to sort, match, and regroup objects on a daily basis.

Sing songs that have repeating patterns that children can easily identify.

Hang or display charts or other posters with recognizable patterns around the room.

Provide children with opportunities to have many hands-on patterning activities and experiences.

Encourage children to explore patterns, textures, shapes and graphs in problem-solving situations and activities.

### Content Standard 3.0: Measurement

#### Indicator M=Math

#### Examples: Children will/may...

#### Supportive Practice: Practitioner/Adult will...

**3.PK.1** Compare objects by size to determine smaller and larger.

↩ **3.K.1** Compare, order, and describe objects by size.

**3.PK.4** Sort pennies and nickels.

↩ **3.K.4** Identify and sort pennies, nickels, and dimes.

**3.PK.6** Identify day and night.

↩ **3.K.5** Recite in order the days of the week

Sort toys from smallest to largest.

Determine which of the children in the classroom is tall, taller, and tallest.

Arrange a group of blocks from longest to shortest.

Identify and sort pennies and nickels.

Understand that each coin represents different values.

Use language associated with everyday events (e.g., understanding the difference between day and night).

Understand the sequence of the daily events and know what will happen next.

Describe the sequence of activities when going outside to play.

Provide opportunities for children to experiment with measuring (e.g., sand, water, cooking, and art experiences).

Talk about measurement concepts during everyday experiences (e.g., “how many cups will it take to fill that bowl?”).

Encourage measuring frequently during activity time.

Talk about time and sequence during daily scheduled events.

Provide opportunities for children to measure items in the classroom or during outside time. Provide enough rulers, measuring tapes, measuring cups, spoons, etc., so that all of the children can experiment.

Encourage discussions with children about similarities and differences between objects.

Model descriptive words to express amount and size to children during the daily events.

Follow a consistent but flexible schedule, so that children will learn about the daily sequence of events.

Provide materials that include three sizes of the same object so that children can explore the differences (e.g., measuring cups, spoons).

## Content Standard 4.0: Spatial Relationships, Geometry and Logic

### Indicator M=Math

### Examples: Children will/may...

### Supportive Practice: Practitioner/Adult will...

**4.PK.1a** Identify circles, triangles, and squares.

**4.PK.1b** Begin to recognize two and three dimensional shapes in the environment.

↶ **4.K.1** Identify two-dimensional shapes (circles, triangles, rectangles including squares) regardless of orientation.

↶ **4.K.4** Identify three-dimensional figures in the environment.

**4.PK.2** Identify positions (e.g., in front, behind, next to, up, down, inside, outside, on top, ordinal positions).

↶ **4.K.2** Demonstrate an understanding of relative position words, including before/after, far/near, and over/under, to place objects.

↶ **1.K.3** Identify ordinal positions first to third

↶ **4.K.9** Put events in a logical sequence

Use basic shapes when drawing pictures.

Identify circles, squares and triangles in signs or pictures around the classroom.

Attempt to add shapes to their drawings.

Use objects in the class to show positions (e.g. cars on top of, off, inside, below, beside the blocks).

Understand the concepts of under, over, beside, between, outside, next to, etc.

Follow a path or move through an obstacle course.

Draw a map or the beginnings of a map to show a location during play time.

Provide clay or play dough for children to create different shapes.

Reinforce the use of shapes in the classroom by playing games, singing songs, and reading books about shapes.

Encourage the children to describe the differences between a pair of shapes. Write down what the children share and post it on shape posters.

Provide opportunities for children to see many different shapes. If possible, add new shaped blocks to the block area.

Have children create three-dimensional shapes using a variety of materials.

Use positional words with an object such as outside, inside, in front, behind, under, above, beside and on top of to play games with children in the classroom.

Provide materials so that children will recognize the basic shapes.

Model language to indicate directions, positions, distances, and sense of order.

Play shape bingo or I Spy with the shapes that can be found in the classroom.

Provide puzzles and manipulatives that include a variety of sizes of geometric shapes.

## Content Standard 5.0: Data Analysis

### Indicator M= Math

### Examples: Children will/may...

### Supportive Practice: Practitioner/Adult will...

**5.PK.1** Identify and sort information (e.g., interpret quantity in pictures).

**5.K.1** Collect, organize, and record data using objects and pictures. Represent data in a variety of ways in response to questions posed by teachers.

Use data to formulate their ideas (e.g., take a survey who likes chocolate milk better than white milk).

Have in-depth discussions about how things work or how to fix something.

Talk more in-depth about ideas that may not always be accurate.

Draw simple maps of the classroom, playground or other relevant places.

Encourage children to use descriptive words.

Ask children open-ended questions to promote analytical thinking.

Provide children with materials to make their own graphs, posters and charts.

Encourage children to share their ideas about how objects work and why.

Give children time and materials to create their own maps.

Let children use assorted materials to track their information around the classroom.

Give the children access to clip boards so that they can collect their own data and information.

## Math Sample Activities

### FAMILY ACTIVITY

Create a “family collection” of fun, easy treasures to sort, count, and classify. Here are some ideas of fun objects to collect:

Sea Shells, Buttons, Shiny Rocks and Small Toy Cars

### FAMILY ACTIVITY

Measuring Counts

Children like to help measure things. Give your child the opportunity to measure items around the house. Start with measuring your child. Let them see how tall they are and then give them a ruler or a measuring tape to measure other items. Encourage them to write down a list of the measurements that they take.

# Science Introduction

Pre-Kindergarten science is a time of discovery (Bredenkamp & Copple, 1997). Science concepts need to be concrete, observable, and within the realm of the child's experience and pre-operational thinking (Piaget & Inholder, 1967). Science concepts are encompassed throughout the domains in the Pre-Kindergarten Standards. Children use literacy to gain information and language to express their wonder in the world around them while using research to answer questions prompted by their imaginations. Through creative arts, children use a variety of media to share ideas and express understanding (The Hundred Languages of Children, Edwards, Dandini and Forman, 1998). Through play, children experiment and test their hypotheses. "... the concepts children gain from their early explorations, questions, observations, and descriptions of their physical world will serve as the foundation on which they will build the abstract and scientific concepts of their physical world (McGraw-Hill, 2003)."

## Goals of Pre-Kindergarten Science:

- To enhance children's natural and instinctual observational skills.
- To support and guide children's curiosity and their need to experiment.
- To encourage exploration and discovery.
- To highlight the wonders of the world around them.



Pre-Kindergarten children learn science concepts through active play and exploration of their environment. Responsive adults facilitate discovery by inviting questions, asking open-ended questions, encouraging hands-on experiences, and providing opportunities to experiment and observe the world through a variety of media and realia (McGraw-Hill, 2003).

The science strands are identified as Nature of Science, Earth and Space Science, Physical Science and Life Science. Although appropriate levels of learning can be adopted for each of these strands, the Pre-Kindergarten Standards have been linked with the Kindergarten Standards and are not meant to limit or exclude children's exploration or experiences with science concepts that have not been included in this document (National Science Education Standards, 1996).

# Pre-Kindergarten Standards: Science

## Content Standard: Nature of Science- Scientific Inquiry and Science, Technology, & Society

Indicator N=Nature Of Science	Examples: Children will/may...	Supportive Practice: Practitioner/Adult will...
<p><b>N.PK1.a</b> Observe their world.</p>	<p>Question why things happen.</p>	<p>Provide experiences for the children to learn about the greater community and other important issues outside of the classroom.</p>
<p><b>N.PK1.b</b> Ask questions about their world.</p>	<p>Want to share their observations about science.</p>	
<p>↩ <b>N.2.A</b> Students understand that science is an active process of systematically examining the natural world.</p>	<p>Ask questions about why things happen; i.e., Why does it rain?</p>	<p>Encourage parents and other family members to come in and share their expertise in the classroom.</p>
<p><b>N.PK.2</b> Share ideas with others.</p>	<p>Begin to share their observations and ideas.</p>	
<p>↩ <b>N.2.A.1</b> Students know how to make observations and give descriptions using words, numbers, and drawings.</p>	<p>Use safety goggles, magnifying glasses, tweezers or other equipment to explore and discover objects.</p>	<p>Take children for walks and invite guests to share their knowledge, and create opportunities to expand the children's knowledge about the world around them.</p>
<p><b>N.PK.3</b> Use tools safely to observe and explore different objects/environments.</p>	<p>Begin to make predictions based on their knowledge; i.e., clouds indicate rain.</p>	<p>Encourage the children to share their thoughts and ideas. Demonstrate respect for differing views of the world.</p>
<p>↩ <b>N.2.A.2</b> Students know tools can be used safely to gather data and extend the senses.</p>	<p>Sort items that belong together based on similar physical characteristics.</p>	
<p><b>N.PK.4</b> Use patterns to predict or sort items.</p>	<p>Engage in a science experiment together; i.e., examine plants, seeds or view small insects, and share their observations about the objects that they are observing.</p>	<p>Promote using scientific methods when children are examining, discovering and exploring new objects and materials (e.g., have goggles, microscopes, magnifying glasses, etc. available).</p>
<p>↩ <b>N.2.A.3</b> Students know observable patterns can be used to predict future events or sort items.</p>		
<p><b>N.PK.5</b> Students work in small groups and share ideas with others regarding to science related activities.</p>		
<p>↩ <b>N.2.B.2</b> Students know that in science it is helpful to work in a team and share findings with others.</p>		

## Content Standard: Earth & Space Science- Atmospheric Processes and the Water Cycle; Solar System & Universe; Earth's Composition & Structure

Indicator E=Earth	Examples: Children will/may...	Supportive Practice: Practitioner/Adult will...
<p><b>E.PK.1</b> Observe and identify weather from day to day.</p>	<p>Make observations about the daily weather.</p>	<p>Discuss the different weather systems that we see in our state (e.g., snow, rain, wind, fog, clouds, thunderstorms, and dust devils).</p>
<p>↩ <b>E.2.A.3</b> Students know weather changes from day to day and seasonally.</p>	<p>Point to the sun and/or moon in the sky.</p>	

**E.PK.2** Observe and identify water in different states.

↪ **E.2.A.2** Students know water on Earth can be a liquid (rain) or a solid (snow and ice) and can go back and forth from one form to the other.

**E.PK.3** Students understand that the sun, moon, and stars can be seen in the sky.

↪ **E.2.B** Students understand that there are objects in the sky, which display patterns.

**E.PK.4** Identify and sort different natural objects (e.g., rocks, soils, etc.).

↪ **E.2.C.1** Students know that Earth is composed of different kinds of materials (e.g., rocks, soils, and water).

Begin to understand that water can be a solid (ice or snow) and it can melt back into a liquid.

Understand that there are planets and stars and in the sky.

Begin to know some of the names of planets (e.g., Mars, Jupiter, etc.).

Begin to identify and sort natural objects in their environment.

Collect a variety of rocks to study in the classroom.

Provide opportunities for children to experiment with water in different forms.

Show children pictures of stars, planets and the constellations.

Take a field trip to a Planetarium or invite an astronomer to visit the class.

### Content Standard: Physical Science- Matter and Forces & Motion and Energy

#### Indicator P=Physical

#### Examples: Children will/may...

#### Supportive Practice: Practitioner/Adult will...

**P.PK.1** Sort objects according to observable properties (e.g., by shape and color).

↪ **P.2.A** Students understand that matter has observable properties.

↪ **P.2.A.3** Students know matter can be categorized by observable properties, such as color, size, shape and weight.

**P.PK.2** Explore and demonstrate how objects move.

↪ **P.2.B.1** Students know the position and motion of an object can be changed by pushing and pulling.

**P.PK.3** Explore what happens to objects in relation to other forces (e.g., magnets, gravity, and water).

**P.PK.4** Investigate how objects react when placed in water.

↪ **P.2.B.3** Students know magnets can be used to make some things move without being touched.

↪ **P.2.B.4** Students know things fall to the ground unless something holds them up.

Sort objects (e.g., by shape, size, and color).

Sort objects by their physical characteristics: hard/soft, heavy/light, and sink/float.

Sort objects and materials by what they are made of (e.g., fabric, wood, glass, plastic, rock, and metal).

Begin to hypothesize, explore and demonstrate how objects move.

Investigate how objects react when placed in water.

Demonstrate how objects can move with magnets.

Make observations about how fast objects will fall to the ground.

Begin to comment on changes in the physical world.

Provide children with opportunities to experiment with different materials to gain more knowledge about how objects work.

Give children many opportunities to have sorting experiences in the classroom.

Set up a table with assorted magnets and materials for children to explore and discover.

Provide opportunities for children to experiment using simple scientific tools (e.g., ramps made from blocks and magnets).

Read fiction and non-fiction books that portray the physical world.

Encourage children to predict and examine what will happen next during science experiments.

**P.PK.5** Identify hot and cold.

↪ **P.2.C.2** Students know that objects can be described as hot or cold relative to another object.

Understand the difference between hot and cold.

Explain why some objects are cold and hot.

Become interested in finding out why ice melts faster when it is hot outside.

Discuss the different reasons why temperature can be so varied and different.

Have children chart the daily temperature and ask them to predict what the temperature will be for the day. Provide a thermometer outside of the classroom so that they can see if their prediction was accurate.

Provide science experiments where children can see what happens when the temperature changes (e.g., putting drops of food color on top of warm whole milk and then see what happens when you put them on cold whole milk). Ask the children to predict the outcome.

**Content Standard: Life Science- Heredity; Structure of Life; Organisms and their Environment; Diversity of Life**

**Indicator L=Life**

**Examples:** Children will/may...

**Supportive Practice:** Practitioner/Adult will...

**L.PK.1** Investigate animals and their offspring.

↪ **L.2.A** Students understand that offspring resemble their parents

↪ **L.2.A.1** Students know animals and plants have offspring that are similar to their parents.

**L.PK.2** Explore and identify a variety of animals and plants.

↪ **L.2.A.2** Students know differences exist among individuals of the same kind of plant or animal.

**L.PK.3** Identify humans, animals, and plants.

↪ **L.2.B** Students understand that living things have identifiable characteristics.

**L.PK.4** Use the five senses to explore and investigate the natural world.

↪ **L.2.B.1** Students know humans and other animals use their senses to know their world.

**L.PK.5** Identify the basic need for air, water and food.

↪ **L.2.C.1** Students know plants and animals need certain resources for energy and growth.

Begin to become interested and discuss animals and their offspring.

Identify the difference between humans, animals, and plants.

Identify a variety of animals and plants (e.g., grass, flowers, cat, dog).

Use their five senses to explore and investigate the natural world.

Begin to understand that living things have basic needs (e.g., air, water and food).

Begin to identify animals and their homes in their natural habitats.

Explain some differences between animals and explain where they live. (e.g., birds in trees, frog in a pond).

Discuss the difference between living and non-living things.

Discuss the different characteristics that animals, humans and plants have. Ask the children to explain what they all have in common.

Provide experiments that reinforce the basic needs such as air; water and food (e.g., try to grow seeds without providing water or by giving plants too much water). Ask the children to make a prediction about which plant will grow and why.

Provide many opportunities for the children to use their sense of smell, touch, sight, taste and hearing to examine the world around them.

Give children opportunities to care for plants and animals in the classroom.

Plant a class garden and have the children help to maintain it. Start the seeds in the classroom and then transplant them outdoors in a container. When the plants mature, eat them in the classroom.

**L.PK.6** Identify animals and their homes.

↩ **L.2.C.2** Students know a habitat includes food, water, shelter and space.

**L.PK.7** Identify and/or sort plants and animals by observable characteristics.

↩ **L.2.D.1** Students know plants and animals can be sorted by observable characteristics and behaviors.

**L.PK.8** Observe living and non-living things on Earth.

↩ **L.2.D** Students understand that there are many kinds of living things on Earth.

Discuss the different characteristics that animals have such as birds fly, lay eggs and have feathers, while cats have fur and deliver live babies.

Have children match the pictures of the plants to the seeds that produce the plants. Include vegetables, fruits, weeds and houseplants.

Provide the pictures and vocabulary so that children can research, match and begin to understand that animals can have similarities and differences.

Provide props in the block area and encourage the children to build different animal homes.

Take the children for a walk in the neighborhood and ask them to spot the different animal homes that they can find.

Ask the children to describe where different animals live and to explain why they need to live there.

### Science Activities

Identify animals and their homes.

Flannel Board Habitat Materials: Flannel board, pictures of animals printed from the internet or cut out from magazines (animals should reflect a variety of habitats), flannel scraps or Velcro pieces, glue, cardstock, markers. Glue either flannel pieces or Velcro to the back of each picture. Using cardstock, prepare labels that read POND, SKY, DESERT, FOREST, OCEAN, etc., and place flannel or Velcro on the back of each. Ask children to think about each animal picture and where they might live. Ask what qualities the animals would need to live in the different habitats. Ask children to place animals beneath the correct labels on the flannel board.

Read: Have You Seen My Duckling? By Nancy Tafuri



# Language and Early Literacy Introduction

According to the 1998 joint position statement of the International Reading Association (IRA) and (NAEYC), pre-kindergarten children need developmentally appropriate experiences and teaching to support literacy learning.

## **These include but are not limited to the following:**

- Positive, nurturing relationships with adults who engage in responsive conversations with individual children, model reading and writing behavior, and foster children's interest in and enjoyment of reading and writing;
- Print-rich environments that provide opportunities and tools for children to see and use written language for a variety of purposes, with teachers drawing children's attention to specific letters and words;
- Adults' daily reading of high-quality books to individual children or small groups, including books that positively reflect children's identity, home language, and culture;
- Opportunities for children to talk about what is read and to focus on the sounds and parts of language as well as the meaning;
- Teaching strategies and experiences that develop phonemic awareness such as songs, finger plays, games, poems, and stories in which phonemic patterns such as rhyme and alliteration are salient;
- Opportunities to engage in play that incorporates literacy tools, such as writing grocery lists in dramatic play, making signs in block building, and using icons and words in exploring a computer game; and
- First hand experiences that expand children's vocabulary, such as trips in the community and exposure to various tools, objects, and materials.

There is increased diversity among young children in pre-kindergarten programs. For example, children who are diverse, English language learners, have exceptional abilities or special needs are found in today's early childhood programs.

Pre-kindergarten English language learners need materials and resources in their own languages in order to develop first language vocabulary and concepts. Children's competence in acquiring a second language is, in part, dependent upon the level of competence achieved in the first language (Cummins, Crawford, 2002; Wong-Fillmore, 1991; Neuman, 1999). Children with special needs may require accommodations or specialized resources to support their literacy development. Exceptional children need to be supported to further stimulate their language and literacy development.

Teachers need to use a variety of methods and approaches to encompass the great diversity of children in their pre-kindergarten programs. "No one teaching method or approach is likely to be the most effective for all children" (IRA & NAEYC, 1998).



# Pre-Kindergarten Standards: Language & Early Literacy (ELA) English Language Arts

## Content Standard 1.0: Word Analysis

### Indicator WA= Word Analysis

### Examples: Children will/may...

### Supportive Practice: Practitioner/Adult will...

**1.PK.1** Identify words that rhyme.

Play with sounds in words.

During dramatic play, art, music, book reading, large motor, or sensory play activities, teachers can call attention to letter sounds in words.

← **1.K.1** Demonstrate phonological awareness of spoken words through rhyming, concept of word, syllable awareness, and onset and “rime” awareness (Phonological Awareness).

Repeat words that rhyme.

Try to create words that rhyme together or create nonsense words.

Allow time for children to play with sounds through singing, rhyming, developing nonsense words, and interacting to music.

**1.PK.2** Identify the beginning sound of own name.

Hear that each letter has a different sound.

Encourage children to imitate the beginning sounds of words.

← **1.K.2** Demonstrate phonemic awareness of spoken words through matching, isolating, blending, segmenting, deleting, and substituting (Phonemic Awareness).

Focus on beginning sounds in familiar words.

Play “I Spy...” game by asking children to “spy something that begins with M like Michael.”

**1.PK.3** Identify letters in own name.

Compare the same sounds of words and letters.

Create environments that include a diverse variety of books, labels, signs, and charts.

← **1.K.3** Recognize and name upper and lower case letters of the alphabet; Identify letter-sound relationships; Decode words using letter/sound relationships; With assistance, decode words in text through short/long vowels. (Phonics).

Begin to know the names of letters if they see their formation.

Provide children with many examples of print in games, activities, books, or centers throughout room.

**1.PK.4** Recognize environmental print and symbols.

Explore letters through play (e.g., tracing letters or forming them with clay).

Encourage children to use and recognize familiar logos and signs on food boxes/cans in dramatic play area.

← **1.K.4** Comprehend vocabulary using pictures, symbols, environmental print; With assistance, comprehend vocabulary using suffixes, synonyms, antonyms; Sequence the letters of the alphabet to understand alphabetic order; With assistance, use resources to find the meaning of unknown words encountered in text; Build vocabulary using picture and symbols. (Vocabulary Development).

Begin to recognize environment signs (e.g., STOP, EXIT).

Label objects in room.

Recognize product logos (e.g., Legos and Barbie).

While reading to or playing with children, talk about and identify select letters.

Recognize some letters and words in books or the environment.

Encourage children to write at their own level their name or letters from their name on drawings or paintings.

Ask for help with a word in the environment.

Display children’s names on paintings, drawings, and cubbies.

Display the alphabet at children’s eye level and point out letters when children seem interested or help them when attempting to find certain letters.

**1.PK.5** Demonstrate awareness that print carries a message.

Begin to write their own messages to their family and friends.

Write a class story together where everyone contributes to the story.

← **1.K.5** Identify high frequency words to build fluency and comprehension. (Fluency & Comprehension).

Share letters that they have written or received.

Provide opportunities for children to write messages to each other or letters to family or friends.

### Content Standard 2.0: Reading Strategies

#### Indicator RS = Reading Strategies

#### Examples: Children will/may...

#### Supportive Practice: Practitioner/Adult will...

**2.PK.1** Identify the front cover of the book and know how to turn the pages when reading.

Show an understanding of how books are organized.

Model the appropriate way to handle books.

← **2.K.1** Demonstrate concept of print, word, and voice-to-print; Identify author and illustrator.

Handle books with care and respect.

Model the way to read (e.g., left to right).

**2.PK.2** Ask questions or make comments pertinent to the story being read.

Understand that books have meaning.

Encourage children to “read” to each other.

← **2.K.2** With assistance, use during reading strategies based on text and purpose to make predictions, identify key vocabulary, and make inferences.

Begin to look over pages of books in an appropriate manner, (e.g., right side up).

Point to words from left to right when reading; model how to turn pages.

**2.PK.3** Identify pictures to aid in comprehension.

Pretend to read.

Explain how a book works, by pointing out title, author, illustrator, etc.

← **2.K.3** With assistance, use after reading strategies based on text and purpose to orally recall details; and orally restate main ideas.

Begin to demonstrate comprehension of the meaning of a story.

Encourage children to retell stories from their own or other illustrations.

Try to retell the story or predict what happens next.

Encourage children to recreate stories or life experiences through drawing or scribbling/writing.

Remember events and characters from a story.

Identify familiar objects in pictures.

Frequently read books to groups or individual children and allow them to respond to or expand on themes within the books.

Express emotion and respond to pictures.

Retell the story using the pictures.

Provide books that allow children to lift flaps and further explore characters and themes.

### Content Standard 3.0: Literary Text

#### Indicator LT = Literary Text

#### Examples: Children will/may...

#### Supportive Practice: Practitioner/Adult will...

**3.PK.1** Retell a story with the aid of pictures, props, or a book

Place pictures from a story in the correct order.

Encourage children to retell stories through dramatic play or other means.

← **3.K.1** With assistance, listen for and identify setting and sequence of events.

Act out a story using a flannel board, puppets, or dramatic play.

Provide many props and manipulatives for children to recreate or develop their own stories.

Dictate their own stories similar to those read by teachers.

**3.PK.5** Listen and respond to rhythm or rhyme, (e.g., clapping or chanting).

↩ **3.K.5** With assistance, listen to and identify examples of words that create images; effects of rhythm and rhyme; and dialect.

**3.PK.6** With assistance, listen and respond to words with tone (e.g., poems and finger plays).

↩ **3.K.6** With assistance, listen to and identify words, and phrases that reveal tone.

**3.PK.7** With assistance, listen and discuss stories from different cultures and eras.

↩ **3.K.7** With assistance, listen to, read and discuss text from different cultures and time periods.

**3.PK.8** Predict what will happen next in a story.

↩ **3.K.8** With assistance, listen to and make predictions based on evidence

**3.PK.9** Listen to age-appropriate material that makes connections to self and the world around them.

↩ **3.K.9** With assistance, make connections to self, other text, and/or the world.

Recognize and recite familiar books/poems that include repeating and rhyming words.

Recite predictable phrases (e.g., “Brown Bear, Brown Bear, What do you see?”)

Participate in singing simple songs.

Recite poems and finger plays.

Begin to understand cultural differences from stories.

Compare events in books to their own experiences.

Explore and expand on themes within stories.

Respond to questions about the story.

Retell stories from memory.

Retell stories from the beginning, middle, and end.

Recreate stories or actual experiences in a variety of ways (e.g., dramatic play, dictating a story, and painting).

Encourage children to remember experiences and describe events in books or their personal lives.

Encourage children to predict the outcomes or change the endings of stories.

Regularly read predictable books.

Provide environments that allow children many opportunities to explore books and stories with diverse pictures and themes.

Encourage children to join in when reading predictable rhyming books.

Encourage children to make up their own songs or chants.

Choose books with repeated phrases.

Encourage children to bring favorite books from home or choose books from the classroom to share and discuss.

Ask children what they like/dislike about certain characters and stories.

Encourage children to explain the meaning of stories in their own unique way.

Encourage children to choose a favorite poem or song to recite/sing with the class.

Encourage children to make up their own poems.

**Content Standard 4.0: Expository Text**

**Indicator ET= Expository Text**

**Examples:** Children will/may...

**Supportive Practice:** Practitioner/Adult will...

**4.PK.1** Demonstrate and understand that printed material contains information (e.g., illustrations, graphs, and charts).

Know differences between various types of literature (e.g., fantasy vs. real).

Model for children writing stories, making lists, or labeling objects.

← **4.K.1** With assistance, listen to and identify the purpose of and gain information from illustrations, graphs, charts and titles.

Understand the meaning of a story.

Encourage children in their beginning interest in pretend writing.

**4.PK.5a** Recall information from an event, text, or picture related to self and the world around them.

Ask for help to read a book about a chosen topic.

Show through daily experiences and modeling that printed words provide useful and necessary information.

**4.PK.5b** Respond to or ask a question about an event, text, or picture.

Retell familiar stories.

Encourage the retelling of stories or events through drawing, painting, or journaling.

← **4.K.5** With assistance, make connections to self, other text, and/or the world; listen to and use information to answer specific questions.

Retell certain events from stories with pictures.

Encourage children to respond to stories by asking open-ended questions and/or engaging in conversations about the story.

**4.PK.7** With teacher assistance, follow, a simple pictorial direction.

Answer questions about the story.

Model genuine enthusiasm and interest in children's stories and pictures.

← **4.K.7** With assistance, listen to and follow pictorial and written directions to complete tasks.

Ask questions about details of pictures or stories.

Ask questions about previous events or books read.

Add personal information related to the story.

Model for children writing out recipes or directions and following the appropriate steps in the process.

Use pictures to organize own stories.

Play games or read books that involve specific steps or directions.

Use pictures to support understanding of a book.

**Content Standard 5.0: Effective Writing** (All levels of writing and spelling at this age are appropriate. Creative spelling and/or pretend writing should be expected and encouraged.)

**Indicator EW = Effective Writing**

**Examples:** Children will/may...

**Supportive Practice:** Practitioner/Adult will...

**5.PK.1** Experiment with writing tools and materials in response to information.

Show beginning control of writing, drawing, and painting (using various writing tools).

Display letters and words at eye level for children to see daily.

← **5.K.1** With assistance, use prewriting strategies to plan written work; choose and narrow a topic to organize ideas; and explore a topic to plan written work.

Develop eye-hand coordination.

Provide alphabet guides, stencils, or word cards for children to trace or use when writing as options.

Begin to determine a purpose for writing.

Provide daily opportunities for children to write at their own level.

**5.PK.2a** Experiment with beginning techniques for using various writing materials.

**5.PK.2b** Trace and progress to copying basic shapes (e.g., horizontal line, vertical line, X, plus sign, circle, etc.).

← **5.K.2** With assistance, draw or communicate ideas in written form.

**5.PK.4a** Use letter-like approximation to write name and/or other words or ideas.

**5.PK.4b** Attempt, with a model, to spell own first name.

**5.PK.4c** Attempt, with a model, to write the first letter of first name using the capital letter.

← **5.K.4** Edit to ensure correct spelling of first and last names. Edit capitalization for first and last names.

Experiment with brushes, chalk, markers, rubber stamps, computers, pens, and pencils.

Copy word cards or shapes from writing center or environment.

Use deliberate letter choices during writing attempts.

Scribble letter-like symbols and some letters in writing.

Begin to print letters in own name.

Recognize first letter in name and ask for assistance in writing or tracing letter.

Talk about letters and sounds when reading or writing with children.

Encourage inventive spelling of name and other familiar words.

Write, display, and point out children's name often.

Model how to write (i.e., left to right, top to bottom).

Praise any and all attempts at writing letters.

Provide environments where children can use various writing materials.

Provide many activities that foster the development of fine motor skills and finger dexterity.

Allow for many opportunities to work (e.g., trace or reshape with various materials) with letters and words.

**Content Standard 6.0: Types of Writing** (All levels of writing and spelling at this age are appropriate. Creative spelling and/or pretend writing should be expected and encouraged.)

### Indicator TW= Types of Writing

### Examples: Children will/may...

### Supportive Practice: Practitioner/Adult will...

**6.PK.1** Experiment with writing tools and materials to communicate.

← **6.K.1** With assistance, draw or write to communicate.

**6.PK.2** Experiment with writing tools and materials in response to a familiar experience.

← **6.K.2** Draw or write about familiar experiences and/or events; Write sentences about experiences and/or events appropriate to audience and purpose

Use pretend writing to communicate ideas and information.

Begin to use other resources to convey meaning (e.g., labels, books, and computers).

Use symbols or drawings to express thoughts, feelings, and ideas.

Use creative writing as part of their daily activities.

Explain their own writing or pictures.

Become familiar with using different writing instruments.

Draw a picture about a familiar experience.

Dictate or attempt to write a story related to a familiar experience.

Provide daily opportunities for children to engage in creative writing with various materials.

Integrate creative writing into daily routines and activities.

Model the appropriate way to write (e.g., left to right, top to bottom).

Encourage children to talk about and reread their own writing.

Encourage children to extend on their creative writings.

Encourage children to represent ideas and feelings through writing or drawing.

Allow for many opportunities for children to write for a purpose.

Model writing for a purpose.

**6.PK.4** Experiment with writing tools and materials in response to literature.

↩ **6.K.4** With assistance, draw and/or write responses to text.

**6.PK.5** Share drawings with others as a response to an expository text.

↩ **6.K.5** With assistance, draw and/or write responses to expository text

**6.PK.6** Share ideas and opinions for class writing.

↩ **6.K.6** With assistance, draw or communicate an opinion.

**6.PK.7** Dictate words, phrases, or sentences to an adult recording on paper.

↩ **6.K.7** With assistance, draw and/or write personal messages.

**6.PK.9a** Organize ideas, through group discussion, with teacher assistance for the purpose of group research.

**6.PK.9b** Identify and explore an area of interest.

**6.PK.9c** Use, with teacher assistance, a variety of sources to obtain information.

↩ **6.K.9** With assistance, discuss, write, and/or draw to formulate a question; record information and answer a research question.

Represent or describe stories through creative writings, drawings, or paintings.

Generate ideas for a story.

Choose a topic for writing related to familiar books.

Explain the meaning of drawings to adults or children.

Begin to compose various notes/letters/invitations to children, teachers, or families.

Label drawings with name to be shared with class.

Make signs or messages to inform others in classroom.

Use writing as a part of play.

Say aloud a story or event for an adult to write down.

Identify objects in drawing/painting for adult to record.

Expand ideas or details that help explain a story.

Contribute to or create stories when given "Once upon a time."

Write something and ask someone else to read it.

Assist children in journal writing for the classroom or home. (Teachers may rewrite the child's words as the child is writing and using his/her own creative spelling).

Provide an environment with a wide variety of literature and daily reading.

Model the writing process by recording the child's exact words for a story or description of a picture.

Encourage children to engage in pretend writing in their play.

Encourage sharing of personal and cultural differences from children's writings.

Provide journals as a choice and time for creative writing.

Allow children many opportunities to work in a writing center or use writing experiences in their play.

Encourage children to complete or change familiar stories.

Reread children's spoken words that have been written down.

Display and talk about children's written work or drawings.

Support children's interest in writing letters, notes, recipes, etc., to share with class or family.

## Content Standard 7.0: Listening

### Indicator LS = Listening

### Examples: Children will/may...

### Supportive Practice: Practitioner/Adult will...

**7.PK.1a** Listen for a variety of purposes with increasing attention span.

**7.PK.1b** Listen to and follow a two-step oral direction with the use of formal and informal language.

↩ **7.K.1** Listen for a variety of purposes, including gaining information, being entertained and understanding directions. With assistance, listen for and identify main idea, purpose and messages.

**7.PK.2** Listen and respond appropriately to stories and group discussions.

↩ **7.K.2** Listen to and respond to oral communication.

**7.PK.3** Listen with increasing attention span to gain new vocabulary.

↩ **7.K.3** Expand vocabulary through listening.

**7.PK.5** Engage in conversation and sometimes follow conversational rules.

↩ **7.K.5** Actively listen to a speaker; listen to and participate in conversations.

Listen to teachers, children, and book recordings in listening centers.

Listen for instructions or ideas in order to complete tasks.

Demonstrate through actions their understanding of directions or requests.

Repeat instructions and/or assist other children with completing directions.

Ask why, who, what, when, where, and how when listening to conversations or to books read aloud.

Repeat rhymes, songs, or passages in books.

Answer questions related to books.

Ask questions about stories indicating increased attention to details.

Model developmentally appropriate behaviors when listening to others speak or read.

Demonstrate an understanding of changes in routine or of changes in words from books.

Begin to demonstrate an understanding of turn-taking in conversation.

Participate as an equal partner in conversations with others.

Listen to children without interruption.

Ask children to repeat or rephrase statements made by others.

Model asking and answering questions.

Provide time for child-initiated discussions on topics that interest children.

Use storytelling to encourage the use of new and interesting words.

Ask many open-ended questions.

Help the children understand directions by encouraging them to repeat them to other children or adults.

Discuss topics that are relevant and interesting to children.

Introduce topics that children can expand and explore further.

Encourage “good listening ears,” and developmentally appropriate “listening” behavior.

Provide children with experiences to learn the nuances of conversation (e.g., pausing and waiting to respond to a question or taking turns).

## Content Standard 8.0: Speaking

### Indicator S= Speaking

### Examples: Children will/may...

### Supportive Practice: Practitioner/Adult will...

**8.PK.1** Speak with increasing clarity, ease and accuracy, and give clear directions.

↩ **8.K.1** With assistance, give directions to complete tasks; ask questions to clarify directions.

Communicate effectively in native language (e.g., English, Spanish, or sign).

Respond to language and help clarify children’s meanings.

Answer children’s questions about words and meanings.

**8.PK.2** Use and expand vocabulary to describe feelings, experiences, observations and ideas.

← **8.K.2** Use precise language to describe feelings, experiences, observations and ideas.

**8.PK.3a** Engage in dramatic play to convey experiences, feelings, ideas, or stories.

**8.PK.3b** Speak in complete sentences using at least three words.

← **8.K.3** Speak clearly with prosody; Communicate personal experiences and retell stories; Communicate a statement that expresses an opinion.

**8.PK.4a** Initiate conversation and respond to others.

**8.PK.4b** Share ideas and information from personal and share group experiences.

**8.PK.4c** Ask and answer simple questions.

← **8.K.4** Participate in group discussions following the turn-taking process; by asking and answering relevant questions.

Repeat instructions for others to understand.

Explain words or directions for other children to understand.

Pretend with words or actions that express feelings or ideas.

Tell real or make-believe stories.

Repeat words and expand on sentences spoken by adults or other children.

Engage in word play (e.g., “banana, fanna, fofanna”).

Experiment with and learn new words.

Demonstrate an understanding of sentence structure.

Respond with nonverbal gestures and expressions while others are speaking.

Share personal experiences and ideas in group discussions.

Ask and answer questions based on conversations with adults or children.

Use new words frequently during play or other interactions.

Positively reinforce children’s new word usage.

Allow children to control the subject of conversations when appropriate.

Reinforce children’s interest in using their native language.

Encourage children to talk about books while reading to them.

Play sound/listening games to help with hearing sound differences.

Provide props or flannel board pieces for children to reenact familiar stories or to develop their own stories.

Encourage children when they speak with or help one another with directions or instructions.

Model the appropriate sentence structure to children.

Speak clearly and repeat words and phrases to children when needed.

Praise children when they speak and use words at their own developmental level.

Expand children’s sentences.

Engage children in talking and model appropriate conversation skills.

Model and encourage turn-taking, eye-contact, etc.

Model asking and answering questions.

Develop questions with children and encourage them to expand on or add more questions on a topic of interest.

Work with children to find answers to questions.

Provide time for discussions on topics that interest children.

**8.PK.5** Use language to repeat simple stories, songs and rhymes, or to relate experiences.

← **8.K.5** Demonstrate phonological awareness of spoken words through rhyming; concept of word; syllable awareness; onset and rhyme awareness. Demonstrate phonemic awareness of spoken words through matching, isolating, blending, segmenting, deleting and substituting.

Repeat nursery rhymes, poems, finger plays, and songs.

Use different voices for characters in books, songs, or poems.

Retell a favorite book or story.

Talk about real-life experiences.

Ask questions to help children understand something.

Share children's thoughts about experiences using new words and help them share these stories with families.

Encourage peer interaction.

Encourage role-playing with individuals or groups of children.

Encourage children to act out stories and pretend to be characters from books.

Discuss feelings or behaviors of characters during role-play to foster empathy and understanding of others.

## Language & Early Literacy Activities Language & Early Literacy Activities

### Family Activity:

"Simon Says" is a game the whole family can enjoy and may help children with practicing their listening skills. Each family member can take turns playing "Simon." This person gives directions such as, "Simon Says touch your toes....Simon Says touch your knees....Simon Says turn around." All family members must follow the directions only when the directions begin with "Simon Says." When they don't hear "Simon Says," players who still follow directions have to sit down. The person who listens best to all directions wins!

### Family Activity:

Puppet Play is a fun activity for children. Using paper bags or different colored socks, make faces on the puppets with markers, crayons, or paint. Help your child glue on yarn, buttons, or anything else to decorate their puppet. Encourage your child to be as creative as they wish in making their puppet, and in acting out characters. One fun activity is after reading a favorite book, encourage your child to act out the story, retell or change the story, or express thoughts and feelings of characters within the story using their puppet.

## Social Studies/Social Emotional Introduction

Early education often focuses on academic subject matter such as reading, mathematics, and science. However, recent reports in early childhood education clearly indicate that children who develop self-confidence and positive social skills early in life are more successful learners later on (The National Academies, *Eager to Learn*, NRC, 2001a; *Neurons to Neighborhoods*, 2000; Katz & McClennan, 1997; Ladd, 1990). For this reason, social-emotional development during the early years of childhood is critically linked to the other, more traditional, content areas in early education.

### Goals of Pre-Kindergarten Social Studies:

- To support and promote children's self-confidence and self-direction,
- To encourage children to express and identify their feelings,
- To give children the skills to persevere and maintain their focus, and
- To develop positive relationships with individuals and the community.

Social-emotional growth and learning develops through interactions with others and is interconnected to other domains such as cognitive and physical development. Social relationships between adults and children exert a powerful positive influence on children's development. Children initially learn about themselves and how to behave in society from their families but are also influenced by peers and other adults in early childhood settings (Kagan, 2000). The literature indicates that children need emotionally warm and positive environments with caregivers who nurture self-concept, independence, and self-control in order to be successful learners (Berk, 2001; McGraw-Hill).



# Pre-Kindergarten Standards: Social Studies/Social Emotional

## Content Standard H1: People, Cultures, and Civilizations

### Indicator H=History

### Examples: Children will/may...

### Supportive Practice: Practitioner/Adult will...

**H1.PK.1** Children begin to complete simple tasks together.

← **H1.K.1** Discuss the importance of working together to complete tasks.

**H1.PK.2** Be exposed to stories of family members, local residents, and prominent figures.

← **H1.K.2** Listen to stories of family members, local residents, and prominent figures to highlight the human experience.

**H1.PK.3** Share information about their family practices, customs, and culture

← **H1.K.3** Listen to stories of people and families around the world.

Work together to complete a task (e.g., cleaning up the classroom or working on a project together).

Begin to become familiar with diverse family practices, customs and cultures.

Be aware of some local and community people and events.

Want to share information about their family practices, customs, and culture.

Bring in materials to share with the class about their family's culture.

Discuss characters in books, talk about feelings of the characters, similarities and differences in appearances, etc.,

Read books and listen to music that represents a variety of cultures and traditions.

Model kindness and caring for all people.

Invite community members or other speakers to share their culture with the children.

Provide children with opportunities to experience other cultures through speakers, activities, music, books, and food.

## Content Standard H2: Nation Building & Development

### Indicator H=History

### Examples: Children will/may...

### Supportive Practice: Practitioner/Adult will...

**H2.PK.1** Begin to recognize that problems can occur in groups.

← **H2.K.1** Identify problems that occur when people live and work together.

Understand that conflicts happen between people.

Be able to discuss the reason behind conflicts.

Model kindness and caring for all people.

Provide children with opportunities to solve problems through discussion and other appropriate techniques.

## Content Standard H3: Social Responsibility & Change

### Indicator H=History

### Examples: Children will/may...

### Supportive Practice: Practitioner/Adult will...

**H3.PK.1** Begin to understand that differences exist between home and school.

← **H3.K.1** Recognize differences between home and school.

Understand that there are different rules and expectations for school and home.

Discuss and understand how important it is to work together.

Provide children with opportunities to discuss and understand differences between home and school (e.g., rules, food, and nap time).

**See Social Emotional 1.0: Self-confidence; 4.0 Interactions with Other Children and Adults; 5.0 Pro-social behaviors)**

- ↩ **H3.K.2** Describe the importance of working together to complete tasks.
- ↩ **H3.K.3** Identify the occupations of people in their school.
- ↩ **H3.K.4** Demonstrate respect for each other in the classroom and school.
- ↩ **H3.K.5** Share those events that are important to the students and their families

Recognize the different jobs that everyone has at their school.  
 Show respect for themselves and others.

Model the importance of working together to accomplish a task (e.g., building a structure from blocks, cleaning up the classroom).  
 Discuss the various jobs that everyone has at the school.  
 Encourage parents and families to participate in the classroom.  
 Model respect, tolerance and kindness in the classroom.

**Content Standard G5: The World in Spatial Terms**

**Indicator G=Geography**

**Examples:** Children will/may...

**Supportive Practice:** Practitioner/Adult will...

**G5.PK.1** Identify direction and location (e.g., up/down and above/below).

- ↩ **G5.K.1** Recognize that a globe is a representation of Earth, and use of vocabulary related to direction and location (i.e., up/down, left/right, near/far and above/beyond).

Identify direction and location (e.g., up/down, above/below).  
 Ask many questions about what he/she sees and finds.  
 Move in directions by a command (e.g., forward, backward, sideways, left, right).  
 Identify and locate familiar places.  
 Make roads for toy trucks, bikes, or cars.

Allow children to climb, run, jump, and roll to physically experience space.  
 Play games such as “Simon Says” and “Mother May I” to help children move in various directions.  
 Use positional and directional words like “above” and “below”, or “left” and “right.”  
 Use words that describe color, size, shape, etc.  
 Read and use maps and globes.  
 Provide maps and discuss routes for trips.

**Content Standard G6: Places & Regions**

**Indicator G=Geography**

**Examples:** Children will/may...

**Supportive Practice:** Practitioner/Adult will...

**G6.PK.1** Identify different areas of the classroom and home.

- ↩ **G6.K.1** Identify areas that have different purposes in the home (i.e., kitchen, bedroom) or in the classroom (i.e., exit door, teacher desk).

Learn the name of his/her own city or town.  
 Give information about where he/she lives.

Discuss the city, state, and country where your family lives in relation to other people.  
 Allow many opportunities for children to explore environments.

**G6.PK.2** Begin to recognize characteristics that make them unique.

← **G6.K.2** Describe self as a unique individual with characteristics similar to others.

**G6.PK.3** Identify numbers and letters related to his/her address.

← **G6.K.3** Recall from memory the street on which s/he lives.

Can express how others are similar or different from one another.

Name and point to different physical characteristics (e.g., body parts, eye color, freckles, hair, etc.).

Recognize that streets have signs and houses have numbers.

Explain where they live and describe structures that they may live by.

Allow many opportunities for children to explore their community through walks, bus rides, and conversations with their peers.

Provide opportunities for children to discuss physical changes (e.g., increases height, weight).

### Content Standard G7: Human Systems

#### Indicator G=Geography

#### Examples: Children will/may...

#### Supportive Practice: Practitioner/Adult will...

**G7.PK.1** Begin to understand that people move to other places.

← **G7.K.1** Explain that people move from one location to another.

Understand moving to a new house or state.

Recognize that other family members live somewhere else.

Understand that people live all over the world.

Discuss how people move to different locations.

Provide opportunities for children to discuss where their families live (e.g., grandparents, aunts, uncles and other family members).

Look at maps or globes to show the children the places where their families live.

### Content Standard G8: Environment & Society

#### Indicator G=Geography

#### Examples: Children will/may...

#### Supportive Practice: Practitioner/Adult will...

**G8.PK.1** Identify weather conditions (e.g. rain, sunshine, snow, fog).

← **G8.K.1** Recognize weather changes with the seasons and how people adapt to those changes.

Identify familiar weather conditions (e.g., rain, sunshine, snow, fog).

Use words such as hard/soft, rough/smooth, and water/land when describing surfaces.

Identify various natural features.

Determine what type of clothing to wear based on the weather.

Identify seasons by temperature or other characteristics.

Draw pictures representing seasonal changes.

Talk about clothing choices based on weather.

Discuss experiences of being in different| weather patterns (e.g. rain, snow, wind, sun).

Discuss how things look different in different weather patterns (e.g., when it is foggy, when it is raining).

Look at thermometers and discuss the numbers.

Watch and discuss the weather forecast.

Talk about clouds and what they might predict about the weather.

## Content Standard Ec9: The Market Economy

### Indicator Ec= Economics

### Examples: Children will/may...

### Supportive Practice: Practitioner/Adult will...

**Ec9.PK.1** Begin to understand that resources can be limited (e.g., turning off the water and lights when not using).

↩ **E9.K.1** Show that resources are scarce, such as a limited number of crayons.

**Ec9.PK.2** Demonstrate the role of different jobs in the community.

↩ **E9.K.2** Identify jobs in the community.

Be aware of the fact that adults work to pay for necessary items, housing, food, etc.

Begin to understand conservation of resources (e.g., turning off the water and lights).

Role play different occupations while engaging in dramatic play.

Talk about what he/she wants to be when grown up.

Discuss the occupations that people have (e.g., policeman, fireman, grocery clerk, or teacher).

Read books about many different occupations.

Help children with questions they may have about various careers and talk to or about people in these careers.

Help children think about their future careers/jobs.

Invite community members to come and visit the classroom and share their knowledge about their occupation.

Provide books, music, pictures and posters displaying different occupations.

## Content Standard Ec10: The US Economy as a Whole

### Indicator Ec= Economics

### Examples: Children will/may...

### Supportive Practice: Practitioner/Adult will...

**Ec10.PK.1** Demonstrate the role of consumers and understand that money is exchanged for goods and/or services.

↩ **E10.K.1** Identify United States currency.

Show an understanding of the consumer's role through dramatic or pretend play.

Play store or restaurant with play or real money, receipts, credit cards, and telephones.

Recognize that things have to be paid for with money, and that sometimes he/she can't buy what is wanted if there is not enough money.

Provide materials for dramatic play.

Use the names of coins and currency and their worth for children to hear and understand.

Involve children in using real money to help buy items.

## Content Standard Ec11: The Dynamic Economy

### Indicator Ec= Economics

### Examples: Children will/may...

### Supportive Practice: Practitioner/Adult will...

**Ec10.PK.1** Decide between two choices involving classroom resources.

↩ **E11.K.1** Make decisions involving classroom resources.

Decide between two choices.

Be aware that adults work in order to earn money to buy the food, clothing, and housing that a family needs.

Create opportunities for children to choose and discuss consequences of choices.

Involve children in using real money in everyday situations.

Encourage children to participate in problem solving activities in the classroom.

Create a pro and con chart and write down the children's responses, so that they can determine what will be the best solution.

**Content Standard C13: Citizenship and the Law (Rules & Laws, Rights, Responsibilities, Symbols)**

**Indicator C=Civics**

**Examples:** Children will/may...

**Supportive Practice:** Practitioner/Adult will...

**C13.PK.1** Follow classroom and school rules.

Understand the rules at school and at home.

Talk about the rules and maintain them consistently but compromise when appropriate.

↩ **C13.K.1** Identify and follow classroom and school rules that guide behavior and resolve conflicts.

Be able to recite the classroom rules.

Talk to the children about appropriate rules before entering a different type of environment such as a library or church setting.

**C13.PK.2** Participate in group decision making.

Follow the rules made with adults and/or peers in a game or play.

Play a variety of simple games (e.g., board games, card games, or ball games) with the children. Comment on “my turn” and “your turn.”

↩ **C13.K.2** Identify an individual's rights within the classroom.

Follow the safety rules.

Model safety rules (e.g., wear your seat belt while in the car, wear a helmet while biking, and wait for the “walk” signal at crosswalks).

**Content Standard C16: Global Relations**

**Indicator C=Civics**

**Examples:** Children will/may...

**Supportive Practice:** Practitioner/Adult will...

**C16.PK.1** Identify their teacher and peers by name.

Know the names of all of their peers in the classroom.

Provide many opportunities for children to recognize their classmates' names.

↩ **C16.K.1** Name their school.

Recognize and know the name of the school.

Have names cards available in the writing area for children to use.

Display a name poster on the wall with all of the children's names on it.

Model the name of the school for the children.

# Pre-Kindergarten Standards: Social Emotional

## Content Standard 1.0: Self-Confidence

### Indicator SE=Social Emotional

### Examples: Children will/may...

### Supportive Practice: Practitioner/Adult will...

**1.PK.1a** Make independent choices from diverse interest centers or activities.

**1.PK.1b** Select materials to use for individual expression.

**1.PK.2a** Express ideas for activities; initiate and participate in discussions with teachers or peers.

**1.PK.2b** Acknowledge actions and accomplishments verbally and nonverbally.

**1.PK.3** Re-engage in a task or activity after experiencing disappointment, frustration, or failure.

Be more independent when choosing activities.

Use materials that help express individuality.

Express ideas about activities.

Talk about and express actions and accomplishments.

Start on a task or activity again after experiencing disappointment or failure.

Encourage children to express likes or dislikes.

Ask children about their opinions and ideas.

Give children opportunities to interact with others.

Give children the chance to take responsibility for daily tasks.

Encourage the children to try new activities.

Comment on what you observe him/her doing.

Offer safe choices but allow children to experience natural consequences within safe limits.

## Content Standard 2.0: Self-Direction

### Indicator SE=Social Emotional

### Examples: Children will/may...

### Supportive Practice: Practitioner/Adult will...

**2.PK.1a** Separate easily from parents(s)/caregivers(s)/significant adult(s).

**2.PK.1b** Move through routines and activities with minimal adult/teacher direction.

**2.PK.2** Demonstrate self-help skills (e.g., put blocks away, pour juice, use soap when washing hands).

**2.PK.3a** Use toys and materials with care.

**2.PK.3b** Clean up or put away toys and materials when finished.

Separate easily from parents or significant adults.

Engage in routines and activities with less adult direction.

Use self-help skills more effectively.

Use toys and materials with care.

Clean up and/or put away toys when finished.

Model appropriate methods for handling objects, cleaning up, etc.

Provide opportunities for child to do things for him/herself.

Discuss issues of carelessness, destruction of property, etc. when they occur and discuss suggestions for resolving the problems.

Encourage families to use a specific good-bye routine that is supportive and eases a child's separation.

Allow children to participate in the rule making process.

## Content Standard 3.0: Identification and Expression of Feelings

### Indicator SE=Social Emotional

### Examples: Children will/may...

### Supportive Practice: Practitioner/Adult will...

**3.PK.1** Identify a range of feelings (e.g., sadness, anger, fear, and happiness).

**3.PK.2a** Express feelings, needs or wants in appropriate ways.

**3.PK.2b** Demonstrate awareness of feelings of others (e.g., gets blanket for friend and comforts him/her when he/she feels sad).

Identify a variety of feelings (e.g., anger, sadness, fear, happiness).

Express feelings, needs, or wants in appropriate ways.

Show an awareness of feelings in others and may comfort friends or others when needed.

Show empathy for a friend or someone who is sad.

Understand why someone is upset and try to help them to feel better.

Create an environment where children feel safe and secure and where their feelings are accepted.

Encourage children to evaluate themselves (e.g., “Was that easy or hard for you?”).

Celebrate the children’s accomplishments.

Respect and accept children and help him/her feel unique and special.

Engage in frequent conversation with children about their interests, activities, feelings, and perspectives.

## Content Standard 4.0: Interactions with other children and adults

### Indicator SE=Social Emotional

### Examples: Children will/may...

### Supportive Practice: Practitioner/Adult will...

**4.PK.1a** Demonstrate appropriate affection for teachers and friends.

**4.PK.1b** Express common courtesy to others (e.g., saying “thank you”, “please” and “excuse me”, or passing a plate of cookies).

**4.PK.1c** Respect rights and belongings of others (e.g., “It is my turn to use the bike, but you can have the bike when I am finished”).

**4.PK.1d** Demonstrate problem-solving skills (e.g. ask for help from an adult, talk about problems, talk about feelings relating to problems, and negotiate solutions).

**4.PK.1e** Be able to say and respond to first and last name.

**4.PK.1f** Be able to say parent’s or caregiver’s name.

Show affection towards adults and friends.

Express common courtesy to others (e.g., “please,” “thank you,” “excuse me”).

Respect the rights and belongings of others (e.g., taking turns).

Show problem solving skills (e.g., ask for help, talk about feelings, talk about problems, and negotiate solutions with others).

Begin to share and invite other children to join in their play.

Have a preferred playmate or prefer to play alone.

Be able recite their full name when asked.

Model trust, honesty, and respect in dealings with children and adults.

Use books to help children take the perspective of others and/or help with problem solving.

Model the words and behaviors of politeness and common courtesy.

Provide many opportunities for sharing.

Support and model empathy.

Point out and celebrate similarities and differences between children and families.

Provide opportunities for children to learn and share names of their friends and families.

## Content Standard 5.0: Pro-Social Behaviors

### Indicator SE=Social Emotional

### Examples: Children will/may...

### Supportive Practice: Practitioner/Adult will...

**5.PK.1a** Play independently.

**5.PK.1b** Play in pairs and small groups.

**5.PK.1c** Engage in dramatic play.

**5.PK.1d** Initiate play, or enter into play with a group of children already playing.

**5.PK.2a** Participate in cooperative groups to complete a task.

**5.PK.2b** Take turns with teacher support.

**5.PK.2c** Share some of the time.

Play independently.

Play in pairs and in small groups.

Engage in dramatic or pretend play.

Initiate play with others or enter into play with a group of other children.

Engage in cooperative groups to work on a task.

Take turns with teacher support.

Show that they have sharing ability with other children.

Provide opportunities for children to play in groups or with a partner.

Support and model empathy.

Point out cooperative/sharing behaviors.

Model taking turns.

Read books that demonstrate respect for the feelings of others.

Provide children with opportunities to engage in cooperative games or activities.

Encourage sharing in the classroom.

## Content Standard 6.0: Attending and Focusing Skills

### Indicator SE=Social Emotional

### Examples: Children will/may...

### Supportive Practice: Practitioner/Adult will...

**6.PK.1a** Attend to a task for at least 10 minutes.

**6.PK.1b** Move on to next activity without exhibiting signs of stress.

**6.PK.1c** Use verbal and non-verbal conversation skills (e.g., listening, letting a person finish speaking before taking a turn, staying with one topic, maintaining eye contact, etc.).

**6.PK.1d** Demonstrate ability to delay gratification to complete a larger task.

Focus on a task for more than 10 minutes.

Be able to transition to a new activity without showing signs of stress.

Use words and non-verbal skills in conversations (e.g. listening, letting a person finish speaking before taking a turn, staying with one topic, making eye contact).

Demonstrate the ability to delay gratification to complete a larger task.

Encourage children to pursue his/her own interests.

Provide an extended period of time to work on specific tasks and/or projects.

Provide a variety of materials/supplies for children to complete tasks/projects in a variety of centers.

## Social Studies/Social Emotional Activity

**Activity:** “Packing for Weather” (Virtual Pre-K, Taking Care of Me, Lesson 10):

**Materials:** Flannel board, weather or season symbols, three suitcases or shopping bags, clothing for a variety of seasonal conditions, large bag, drawing paper, crayons, or markers. Introduce the activity with a related story or game such as “What’s in the suitcase?” Put something like an umbrella in a soft-sided suitcase. Have students try and guess the contents by touching the suitcase. Open the case and ask, “When do we use this?” Have the students pick a destination and discuss weather conditions for it. Bring in a large bag of clothing and tell the students to help you pack the right clothing for the trip. Place the symbols for rainy, snowy, and sunny on the flannel board and put a suitcase under each. Students take turns reaching into the bag and naming the item of clothing each pulls out. Then the student decides which suitcase the clothing belongs in and puts it into the case. Ask for agreement from the students or discuss alternatives. After the suitcase activity, have children discuss their favorite weather and draw pictures of it. These may be combined into a book with chapter names for the weather conditions or seasons.

**Teacher-to-Teacher Tip:** Weather conditions overlap, so make sure the students understand that rain means wet conditions, snow means cold conditions, and sun means hot conditions. Thrift shops are a good source of clothing for this lesson. The clothing can also be used for dress-up clothes.



## Creative Expression Introduction: Approaches To Learning

During the early years, imagination and creativity are at their height. Early childhood programs should value and recognize these attributes in children and build on them as a way to facilitate development and learning. Opportunities for creativity should be integrated throughout all areas of the early childhood curriculum. Children should be provided with a wide range of materials and time to explore them. It is the process rather than the end product that is most important, because children experience and learn many skills through the process. Depending on their previous experiences, individual dispositions, age or developmental level and unique interests, children will express their creativity in a variety of ways. Children learn by interacting with the environment, their peers, and significant adults. This interaction often is in the context of play. Creativity is particularly supported through play, when children use imagination, experiment with roles, use a wide range of tools and props, find creative solutions to problems, and gain insight into the world around them.

**Creativity presents itself in many ways. The following standards consider creativity in four distinct areas:**

- Visual Arts,
- Music and Movement,
- Dramatic Play, and
- Creative Thinking.

Research supports the importance of the arts in academic achievement (CNAEA, 1994). By expressing and appreciating the arts, one develops thought processes and communication skills (Althouse, Johnson, & Mitchell). Arts involve all content areas. Early childhood curriculum is not taught in isolated segments but is integrated across content areas. The arts connect the content areas and give children a means of developing new ways of understanding their world.



# Pre-Kindergarten Standards: Creative Expression

## Content Standard 1.0: Creative Thinking- Approaches to Learning through Creativity

### Indicator CT: Creative Thinking

### Examples: Children will/may...

### Supportive Practice: Practitioner/Adult will...

**1.PK.1** Use a variety of approaches to solving problems.

Predict outcomes in stories, and to answer “what if” questions.

When problems occur in the classroom, model for children how to come up with a variety of solutions.

**1.PK.2** Use a variety of approaches to solving interpersonal problems in the classroom.

Engage in problem solving in a variety of centers.

Role play situations for children to expose them to potential problems and how to solve them.

**1.PK.3** Adapt environment or abilities to reach a motor challenge, such as climbing or reaching an object.

Demonstrate awareness of ways to get help in solving problems.

When conflicts occur between children, use it as an opportunity to teach them how to solve a problem.

Solve an increasing number of problems independently in play and living situations.

Ask children many open-ended questions that require more than a yes or no answer.

Demonstrate ability to classify, compare, and contrast.

Ask children to explain how they reach solutions to problems they encounter.

Use an increasing number of details and more realistic representations.

Encourage children to find more than one way to solve problems.

Try new ideas to solve a problem.

Offer a variety of materials in the classroom that are open-ended in how they can be used (e.g., blocks, art materials, etc.).

Demonstrate a technique to get something out of reach (e.g., using tongs to grasp something off of a tall shelf).

Have a variety of tools (e.g., manipulatives, measuring tools, and magnifying glasses, etc.) for math, science, and other cognitive areas.

Allow children to use things in the classroom environment to adapt to challenges (e.g., using a large block as a stepstool).

## Content Standard 2.0: Creative Thinking- Approaches to Learning through Motivation and Persistence

### Indicator CT: Creative Thinking

### Examples: Children will/may...

### Supportive Practice: Practitioner/Adult will...

**2.PK.1** Select progressively more challenging tasks.

Use an assortment of objects to complete a task.

Provide children with large amounts of time to explore and work with classroom materials.

**2.PK.2a** Demonstrate ability to delay gratification to complete a larger task.

Combine materials to make the play or experience more rewarding.

Permit children to choose activities that are of interest to them.

**2.PK.2b** Express satisfaction when accomplishing a task and achieving a goal.

**2.PK.3** Demonstrate persistence by trying again when faced with challenges.

Become interested in building, drawing or creating an intricate structure.

Show pride in the work that they have accomplished.

Seek out friends and teachers to show the work that they have done.

Stay focused on a specific area in the classroom until they feel that they have mastered the skill.

Encourage children to engage with classroom materials for longer periods of time.

Offer materials that range from simple to complex, and encourage children to work up to the more complex materials (e.g., simple puzzles to jigsaw puzzles).

After a large amount of exploration time with materials, encourage children to create more complex things.

Encourage children to try new things or elaborate on something they have done.

Allow children to work individually and in small groups on ongoing projects that interest them.

Set aside space in the classroom to store work (e.g., block structures, art, etc.) so that children can work on projects for an extended amount of time.

Take photos of children's work and write down the things they say and post it at their eye level to inspire them to continue or change course.

Take time to revisit a project that children have done and talk about how it will or will not carry on.

Invite children to share their work with their classmates and encourage them to make comments or ask questions.

### Content Standard 3.0: Creative Thinking- Making Connections

#### Indicator CT: Creative Thinking

#### Examples: Children will/may...

#### Supportive Practice: Practitioner/Adult will...

**3.PK.1** Combine objects in a variety of ways.

**3.PK.2** Categorize experiences, people and ideas in a variety of ways.

**3.PK.3** Create stories and scenarios by combining experiences and ideas.

Incorporate a variety of materials into the play or activity.

Sort or classify materials, and objects by specific characteristics.

Expand their play or activity by including real life experiences with fantasy play.

Encourage children to move freely among the centers in the classroom.

Offer a variety of materials in all learning centers in the classroom.

Allow children to move materials around the room to use them in diverse ways.

Model for children how to make connections among ideas and topics that they are exposed to.

Include all subject areas in all learning centers (e.g. have math materials available in all learning centers).

Expose children to lots of experiences, people, and ideas through discussions, books, and classroom visitors.

Read and sing different versions of a story or song and talk about how they are similar and different.

Encourage children to talk about their ideas and share them with others.

Make journals for the children to use for drawing and writing stories and ideas.

Make time for children to dictate their ideas or stories to you and then write them down.

Help children think of topics they want to write about.

Allow children to express their ideas and stories in multiple ways (e.g., visual arts, dramatic play, construction, etc.).

## Content Standard 1.0: Music and Movement - Singing

### Indicator MM=Music and Movement

### Examples: Children will/may...

### Supportive Practice: Practitioner/Adult will...

**1.PK.1** Make a variety of sounds with their voices.

**1.PK.2** Create and sing chants.

**1.PK.3a** Recognize and select a variety of simple songs, finger plays, musical games, and musical activities alone and with others.

Participate during singing activities.

Request that the teacher sing their favorite classroom song.

Sing during circle time and during activity time.

Recognize the words of simple songs sung in the classroom.

Enjoy music experiences from other cultures.

Include musical activities in the classroom on a daily basis.

Sing a variety of songs, fingerplays, chants, and rhymes.

Expose children to a variety of styles in music (e.g., classical, folk, etc.).

Talk about and demonstrate how to sing in low and high voices.

**1.PK.3b** Select and recognize a variety of songs from diverse cultures.

↪ **K.1.3.1** Sing a simple melody with accurate pitch.

↪ **K.1.3.3** Sing simple ostinati and two-part rounds such as “Row, Row, Row Your Boat”.

↪ **K.1.3.4** Sing patriotic songs, folk songs, and multicultural selections.

Encourage children to sing songs in different pitches and dynamics (e.g., high, low, and soft, loud).

Include a music center in your classroom complete with a variety of instruments and musical themed books.

Allow children to make noise often with their voices and/or musical instruments.

Encourage children to try and make different animal and environmental sounds.

When reading books, encourage children to make sound effects that go with the story.

Have musical themed or “singable” books available in the classroom.

Create a book with all of the children’s favorite songs for them to look at.

Give opportunities for children to choose what songs or musical activities to play.

Expose children to a variety of music and songs from different cultures.

Learn songs in more than one language.

**Content Standard 2.0: Music and Movement - Playing Instruments**

**Indicator MM=Music and Movement**

**Examples:** Children will/may...

**Supportive Practice:** Practitioner/Adult will...

**2.PK.1** Play and identify a variety of musical instruments.

**2.PK.2** Participate in a rhythm instrument band.

**2.PK.4** Accompany simple music with rhythm instruments or clapping.

↪ **K.2.3.1** Play classroom instruments using proper technique.

Ask to play the musical instruments in the classroom.

Have a favorite instrument that they like to play.

Follow the rhythm of the music using an instrument.

Use materials to create their own instrument.

Have books about music and musical- themed books available in the classroom.

Play instrumental music and show children pictures of the instruments that are being played.

Encourage children to make instruments from recycled materials.

Encourage children to gather together and pretend to be in a rhythm instrument band.

Move and dance around to different types of music.

Have children clap, tap, stomp, etc. to the beat of music that they hear.

### Content Standard 3.0: Music and Movement - Improvisation

#### Indicator MM=Music and Movement

**3.PK.1** Improvise simple songs and rhythmic patterns using voice, body or instrument.

**3.PK.3** Take familiar songs and change the words, feelings, sound of voice or dynamics.

↶ **K.3.3.1** Improvise short melodic and rhythmic patterns.

↶ **K.4.3.1** Create music to interpret stories, rhymes, and poetry.

↶ **K.4.3.2** Create short songs and instrumental pieces.

↶ **K.4.3.3** Organize pieces using a variety of sound sources.

#### Examples: Children will/may...

Create own words and sing them with a familiar tune.

Change their voice tone to be funny or serious.

#### Supportive Practice: Practitioner/Adult will...

Sing a variety of songs and repeatedly expose children to them.

Model for children how to change words and sounds to create different songs and music.

Model for children how to change the rhythm of a song (e.g., sing it faster or slower).

Show children how to change the feeling of a song by singing a familiar song in a happy voice, sad voice, etc.

Encourage children to make up their own songs and music.

Have children perform and sing their songs for their classmates.

Write down the words to children's songs and create a class songbook.

### Content Standard 6.0: Music and Movement - Listening

#### Indicator MM=Music and Movement

**6.PK.1** Identify simple elements of music such as loud/soft and fast/slow.

↶ **K6.3.1** Identify simple elements of music.

#### Examples: Children will/may...

Understand the difference between loud /soft, fast/slow when singing.

Be able to demonstrate how to incorporate simple elements of music.

#### Supportive Practice: Practitioner/Adult will...

Take familiar songs and encourage the children to try and sing them slow and fast or loud and soft.

Play music and have the children move to the rhythm, beat, or tempo of the song.

Play music and verbally identify if it is playing slow, fast, loud, or soft.

Talk about songs that you know and whether they are slow, fast, soft, or loud.

## Content Standard 7.0: Music and Movement - Evaluation

### Indicator MM=Music and Movement

### Examples: Children will/may...

### Supportive Practice: Practitioner/Adult will...

**7.PK.2** Demonstrate a preference in music.

← **K.7.3.2** Explain personal preferences for specific musical works and styles using simple musical vocabulary (e.g., loud/soft; high/low).

Have a preference in music and want to share it with the class (e.g., country, pop, or children's music).

Bring in musical instruments that make the sound of their favorite kind of music.

Encourage children to suggest songs and music to be played in the classroom.

Have a variety of musical instruments available for children to choose from.

During circle time, give the choice of a few songs and have children vote on which one to sing.

Make a class graph showing the children's favorite songs.

Make a class book where children dictate stories about their favorite songs or music.

## Content Standard 8.0: Music and Movement - Application to Life

### Indicator MM=Music and Movement

### Examples: Children will/may...

### Supportive Practice: Practitioner/Adult will...

**8.PK.2** Demonstrate math and language skills while participating in music.

Participate with counting songs and finger plays.

Understand the concepts that are being demonstrated in the song.

Sing counting songs such as "Five Little Monkeys," "Five Little Ducks," and "Five Little Speckled Frogs."

Sing songs with repetitive patterns such as "There was an Old Lady Who Swallowed a Fly" and "This old man."

Sing mathematical chants such as "One, Two Buckle My Shoe."

Sing songs and move the body in a patterned way (e.g., clap, stomp, clap stomp).

Chant the children's names and clap, stomp, or snap out the syllables or letters in their names.

Sing songs in all areas of the classroom environment.

Sing songs related to art and science (e.g., color songs, animal songs).

## Content Standard 9.0: Music and Movement - Cultural and Historical Connections

### Indicator MM=Music and Movement

### Examples: Children will/may...

### Supportive Practice: Practitioner/Adult will...

**9.PK.1** Experience music from different cultures.

Ask to hear music from other cultures.

Provide children with music experiences from many different cultures.

↩ **K9.3.1** Identify several styles of music from various cultures.

Bring in music from their home to share in the class.

Play a variety of different musical pieces for children to listen to.

↩ **K9.3.2** Identify various uses for music and daily experience.

Bring in different instruments from different cultures.

## Content Standard 10.0: Music and Movement - Cross-curricular

### Indicator MM=Music and Movement

### Examples: Children will/may...

### Supportive Practice: Practitioner/Adult will...

**10.PK.1a** Move in a variety of ways to music to reinforce physical development basic movements (e.g., over, under, in, out, in and between).

Demonstrate movement activities during circle time.

Offer opportunities to move and dance to a variety of music.

**10.PK.1b** Move with and without music using a variety of props such as scarves, balloons, hoops, etc.

Understand simple position vocabulary words (e.g., over, under, in, out, in and between).

Play a variety of music to move to (e.g., quiet or active music).

**10.PK.1c** Respond to changes in tempo.

Use props when dancing with or without music.

Have props such as balloons, scarves, and hoops to use for dancing and moving.

↩ **K.10.3.1** Demonstrating an understanding of K-3 Standards adopted for Physical Education 3.0.

Be able to demonstrate the different tempos (e.g., fast, slow).

Have children move to the beat of a song.

Play songs that change in tempo or speed, and have the children move according to the way the music is playing.

## Content Standard 1.0: Dramatic Play

### Indicator D=Dramatic Play

### Examples: Children will/may...

### Supportive Practice: Practitioner/Adult will...

**1.PK.1** Act out a role observed in his/her life experiences; for instance, mother, baby, doctor.

Role play familiar figures from his/her own life (e.g., mom, dad, and baby).

Encourage children to act out a variety of roles that they are familiar with and roles that are new to them.

**1.PK.2a** Make up new roles from experiences and familiar stories.

Act out new roles from real life experiences or stories.

Give the children the freedom to act out many roles and situations.

**1.PK.2b** Direct peers and/or follow directions from peers in creating dramatic play scenarios.

Lead the play or story line during dramatic play.

Provide costumes and props that your children see in their everyday life experiences.

**1.PK.3** Act out roles that involve another child(ren) in related role; for instance, mother and baby, grocer and shopper.

**1.PK.6** Use available materials as either realistic or symbolic props as part of dramatic play.

**1.PK.7** Use dress-up clothes or costumes and other props in dramatic play.

← **K1.3.6** Create simple sets and sound effects for a dramatized idea or story (e.g. tables become caves).

← **K1.3.7** Assemble and use simple props, costumes, masks, or make-up for a dramatized idea or story.

Re-enact roles that they are familiar with (e.g., shopping with mom, driving to school).

Use props to help to enhance play.

Use objects to represent a prop (e.g., box for a car, banana for a phone).

Read books about experiences that children are familiar with and can reenact.

Provide books related to the theme of the dramatic play area (e.g., “grocery store”) to give ideas for roles to play.

Allow children to direct the play and encourage cooperation with each other.

Offer open-ended and/or natural materials (e.g., pinecones, polished stones, seashells) to encourage imaginative play.

Put open-ended dress up clothes (e.g., fabric or a variety of scarves) to encourage more imaginative and fantasy play.

Allow and encourage children to use materials from other areas in the classroom in their dramatic play (e.g., using a wooden block as a walkie talkie).

## Content Standard 2.0: Dramatic Play

### Indicator D=Dramatic Play

### Examples: Children will/may...

### Supportive Practice: Practitioner/Adult will...

**2.PK.1** Distinguish between persons, animals, and objects by identifying characteristics (e.g., the sounds animals make).

**2.PK.2** Imitate roles observed in child’s life experiences.

**2.PK.3** Assume the role of a familiar person or thing and talk in the language/tone appropriate for that person or thing.

← **K2.3.1** Identify traits of a person, animal, or object (e.g. What does a dog do when it’s happy? Wag its tail).

← **K2.3.2** Imitate the traits of a given person, animal, or object.

← **K2.3.3** Use voice and body to show different emotions while portraying a character in a dramatized idea or story.

Act like a favorite pet or animal and include the mannerisms or sounds that they make.

Copy the mannerisms of a familiar person and use them during dramatic play.

Use the language, speech patterns or use props to act like another person or thing.

Allow children to act out many different characters or roles in the classroom.

Let the children demonstrate how different roles and characters sound and behave.

Discuss with children about familiar people and characters and how they speak and move.

Provide props and costumes to aid the children in acting out roles and characters.

When reading books, talk about the characters and how they look, sound, and act.

### Content Standard 3.0: Dramatic Play

#### Indicator D=Dramatic Play

#### Examples: Children will/may...

#### Supportive Practice: Practitioner/Adult will...

**3.PK.3** Differentiate between pretend and real.

← **K3.3.3** Identify the differences between fantasy and reality.

Understand the difference between reality and fantasy.

Demonstrate play that includes both fantasy characters and real people.

Allow children to pretend and act out a variety of roles and scenarios.

Talk with children about pretend and real situations and how they should respond to each.

Read fiction and non-fiction books and talk about the differences in pretend characters and real characters.

Have the children make masks and costumes and demonstrate what is pretend and real.

Have puppets available in class and encourage children to act out roles with the puppets.

Talk with children about fears and safety issues and how to cope.

### Content Standard 4.0: Dramatic Play

#### Indicator D=Dramatic Play

#### Examples: Children will/may...

#### Supportive Practice: Practitioner/Adult will...

**4.PK.1** Begin to understand and identify similarities and differences between dramatic characters and real people.

← **K4.3.2** Identify similarities and differences between dramatic characters and real people.

Understand the difference between dramatic play and real life.

Recognize that some things can be the same for both.

Provide acting experiences for children to role play and see that characters can have real life characteristics.

### Content Standard 5.0: Dramatic Play

#### Indicator D=Dramatic Play

#### Examples: Children will/may...

#### Supportive Practice: Practitioner/Adult will...

**5.PK.1** Use music, movement, and visual arts in dramatic play.

**5.PK.3** Use language arts, math, science, and other disciplines in dramatic play (e.g., finger plays, counting, grocery store, life cycles).

Want to have music available in the dramatic area.

Include math, science, and music in their dramatic play activities. (e.g., playing high school musical).

Allow children to have music in the dramatic play center.

Encourage children to sing or play music in dramatic play.

Allow children to decorate the dramatic play center with art or other classroom materials.

Let children safely rearrange the furniture in the dramatic play area as space allows.

Make a theater area in the dramatic play to act out roles and have performances.

Provide a puppet theater and puppets to act out stories.

Provide math-related materials such as money, checks, credit cards, scales, and measuring cups/spoons in dramatic play.

Provide science-related materials such as cookbooks and health-related materials.

Supply books and writing materials in the dramatic play area.

## Content Standard 1.0: Visual Arts: Knowledge

### Indicator VA= Visual Arts

### Examples: Children will/may...

### Supportive Practice: Practitioner/Adult will...

**1.PK.3** Use a variety of media, techniques, and processes in art activities that are of the child's creation without a model.

↩ **VA.K1.3.3** Use different media, techniques, and processes to produce works of art.

Demonstrate how to use and create with a wide variety of mediums.

Create works of art without the use of a model.

Express an interest in trying to work with different mediums.

Provide a large selection of art tools (e.g., various paintbrushes, clay tools, etc.).

Offer a variety of surfaces on which to create such as type, size and texture of paper, canvases, and easels.

Give children a wide selection of options for creating art (e.g., sculpture, paint, collage).

Allow children long periods for exploring the art materials before introducing them to a new technique or material.

Encourage children to be creative and not copy a teacher model.

Focus on what the children learn during the time they worked on the art project, not what it looks like in the end.

Provide space in the classroom to store the children's art to work on at a later time.

Include books about art techniques, art material, and famous artists in the art center.  
Expose children to examples of pictures of a variety of famous works of art.

**Content Standard 2.0: Visual Arts - Content**

**Indicator VA= Visual Arts**

**Examples:** Children will/may...

**Supportive Practice:** Practitioner/Adult will...

**2.PK.4** Identify color, shape, and texture through art experiences.

Share their knowledge of colors, shapes and textures in their art.

Talk to children about colors, shapes, and textures.  
Read books about colors, shapes, and textures.

**VA.K2.3.1** Identify selected elements of design and principles of design in nature and in works of art.

Have a preference of colors or shapes that they use in their work.

Look and talk about the colors, shapes, and textures in the environment.

**VA.K2.3.2** Use elements and principles of design to create works of art.

Provide art materials that have a range of colors, shapes, and textures.

Give children a lot of time to explore how colors can mix and change, how to form shapes, and how to create different textures.

Ask children questions about the colors, shapes, and textures they used in their artwork.

When commenting on a child's artwork, avoid empty praise (e.g., "good job") instead comment on the colors, shapes and textures represented.

**Content Standard 3.0: Visual Arts - Content**

**Indicator VA= Visual Arts**

**Examples:** Children will/may...

**Supportive Practice:** Practitioner/Adult will...

**3.PK.1** Recognize various art forms (e.g., photographs, statues, paintings, and drawings).

Be familiar with various forms of art.

Expose children to pictures of different art forms such as photos, sculptures, painting and drawing.

**3.PK.2** Create works that express or represent experiences, ideas, feelings, and fantasy using various media.

Understand the difference between paintings, photographs, statues, and drawings.

Talk with children about how art comes in many different forms.

Read books about art, works of art, and artists.

Place pictures of different art forms in the art area.

 **VA.K3.3.2** Create artwork that demonstrates choice of subject matter and symbols to communicate meaning.

Enjoy creating their own creative art piece.

Encourage children to talk about their experiences, fantasies and feelings. and to express them in a visual way.

Understand how to express themselves through their art.

Give the children a variety of materials (e.g., drawing pens, paint, clay) to use to express their thoughts and feelings.

After a field trip or classroom event, encourage children to create works about what they saw and heard.

## Content Standard 4.0: Visual Arts - Context

### Indicator VA= Visual Arts

### Examples: Children will/may...

### Supportive Practice: Practitioner/Adult will...

**4.PK.3** Create a work of art that expands on an experience, such as after a field trip or as a part of a cultural event.

Create art that reflects an experience that the child had in the classroom or on a field trip.

Expose children to many different experiences and cultural events.

Talk with children before and after a new experience.

← **VA.K4.3.3** Create a work of art that is influenced by a particular historical period or culture

Dictate a story that reflects a book or story from the classroom.

Have children create a work of art before going on a field trip or event to demonstrate what they think they might experience.

If time allows, during a field trip have children draw what they see and experience.

After a field trip or event, have the children create a work of art to demonstrate what they experienced.

Take photos of the field trip or event to help children recall their experiences and be able to create a work of art reflecting what they learned.

Have the children share their art with their classmates.

## Content Standard 5.0: Visual Arts - Interpretation

### Indicator VA= Visual Arts

### Examples: Children will/may...

### Supportive Practice: Practitioner/Adult will...

**5.PK.1** Recognize their own and others' artwork.

Be able to recognize their work.

Encourage children to show their artwork to you and share with others.

**5.PK.2** Demonstrate respect for the artwork of others.

Recognize the work and what was created by their classmates.

Model how to be respectful toward works of art.

**5.PK.3** Describe or respond to their own creative work or the creative work of others.

Be respectful of the work of others.

Talk with children about their art and ask questions.

Express themselves through their own artwork.

Have children share their artwork during whole group time.

← **VA.K5.3.3** Discuss possible meanings of art.

Describe the work that they have created.

Encourage children to be respectful and careful with their peer's work.

Model and encourage children to give constructive comments and ask questions about their peer's art.

Display the children's artwork in the classroom in an attractive, neat style.

**Indicator VA= Visual Arts**

**Examples:** Children will/may...

**Supportive Practice:** Practitioner/Adult will...

**6.PK.1** Use visual arts as a means to express their feelings, thoughts, knowledge and skills in content areas such as language arts, science, and math.

**6.PK.2** Use visual arts in dramatic play, music, and movement activities.

Demonstrate the use of different mediums as they use them in the classroom.

Understand how visual arts are used in different areas (e.g., plays, musicals, and dance).

When children dictate stories, encourage them to create a picture or work of art to accompany it.

If children talk about their artwork, write down what they say and post it near their art.

When talking about art, model using mathematical words, such as big/small, shapes, and count numbers of items you see.

Ask children questions about colors, shapes, and numbers of items in their artwork.

Offer children opportunities to create works of art related to science such as nature, animals, flowers, etc.

Encourage children to explore color mixing with colored water or tempera paint.

Offer visual art activities in the dramatic play area, music area, movement activities, and outdoors.

Have materials and props with a range of colors, shades, and shapes in the classroom.

When the children see or do something of interest to them, encourage them to represent it in a visual way.

### **Creative Arts Books & Resources** “Inspiring Materials”

When a child brings a special or particularly unique object to school such as a flower, pine cone, or a pretty stone, invite them to share it with the class. Talk about the colors, shapes, and lines that they see in the object. Set the object on the art table and invite children to draw, paint or sculpt the object that their friend brought to school. Point out the different styles that the children used to recreate the object. Have the children share their work with each other. Display the children’s work along with a photo of the object in the classroom.

**Activity:** “Looking for Shapes or Lines in the Environment”

**Materials:** Camera, paper, markers or drawing pens

Read books about shapes or lines with children and talk about how shapes or lines are everywhere around us. Look around the classroom and outdoors and see if you can find shapes and lines. When children find a shape or line, take a picture of it. Later give the children the pictures of the shapes and lines that they found in the environment. Invite them to choose one or more pictures and try to draw the shapes and lines that they see in the picture. Make a class book with the pictures and drawings that the children made.



## Physical Development & Health Introduction



Young children's future health and well-being are directly related to the development and strengthening of their large and small muscles. The National Association for Sports and Physical Education (NASPE) suggests that, in addition to children's enjoyable active free play in and out of doors and moving to music, children need to experience explicit teaching in order to learn a variety of movement skills, initially as individuals, then with partners, and finally in a small group (NASPE, 2002). The NASPE suggests that all young children from birth through age five engage in at least sixty minutes of physical activity daily, designed to promote health-related fitness and movement skills. Recognizing that preschoolers are naturally active individuals, the NASPE suggests that the 'duration, frequency and intensity of movement and physical activity depends on the child's age, developmental status, ability level, personal interest, prior experience, and normal tendency to alternate short bursts of activity with intervals of rest and recovery' (2002, p.8) (CTB/ McGraw-Hill LLC).

Beginning with the freedom to walk, run, jump, climb, hop and do other physical activities in and out of doors, children are introduced to exploring different ways they can move. Throughout the preschool years, children are focusing on large muscle development that includes:

- Strengthening of muscles,
- Balance,
- Coordination, and
- Muscle control.

Children have a natural desire to learn about their environment through touch and manipulation. Eye-hand coordination, manipulation skills, strength, dexterity and control are essential for the physical development of fine motor skills. Through active participation in these small muscle activities, children will develop:

- Eye-hand coordination,
- Strength and dexterity, and
- Control of writing utensils.

Tasks may be given to children, such as “jump high and hold one part of your body low.” While completing these tasks, children are learning the names of different movements and developing specific movement skills (Sanders, 2002). Simple noncompetitive games, those with rules as well as those that involve children in imaginative thinking, should be introduced during the preschool years.

Children cannot learn well if they are not physically healthy. The NRC and the Institute of Medicine (NRC and IM, 2000) indicate that health services must be made available in culturally appropriate ways for all our nation’s children. Further, the (NRC,( 2001a) strongly advocates that programs for young children include health education and physical education.

Knowledge and habits of healthful living begin early in life. While young children are not in charge of providing themselves with a healthy environment and lifestyle, they can begin the life-long process of developing habits of healthy living and physical activity. Children feel a sense of pride and accomplishment when taking an active role in preparing nutritious snacks, maintaining a clean and healthy environment, and caring for their bodies,

They begin to understand how daily activities promote overall personal health and safety when they are able to:

- Distinguish between healthy and non-healthy foods,
- Take care of personal hygiene,
- Follow basic safety rules, and
- Identify feelings.

Children learn as they live. Every program for young children needs to have established routines involved in healthy living. Children are able to choose from healthy snacks and lunches and begin to recognize the necessity of food and water for life. Habits of washing hands, brushing teeth and keeping their environment clean, safe and healthy are established during the period of early childhood. While children are engaging in these activities, teachers interact with them, informally introducing information and facts about healthy living.



# Pre-Kindergarten Standards: Physical Development & Health Education

## Content Standard 1.0: Development of Motor Skills

### Indicator PD=Physical Development

**1.PK.1** Identify the basic vocabulary of simple movement patterns (e.g., walk, run, jump, hop, climb, etc.).

### Examples: Children will/may...

Enjoy playing games, such as “Mother May I” or participate in a simple obstacle course.

Begin to recognize simple vocabulary words that indicate movement.

Demonstrate simple movement activities.

Have a preference for certain large motor movements (e.g., running, jumping or climbing).

### Supportive Practice: Practitioner/Adult will...

Provide opportunities to move indoors and outdoors.

Model and verbally label simple movement patterns.

Sing songs that label movement pattern such as “Skip to My Lou.”

Ask children to demonstrate motor skills when transitioning to activities (e.g., tiptoe to the center you choose).

Use descriptive movement words with characters or objects (e.g., gallop like a horse” or “spin like a top”).

Turn on music, hold up cards with a visual of movements (e.g., jump, clap, and stomp) for the children and let them perform the movements.

Play games such as “Mother May I” to label and practice movement patterns.

Make lotto or memory games with movement patterns and let children demonstrate the motor skill as they play the games.

When reading books with movement or action words, point them out and allow children to imitate.

## Content Standard 2.0: Movement Forms

### Indicator PD=Physical Development

**2.PK.1** Demonstrate a basic form in walking, running, climbing, jumping, hopping, and walking up and down stairs.

**2.PK.2** Perform a variety of large motor skills (e.g., throw a ball in purposeful direction, attempt to catch a large ball).

### Examples: Children will/may...

Practice a variety of motor skills while engaged in outdoor play.

Participate in games that require trying new skills.

### Supportive Practice: Practitioner/Adult will...

Encourage children to practice a variety of motor skills.

Provide props, such as different sized balls, bikes, hoops and jump ropes.

**2.PK.3** Balance on one foot for at least five seconds.

Play hopscotch or other jumping games with other children.

Enjoy playing “Simon Says” to follow directions and try new large motor skills.

Demonstrate or try to balance on one foot for at least five seconds.

Use various sized containers, such as baskets for playing basketball, and practice throwing the balls into the containers.

Roll medium to large balls to knock over water bottles or blocks.

Encourage children to throw, bounce, and kick balls to one another.

Give children opportunities to climb, do somersaults, and roll their whole bodies.

Have children try to walk with a bean bag on their heads.

Make stilts for children to balance on with tuna or coffee cans and some rope.

### Content Standard 3.0: Dance

#### Indicator PD=Physical Development

#### Examples: Children will/may...

#### Supportive Practice: Practitioner/Adult will...

**3.PK.1** Demonstrate locomotor movements such as up, down, forward, and backward.

**3.PK.2** Demonstrate the ability to follow basic movements (e.g., over, under, in, out, in between).

Begin to demonstrate how to do something new that they have learned.

Follow simple movements during play and activities.

Engage in activities or songs that require them to follow simple movements.

Create obstacle courses indoors and out to practice motor skills.

Provide scarves, streamers or other props and move to music.

Do stretching exercises (e.g., bending sideways, touching toes, etc.).

Use descriptive movement phrases (e.g., “float like a bubble”, or “pop like popcorn” and let children demonstrate).

Create pictures of various dance forms (e.g., ballet, tap, ice skating) and encourage children to try to demonstrate them.

Play music with various tempos (e.g., fast or slow) and have children move to them.

Create a “treasure hunt” map incorporating basic movements (e.g., over, under, in, between) and encourage children to find the treasure.

**Content Standard 4.0: Health Enhancing Lifestyle**

**Indicator PD=Physical Development**

**Examples:** Children will/may...

**Supportive Practice:** Practitioner/Adult will...

**4.PK.1** Engage in daily moderate to vigorous physical activity.

Participate in a variety of motor skills throughout the daily schedule.

Encourage children to participate in moderate to vigorous physical activities.

← **4.K.2.1** Engage in daily moderate to vigorous structured physical activity.

Play in active games that encourage physical movement.

Set aside time and room for movement activities daily.

Play active games such as “Red Light, Green Light.”

Integrate opportunities to move around in all activities, even reading books.

Provide active props in different learning centers (e.g., dance in dramatic play, very large blocks in block center, etc.).

**Content Standard 5.0: Personal Responsibility**

**Indicator PD=Physical Development**

**Examples:** Children will/may...

**Supportive Practice:** Practitioner/Adult will...

**5.PK.1** Participate appropriately during physical activities.

Engage in playing group games that require taking turns and using a variety of motor skills.

Model and discuss safety rules before beginning movement activities.

**5.PK.2** Demonstrate turn taking and cooperation during physical activities.

Encourage their friends to play regardless of their ability to perform the task.

Encourage children to be respectful of one another during movement activities.

**5.PK.3** Interact positively with others regardless of personal differences (e.g., skill level, gender, race, and disability).

Begin to become interested in other cultures and are interested in new music or games.

Provide opportunities for children to take turns demonstrating motor skills by playing games such as, “Follow the Leader” and “Duck, Duck, Goose.”

**5.PK.4** Participate in multi-cultural activities that enhance physical development (e.g., dance, games, and activities).

Use a parachute, sheet or tarp and shake balls, balloons, or bean bags in it.

Sing songs such as “Ring Around the Rosie” or “Farmer in the Dell.”

Model positive interactions with all children regardless of ability levels.

Offer movement activities that include a range of skill levels so that all children can participate.

Talk about personal differences and ability levels and model acceptance of those differences.

Encourage children to help younger children or children with disabilities to accomplish skills.

Invite families and community members into the classroom to demonstrate multicultural movement activities.

Play music from other cultures and move to it.

## Content Standard 6.0: Fine Motor Skills

### Indicator PD=Physical Development

### Examples: Children will/may...

### Supportive Practice: Practitioner/Adult will...

**6.PK.1** Demonstrate skills in eye-hand coordination (e.g., stacking, sorting, lacing toys, stringing beads, reproducing basic patterns, complete six-piece puzzle, Legos and peg-boards).

**6.PK.2** Demonstrate the muscle strength, dexterity, and control needed to manipulate items (e.g., scissors, writing utensil, paint brushes, play dough, buttons/snaps, etc.).

**6.PK.3** Use fingered or tripod grasp with drawing, painting or writing instruments.

Attempt to participate in a variety of fine motor skills.

Use fine motor materials that require more difficult skills.

Try to use new materials on their own.

Begin to try new materials and become proficient using scissors and other writing utensils.

Enjoy using different materials to express their creative expression (e.g., using different paint brushes).

Provide many opportunities for children to handle a variety of manipulatives such as stringing beads, puzzles, stacking blocks, and legos.

Provide a large variety of writing materials to manipulate such as crayons, markers, and pencils.

Provide a variety of materials to cut with scissors such as paper, cardstock, string, and fabric.

Ensure that a variety of art utensils are available such as different sized paintbrushes and stamps.

Provide for opportunities to play with clay or playdough.

Put dress-up clothes with buttons and snaps in dramatic play area.

Provide sand and water play to practice pouring and shoveling.

Provide squirt bottles or plant sprayers for painting in art or watering plants.

Create sensory experiences for children to explore with their hands (e.g., shaving cream, flubber, etc.).

Model and encourage fingered or tripod grasp when drawing, writing, or painting.

Provide a wide range of sizes in manipulatives, writing utensils and art utensils.

Give opportunities for children to use eye droppers, clips, clothespins, and tweezers.

Provide a variety of horizontal and vertical surfaces for writing.

## Content Standard 1.0: Core Concepts-Health Promotion/Disease Prevention

### Indicator HE=Health

### Examples: Children will/may...

### Supportive Practice: Practitioner/Adult will...

**1.PK.1** Demonstrate personal hygiene skills (e.g., hand washing, independent toileting, etc.).

Participate in daily hygiene rituals. (e.g., washing hands, wiping nose).

Talk about and post visual charts of hand washing and toileting routines.

**1.PK.2** Identify basic anatomy (e.g., eyes, nose, arms, legs, etc.).

Be able to identify simple body parts: eyes, ears and nose.

Teach the children personal hygiene songs for hand washing and tooth brushing routines.

**1.PK.3** Identify healthy foods.

Give examples of healthy foods to eat (e.g., fruit, vegetables).

Incorporate dental hygiene in classroom routines.

**1.PK.5** Identify some safety rules (e.g., fire safety, traffic/pedestrian safety, dangerous objects/substances/activities, etc.).

Understand simple safety hazards such as crossing the street.

Point out body anatomy (e.g., eyes, nose, arms, legs, etc.) seen in books and have children identify their own body anatomy.

**1.PK.6** Demonstrate basic disease prevention skills (e.g., cover mouth/nose when sneezing/coughing, hand washing, etc.).

Recognize important community helpers and understand what their roles are (e.g., fireman, policeman, or doctor).

Sing songs that label basic anatomy such as "Head, Shoulders, Knees, and Toes."

**1.PK.7** Recognize community health and safety helpers (e.g., police, firefighters, doctors).

Discuss the basic need for air, food and water.

Have children draw or paint life size portraits and help them label body anatomy.

**1.PK.8** Identify the basic need for air, water, and food.

Understand that all living things require air, food and water.

Talk about healthy foods and the benefits of eating them.

Sort pictures or make a graph of foods into categories of healthy and unhealthy foods.

Draw or cut out pictures of foods from grocery ads and make a favorite healthy foods class book.

Talk about and post a visual chart of safety rules for the classroom.

Read and discuss books about fire safety, traffic safety, and keeping safe from danger.

Take a walk around the neighborhood and model safety rules.

Model and post visual charts of basic disease prevention skills (e.g., hand washing).

Read and talk about germs and how they spread.

Have children help with clean up routines.

Read books about community helpers and talk about what they do.

Invite community helpers to visit your classroom.

Put community helper dress up clothes and props in the dramatic play area and outdoors.

Read and talk about what our bodies need to be strong and healthy.

Sort pictures or make a graph of things that we need and don't need to be healthy (e.g., food vs. video games).

Talk about air and how we need to breathe clean air to be healthy.

Include water play indoors and out and talk about how we need water to live.

**Content Standard 3.0: Self-management**

**Indicator HE=Health**

**Examples:** Children will/may...

**Supportive Practice:** Practitioner/Adult will...

**3.PK.1** Identify and express basic feelings (e.g., happy, sad, angry, frightened, etc.).

**3.PK.3** Identify potential hazards at home, school, and community.etc.).

Share their feelings and are able to express how they feel.

Understand the reasons behind their feelings.

Describe safety issues that they need to be aware of ( e.g., crossing the street, touching hot surfaces).

Talk about feelings and have children demonstrate the appropriate facial expressions and body language.

Read books about expressing feelings, then discuss them, and role play situations.

Sing songs that express emotions such as "If You're Happy and You Know It."

Make a class book with photos of children expressing emotions and their dictated stories.

Put on music, hold up and rotate pictures of facial expressions and have children model the expressions.

Model for children how to be safe and express feelings appropriately.

Make and play a lotto or memory game with pictures of emotions.

Encourage children to use their words instead of aggression to resolve conflicts.

Read books about potential hazards in homes, school, and community (e.g., fire hazards).

Take walks around the school and neighborhood to identify and resolve any potential hazards.

### Content Standard 5.0: Interpersonal Communication

#### Indicator HE=Health

#### Examples: Children will/may...

#### Supportive Practice: Practitioner/Adult will...

**5.PK.1** Seek adult assistance when injured and/or ill.

Seek out an adult when they are injured or need help with a safety situation.

Know how to use the phone to call 9-1-1 and solicit help in a emergency situation.

Discuss and role play with children how to take action when they are ill or injured.

Model empathy so that children feel comfortable approaching an adult when ill or injured.

Have community helpers visit your classroom to dispel any fears and demonstrate how to get help if needed.

Make a class book entitled, "When I Need Help I..." and write down children's dictated stories.

## Physical Development & Health Activities

**Activity:** A Firefighter's Visit (Virtual Pre-K, Taking Care of Me, Lesson 8)

**Materials:** paper plates (white), large tongue depressors, glue, stapler and staples, colored foam noodles, crayons

**LESSON DESCRIPTION:** Contact your local fire department to schedule a visit from a fire fighter trained in making classroom visits. Have the children discuss and learn about fire safety measures during a classroom lesson and follow this activity with a visit from an actual fire fighter. Reinforce the use of 911 for fire safety with the activity below. During a small group activity, have at least five children sit in an area together with the materials mentioned above. An adult should staple a tongue depressor to the bottom of a plate for each child, making a handle or hold up the sign. Help the children write 911 with a crayon on the plate in large numbers. (The child can do this independently, if possible). Trace the numbers 911 with glue, and have children place the colored noodles on the numbers. Allow the children the opportunity to dress up and role-play as firefighters in a learning center with fire trucks and fire equipment. Provide a telephone where children can practice dialing 911.

**Teacher-to-Teacher Tip:** Invite parents to visit the classroom during the firefighter's presentation to the children. Parents will be exposed to wonderful fire safety information as well, and can reinforce these activities at home with their children.



# Nevada Grades K-12 Content and Common Core Standards

## **MATHEMATICS**

1.0 Students will accurately calculate and use estimation techniques, number relationships, operation rules, and algorithms; they will determine the reasonableness of answers and the accuracy of solutions to solve problems, communicate, reason, and make connections within and beyond the field of mathematics.

2.0 Students will use various algebraic methods to analyze, illustrate, extend, and create numerous representations (words, numbers, tables, and graphs) of patterns, functions, and algebraic relations as modeled in practical situations to solve problems, communicate, reason, and make connections within and beyond the field of mathematics.

3.0 Students will use appropriate tools and techniques of measurement to determine, estimate, record, and verify direct and indirect measurements to solve problems, communicate, reason, and make connections within and beyond the field of mathematics.

4.0 Students will identify, represent, verify, and apply spatial relationships and geometric properties to solve problems, communicate, and make connections within and beyond the field of mathematics.

5.0 Students will collect, organize, display, interpret, and analyze data to determine statistical relationships and probability projections to solve problems, communicate, reason, and make connections within and beyond the field of mathematics.

### **Nevada Grades K-12 Process Standards**

Students will develop their ability to solve problems by engaging in developmentally appropriate opportunities where there is a need to use various approaches to investigate and understand mathematical concepts.

Students will develop their ability to communicate mathematically by solving problems where there is a need to obtain information from the real world through reading, listening, and observing.

Students will develop their ability to reason mathematically by solving problems where there is a need to investigate mathematical ideas and construct their own learning in all content areas.

Students will develop the ability to make mathematical connections by solving problems where there is a need to view mathematics as an integrated whole.

## **ENGLISH LANGUAGE ARTS**

1.0 Students know and use word analysis skills and strategies to comprehend new words encountered in text and to develop vocabulary.

2.0 Students use reading process skills and strategies to build comprehension.

3.0 Students read literary text to comprehend, interpret, and evaluate authors, cultures, and times.

4.0 Students read expository and persuasive texts to comprehend, interpret, and evaluate for specific purposes.

5.0 Students write a variety of texts using the writing process.

6.0 Students write a variety of texts that inform, persuade, describe, evaluate, entertain, or tell a story and that are appropriate to audience and purpose.

7.0 Students listen to and evaluate oral communications for content, style, speaker's purpose, and audience appropriateness.

8.0 Students speak using organization, style, tone, voice, and media aids appropriate to audience and purpose. Students participate in discussions to offer information, clarify ideas, and support a position.

## **SCIENCE**

### **NATURE OF SCIENCE**

#### **Scientific Inquiry**

N2A Students understand that science is an active process of systematically examining the natural world.

N5A Students understand that science involves asking and answering questions and comparing the answers to what scientists know about the world.

N8A Students understand that scientific knowledge requires critical consideration of verifiable evidence obtained from inquiry and appropriate investigations.

N12A Students understand that a variety of communication methods can be used to share scientific information.

#### **Science, Technology, and Society**

N2B Students understand that many people contribute to the field of science.

N5B Students understand that many people, from all cultures and levels of ability, contribute to the fields of science and technology.

N8B Students understand the interactions of science and society in an ever-changing world.  
N12B Students understand the impacts of science and technology in terms of costs and benefits to society.

## **PHYSICAL SCIENCE**

### **Matter**

P2A Students understand that matter has observable properties.  
P5A Students understand properties of objects and materials.  
P8A Students understand the properties and changes of properties in matter.  
P12A Students understand that atomic structure explains the properties and behavior of matter.

### **Forces and Motion**

P2B Students understand that position and motion of objects can be described.  
P5A Students understand that forces can change the position and motion of an object.  
P8A Students understand that position and motion of an object result from the net effect of the different forces acting on it.  
P12A Students understand the interactions between force and motion.

### **Energy**

P2C Students know heat, light, and sound can be produced.  
P5C Students understand that energy exists in different forms.  
P8C Students understand transfer of energy.  
P12C Students understand that there are some interactions between matter and energy.

## **EARTH AND SPACE SCIENCE**

### **Atmospheric Processes and the Water Cycle**

E2A Students understand that changes in weather often involve water changing from one state to another.  
E5A Students understand the water cycle's relationship to weather.  
E8A Students understand the relationship between the Earth's atmosphere, topography, weather and climate.  
E12A Students understand heat and energy transfer in and out of the atmosphere and influence weather, and climate.

### **Solar System and Universe**

E2B Students understand there are objects in the sky which display patterns.  
E5B Students understand that there are many components in the Solar System including Earth.  
E8B Students understand characteristics of our solar system that are part of the Milky Way galaxy.  
E12B Students know scientific theories of origins and evolution of the universe.

### **Earth's Composition and Structure**

E2C Students understand that Earth materials include rocks, soils, and water.  
E5C Students understand that features on the Earth's surface are constantly changed by a combination of slow and rapid processes.  
E8C Students understand that landforms result from a combination of constructive and destructive processes.  
E12C Students understand evidence for processes that take place on a geologic time scale.

## **LIFE SCIENCE**

### **Heredity**

L2A Students understand that offspring resemble their parents.  
L5A Students understand that some characteristics are inherited and some are not.  
L8A Students understand the role of genetic information in the continuation of a species.  
L12A Students understand how genetic information is passed from one generation to another.

### **Structure of Life**

L2B Students understand that living things have identifiable characteristics.  
L5B Students understand that living things have specialized structures that perform a variety of life functions.  
L8B Students understand that living things are composed of cells, which are specialized in multi-cellular organisms to perform a variety of life functions.  
L12B Students understand that all life forms, at all levels of organization, use specialized structure and similar processes to meet life's needs.

## **Organisms and Their Environment**

L2C Students understand that living things live in different places.

L5C Students understand that there are a variety of ecosystems on Earth and organisms interact within their ecosystems.

L8C Students understand how living and non-living components of ecosystems interact.

L12C Students understand that ecosystems display patterns of organization, change, and stability as a result of the interactions and interdependencies among the living and non-living components of the Earth.

## **Diversity of Life**

L2D Students understand that there are many kinds of living things on Earth.

L5D Students understand that living things can be classified according to physical characteristics, behaviors, and habitats.

L8D Students understand that life forms change over time, contributing to the variety of organisms found on the Earth.

L12D Students understand biological evolution and diversity of life.



## **HEALTH**

1.0 Students will comprehend concepts related to health promotion and disease prevention to enhance health.

2.0 Students will analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors.

3.0 Students will demonstrate the ability to access reliable health information, products and services to enhance health.

4.0 Students will demonstrate the ability to use interpersonal communication skills to enhance health and to avoid or reduce health risks.

5.0 Students will demonstrate the ability to use decision-making skills to enhance health.

6.0 Students will demonstrate the ability to use goal-setting skills to enhance health.

7.0 Students will demonstrate the ability to practice health-enhancing behaviors and to avoid or reduce health risks.

8.0 Students will demonstrate the ability to support/promote family, personal, and community health.

## **PHYSICAL EDUCATION**

1.0 Students understand and apply movement concepts and principles to the learning and development of motor skills.

2.0 Students demonstrate competency in many movement forms and proficiency in a few movement forms.

3.0 Students demonstrate an understanding of dance through skills, techniques, choreography, and as a form of communication.

4.0 Students achieve and maintain a health-enhancing level of individual fitness for an active lifestyle.

5.0 Students demonstrate personal responsibility, positive social interaction, and respect for diversity in physical activity settings.

## **SOCIAL STUDIES**

HISTORY 1.0 People, Cultures, and Civilizations – Students understand the development, characteristics, and interaction of people, cultures, societies, religion, and ideas.

HISTORY 2.0 Nation Building and Development – Students understand the people, events, ideas, and conflicts that lead to the evolution of nations, empires, distinctive cultures, and political and economic ideas.

HISTORY 3.0 Social Responsibility & Change – Students understand how social ideas and individual action lead to social, political, economic, and technological change.

GEOGRAPHY 5.0 The World in Spatial Terms – Students use maps, globes, and other geographic tools and technologies to locate and extrapolate information about people, places, and environments.

GEOGRAPHY 6.0 Places & Regions – Students understand the physical and human features of places and use this information to define and study regions and their patterns of change.

GEOGRAPHY 7.0 Human Systems – Students understand how economic, political, and cultural processes interact to shape patterns of human migration and settlement, influence and interdependence, and conflict and cooperation.

GEOGRAPHY 8.0 Environment and Society – Students understand effects of interactions between human and physical systems and the changes in use, distribution, and importance of resources.

ECONOMICS 9.0 The Market Economy – Students will understand how scarcity and incentives affect choices, how markets work, why markets form, how supply and demand interact to determine the market price, and how changes in prices act as economic signals to coordinate trade.

ECONOMICS 10.0 The U.S. Economy As A Whole – Students will identify indicators used to measure economic performance, understand key aspects of how the economy acts as a system, and understand the roles of money, interest rates, savers, and borrowers, financial institutions, and the central bank in our economy.

ECONOMICS 11.0 The Dynamic Economy – Students will identify the causes of economic change, explain how the U.S. economic system responds to those changes; and explain how other economic systems respond to change.

CIVICS 13.0 Citizenship and the Law – Students know why society needs rules, laws, and government and understand the roles, rights, and responsibilities of citizens.

CIVICS 16.0 Global Relations – Students explain the different political systems in the world and how those systems relate to the United States and its citizens.

## **SOCIAL- EMOTIONAL DEVELOPMENT**

1.0: Self-Confidence Students will participate in activities that foster independence, self-expression, and persistence.

2.0: Self-Direction Students will demonstrate self-direction by attaining skills in self-management, self-help, and routines.

3.0: Identification and Expression Feelings. Students will identify and express feelings.

4.0: Interactions With Other Children and Adults - Students will develop positive interaction skills with other children and adults.

5.0: Pro-Social Behaviors: Students will demonstrate positive social behaviors in play and group settings.

6.0: Attending and Focusing Skills: Students will demonstrate attending and focusing skills.

## **MUSIC**

1.0 Singing - Students sing a varied repertoire of music alone and with others.

2.0 Playing Instruments - Students perform a varied repertoire of music on instruments alone and with others.

3.0 Improvisation - Students improvise melodies, variations, and accompaniments.

4.0 Writing - Students compose and arrange music within specified guidelines.

5.0 Reading - Students read and notate music.

6.0 Listening - Students listen to, analyze, and describe music.

7.0 Evaluation - Students evaluate music and music performances.

8.0 Application to Life - Students demonstrate relationships between music, the other arts, and disciplines outside the arts.

9.0 Cultural and Historical Connections - Students demonstrate knowledge of the historical periods and cultural diversity of music.

10.0 Cross- Curricular - Students demonstrate an understanding of movement through skills, techniques

## **VISUAL ARTS**

1.0 Students know and apply visual arts media, techniques, and processes.

2.0 Students use knowledge of visual characteristics, purposes, and functions.

3.0 Students choose, apply, and evaluate a range of subject matter, symbols, and ideas.

4.0 Students understand the visual arts in relation to history and cultures.

5.0 Students analyze and assess characteristics, merits, and meanings in their own artwork and the work of others.

6.0 Students demonstrate relationships among visual arts, the other arts, and disciplines outside the arts.

## **THEATER STANDARDS**

1.0: Students recognize the components of theatrical production including script writing, directing, and production.

2.0: Students understand and demonstrate the role of the actor in the theater.

3.0: Students apply and demonstrate critical and creative thinking skills in theater, film television, or electronic media.

4.0: Students recognize and explain how theatrical experiences contribute to a better understanding of history, culture, and human relationships.

5.0: Students make connections with theater, the other arts, and academic disciplines.

# Glossary

**Act out:** The process by which an individual uses the entire self—body, mind, voice, and emotions—to interpret and perform the role of an imagined or assumed character.

**Acting:** The process by which an individual uses the entire self—body, mind, voice, and emotions—to interpret and perform the role of an imagined or assumed character.

**Alliteration:** Repetition of the same letter or sound at the beginning of two or more consecutive words near one another as in silly Sally simply sang.

**Appropriately:** Relevant to topic of discussion.

**Arts:** Dance, drama, visual arts, music.

**Attribute:** Characteristic of an object, such as color, shape, size, etc.

**Cardio respiratory:** Involves the ability of the heart and lungs to supply oxygen to the working muscles for an extended period of time.

**Choice:** A selection from a set of alternatives.

**Classify:** Sort or form groups by similar characteristics / attributes.

**Compare:** Think about same and different; describe the relationship between two or more objects.

**Congruent:** Figures that have the same size and shape.

**Consumer:** A person who buys and uses goods and services.

**Conversational rules:** Take turns, stay on topic, and refrain from interrupting.

**Cost:** Anything given up when a choice is made.

**Costumes:** An actor's clothing that denotes or suggests a character.

**Count with understanding:** Attach a number name to a series of objects; to understand that the number spoken when tagging or touching the last object also identifies the total number in the group.

**Creative:** Ability to express original and imaginative ideas or products.

**Creative thinking:** Looks for solutions to problems in a variety of ways.

**Criteria:** A physical characteristic or standard on which a judgment is based.

**Data:** Information represented in the form of symbols, objects, sounds, or information gathered to answer a question.

**Demonstrate:** To show, to do by action.

**Dictate:** Spoken word recorded on paper.

**Direct:** To integrate an entire production, from the basic interpretation of the text through all the acting and technical phases, up to the time of performance.

**Diversity:** Quality of being different.

**Ecosystem:** A system of relationships between organisms in an environment, and between organisms and the environment.

**Engage:** To be involved in or occupied.

**Environmental Print and Symbols:** Print and other symbols, other than books, found in the physical environment, such as street signs, billboards, cereal boxes, beverages, commercial logos, etc.

**Estimate:** To give an approximate and reasonable answer for an arithmetical exercise without the need of calculating the exact answer; making an educated guess as to the amount or size of something.

**Everyday fractions:** numbers that represent parts of whole objects in the child's environment (e.g., half a sandwich).

**Experiment:** Use a variety of tools in an exploratory manner. For example, children need to become familiar and comfortable with a variety of writing tools in literacy.

**Explore:** To investigate systematically.

**Exploring data:** Informal experience with data by collecting, organizing, representing and comparing the information.

**Expository Text:** Text or speech that is meant to set forth or explain a concept or procedure.

**Extend:** Continue a pattern beyond what is shown.

**Genres:** Types of literature (e.g., poetry, fiction, non-fiction, etc.).

**Geometry:** The area of mathematics that involves shape, size, position, direction and describes and classifies the physical world we live in.

**Identify:** Distinguish by pointing, gesturing, vocalizing or verbalizing.

**Improvise:** Compose, recite, or perform spontaneously.

**Inferences:** Conclusions arrived at by reasoning from evidence.

**Investigate:** Observe and ask questions about.

**Label:** Name, express and/or verbalize.

**Letter- like approximation:** Symbols (squiggles) that bear some semblance to a letter.

**Line of Symmetry:** When an object can be folded in half to form two mirror objects.

**Location:** Where an object is in space.

**Locomotor Movement:** Locomotor skills are used to move the body from one place to another or to project the body upward, including walking, running, jumping, leaping, hopping, skipping, sliding, and galloping.

**Manipulative Skills:** Movement that occurs in conjunction with an object (i.e., dribbling a basketball).

**Match:** To find two objects that have at least one characteristic in common.

**Measurable features:** A characteristic or attribute of an object that can be quantified (represented with a number), such as size, shape, weight or number of sides.

**Measurement:** Young children's intuitive notions of comparing volume, area, length and other attributes that they will eventually learn to measure; involves decisions about how much or how long.

**Media:** Categories for grouping artwork according to the materials used; (e.g., drawing, painting, sculpture).

**Merit:** Praiseworthy quality.

**Money:** Anything widely accepted as a final payment for goods and services, including currency, coins, or checks. Credit cards, while accepted for payment, are not a final form of payment. Credit card loans are short-term loans, not money.

**Motor Skills:** Utilization of the body's muscles to enact a movement form.

**Musical Instruments:** Rhythm instruments such as drums, rhythm sticks, tambourines, and simple melodic instruments such as a xylophone.

**Non locomotor Movement:** Movement that is organized around the axis of the body; includes bending and stretching, pushing and pulling, raising and lowering, twisting and turning, shaking, bouncing, circling, and swinging.

**Number:** A unit belonging to a mathematical system used for counting, measuring, ordering and labeling; the meaning of a number word or numeral.

**Number and operations:** Understanding of numbers; ways of representing numbers; relationships among numbers and number systems.

**Number sense:** The ability to understand numbers, ways of representing numbers and relationships among numbers. Number sense is much more than counting; it involves the ability to think and work with numbers easily and to understand their uses (counting, measuring, ordering and labeling) and relationships.

**Numerals:** Conventional symbols that represent numbers (e.g., “1” is the numeral for “one”).

**One-to-one correspondence:** Linking a single number name with one and only one object at a time.

**Operations on numbers:** Basic number combinations and strategies for computing such as addition and subtraction.

**Order:** Arrange objects or numbers to show a progressive increase or decrease of a specific characteristic.

**Ordinal numbers:** Numbers that indicate the position of an object in a sequence (i.e., first, second, third).

**Organize:** To arrange information in order to see relationships, often using graphs and charts.

**Orientation:** The position or arrangement of an object.

**Participate:** Join in, share with, and engage in.

**Pattern:** A sequence of colors, shapes, objects, sounds or movements that repeats again and again in a regular arrangement; patterns are a way for young students to recognize order and to organize their world.

**Patterns and relationships (algebra):** The primary objective is for young children to be able to identify and analyze simple patterns, extend them and make predictions about them.

**Phonics:** The system by which symbols represent sounds in an alphabetic writing system.

**Position:** The place where an object, person, or thing is in relation to others.

**Processes:** A progression of activities using several techniques; (e.g., taking pictures, developing the film, and then printing the photographs).

**Props:** Any object used on the stage excluding scenery, lights, and costumes, such as furniture, utensils, ornaments, and personal possessions.

**Prose:** Anything not written in poetry form.

**Quantity:** How many units are in a set (i.e., an amount or the result of counting).

**Realia:** Real objects that are used in the classroom.

**Recognize:** Identify receptively; distinguish by pointing, gesturing, or vocalizing or verbalizing.

**Regroup:** To place or assign objects in two or more groups using a different characteristic than was used the first time the objects were grouped.

**Relative difference:** The specific characteristic that differs among a group of objects (e.g., size).

**Respond:** Exhibit some action (e.g., verbally, pictorially, etc).

**Rote count:** Recite the names of the numerals in order or sequence (e.g., singing a counting song).

**Sequence:** An arrangement of events or actions in a progressive order over time.

**Sort:** To place or assign objects in two or more groups on a basis of at least one characteristic.

**Spatial sense:** Children's awareness of themselves in relation to the people and objects around them; it includes knowing boundaries, arrangements and positions.

**Techniques:** Methods used in creating works of art (e.g., applying thick opaque paint vs. thinning paint for transparency).

**Three-dimensional:** Objects that have length, width and depth; solid figures such as cubes, spheres and cylinders.

**Two-dimensional:** Objects that have length and width but not depth; shapes such as squares, triangles and circles. A figure that is two-dimensional is one that can be represented on a coordinate grid.

**Verify:** The process of demonstrating or proving that a response is correct.

**Visual Arts:** Include a variety of media such as painting, drawing, clay, paper-mache or other materials that children use to express thoughts, memories, ideas and feelings.

# APPENDIX

## **BILINGUAL RESOURCES**

- Bredekamp, S., & Copple, C. (2009). Developmentally appropriate practice in early childhood programs- serving children from birth through age 8, 3rd edition. Washington, DC: National Association for the Education of Young Children.
- Cole, M. (1999). Culture in development. In M. H. Bornstein & M.E. Lamb (Eds.), *Developmental psychology: An advanced textbook* (pp.73-124). Mahwah, NJ: Lawrence Erlbaum Associates Inc.
- Cummins, J. (1998). Beyond adversarial discourse: Searching for common ground in the education of bilingual students. Presentation to the California State Board of Education. Sacramento, California. February 1998. 26 pages.
- Cummins, J. (2000). *Language, power, and pedagogy: Bilingual children in the crossfire*. Clevedon, England. Multilingual Matters Ltd.
- Dewey, J. (1944). *Democracy and education*. New York: McMillan.

## **CREATIVE ARTS RESEARCH**

- Althouse, R., Johnson, M.H., & Mitchell, S. (2003). *The colors of learning: Integrating the visual arts into the early childhood curriculum*. NY: Teachers College Press.
- Berk, L.E. (2001). *Development through the lifespan*. Boston. Allyn & Bacon.
- Bredekamp, S. & Copple, C. (1997). *Developmentally appropriate practice in early childhood programs*. Washington, DC: National Association for the Education of Young Children.
- Consortium of National Arts Education Associations (1994). *National standards for arts education. Dance, music, theater, visual arts: What every young American should know and be able to do in the arts*. Reston, VA: Author.
- Cratty, B.J. (1986). *Perceptual and motor development in Infants and Children*.
- Edwards, Carolyn, Lella Gandini and George Forman, eds.(1998). *The Hundred Languages of Children: The Reggio Emilia Approach – Advanced Reflections* 2nd ed. Westport: Ablex Publishing.
- Gallahue, D.L. (1995). "Transforming physical education curriculum." in *reaching potentials: Transforming Early childhood Curriculum and Assessment*, vol. 2., S. Bredekamp and T. Rosegrant, editors. 125-44. Washington, DC: National Association for the Education of Young Children.
- Glassman, M. (2001). *A music learning theory for newborn and young children*. Chicago: G.I.A. Publications.
- Gronlund, G. (2006). *Make Early Learning Standards Come Alive: Connecting Your Practice and Curriculum to State Guidelines*. St. Paul, MN: Redleaf Press.
- Hart, B. & Risley, T. (1995). *Meaningful differences in the everyday experiences of young American Children*. Paul H. Brookes Publishing Co.
- McCall, R.M., and Craft, D.H. (2000). *Moving with a Purpose: Developing programs for preschoolers of all abilities*. Champaign, IL: Human Kinetics. (National Association for Sport and Physical Education) NASPE. (2002).

National Research Council (2001). *Eager to learn: Educating our preschoolers*. Committee on Early Childhood Pedagogy. Barbara T. Bowman, M. Suzanna Donovan, and M. Susan Burns, editors. Commission on Behavioral and Social Sciences and Education. Washington, DC: National Academy Press.

Nurss, J. (1987). *Readiness for kindergarten*. ERIC/EECE Digest. Available at: [www.kidsource.com/kidsource/content/readiness\\_for\\_k.html](http://www.kidsource.com/kidsource/content/readiness_for_k.html)

Perry, J. (2001). *Outdoor play: Teaching strategies with young children*. New York: Teachers College Press.

Pica, R. (2000). *Moving & Learning Series: Preschoolers and kindergarteners*. Albany, NY: Delmar.

Pica, R. (2001). *Wiggle, giggle & shake: 200 ways to move and learn*. Beltsville, MD: Gryphon House.

Pre-Kindergarten Standards: Guidelines for teaching and learning. 2003. CTB/ McGraw-Hill. March 10, 2003. <http://www.ctb.com/static/resources/prekstandards.jsp>

Rivkin, M.S. (1995). *The great outdoors: Restoring children's right to play outside*. Washington, DC: National Association for the Education of Young Children (NAEYC).

Sanders, S. (1992). *Designing preschool movement programs*. Champaign, IL: Human Kinetics.

Sanders, S. (2002). *Active for life: Developmentally appropriate movement programs for young children*. Washington, DC: NAEYC.

Schwarz, I.S., Joseph, G. E., Chou, H.Y., Horn, E.M., Sandall, S. R., Wolery, R., & Lieber, J. (2002). *Building blocks for teaching preschoolers with special needs*. Paul H. Brookes Publishing Co.

Staley, L., and Ortman, P.A. (2000). "Red Rover, Red Rover, it's time to move over." *Young Children*. 55 (1): 72.

Sutterby, J.A., and Frost, J.L. (2002). "Making playgrounds fit for children and children fit on playgrounds." *Young Children*. 57 (3): 34-39.

Sweet, J.E., and Jacobson, M. (2001). *365 Activities for fitness, food, and fun for the whole family*. New York, NY: McGraw-Hill.

Torbert, M., and Schneider, L.B. (1992). *Follow me too: A handbook of movement activities for three- to five-year-olds*. New York, NY: Addison-Wesley/Pearson.

Wardel, F. (2000). "Supporting constructive play in the wild: Guidelines for learning outdoors." *Child Care Information Exchange*. 133: 26-30.

Weikart, P.S. (2002). *Movement in Steady Beat: Activities for Children Ages 3 to 7*. Ypsilanti, MI: High/Scope Press.

Wellhousen, K. (2001). *Outdoor play, everyday: Innovative play concepts for early childhood*. Albany, NY: Delmar.

## **CREATIVE ARTS WEBSITES**

[www.childdevelopmentinfo.com/health\\_safety/physical\\_fitness\\_guide\\_for\\_kids.htm](http://www.childdevelopmentinfo.com/health_safety/physical_fitness_guide_for_kids.htm) (Child Development Institute Physical Fitness Guide for Kids and Teens)

[www.aahperd.org/naspe/template.cfm?template=toddlers.html](http://www.aahperd.org/naspe/template.cfm?template=toddlers.html) (NASPE) Physical Activity Guidelines for Infants and Toddlers)

[www.aahperd.org/NASPE/pdf\\_files/brochure.pdf](http://www.aahperd.org/NASPE/pdf_files/brochure.pdf) (NASPE's Kids in Action: Fitness for Children Birth to Age 5)

[www.kidshealth.org](http://www.kidshealth.org) (The Nemours Foundation KidsHealth)

[www.pbs.org/teachsource/prek2/issues/index.shtm](http://www.pbs.org/teachsource/prek2/issues/index.shtm) (PBS TeacherSource)

[www.fitness.gov/funfit/funfit.html](http://www.fitness.gov/funfit/funfit.html) (The President's Council for Physical Fitness and Sports: Fit 'n Active Kids)

[www.zerotothree.org](http://www.zerotothree.org) (Zero to Three: National Center for Infants, Toddlers and Families)

[www.doe.nv.gov/equity/prekstandards.htm](http://www.doe.nv.gov/equity/prekstandards.htm) (Download complete copy of Nevada's Pre-K Standards)

[www.ed.gov](http://www.ed.gov) (Federal Even Start Family Literacy)

www.naeyc.org (see Position Statement on School Readiness and Signs of Quality Programs)  
www.nas.edu or www.4nationalacademies.org (National Research Council)  
www.ed.gov (U.S. Department of Education)  
www.ala.org/ALSCTemplate.cfm?Section=ALSC (American Library Association)  
www.nea.org/parents (National Education Association)  
www.ncpie.org/ (National Coalition for Parent Involvement in Education)  
www.npin.org (National Parent Involvement Network)  
www.acs.ualgary.ca/~dkbrown/ (The Children's Literature Web Guide)  
www.pta.org (Parent Teacher Association)  
www.virtualpre-k.org/reno/en/ (Virtual Pre-K website)  
www.teachersandfamilies.com (Teachers and Families Working Together)  
www.teachersfirst.com (Teachers First website)

## **HEALTH & PHYSICAL DEVELOPMENT RESOURCES**

Berk, L.E. (2001). *Development through the lifespan*. Boston. Allyn & Bacon.

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

Cratty, B.J. (1986). *Perceptual and motor development in infants and children*.

Dinwiddie, S. (1999). *Kindergarten readiness*. Available at: [www.kidsource.com/better.world.press/kindergarten.html](http://www.kidsource.com/better.world.press/kindergarten.html)

Gronlund, G. (2006). *Make Early Learning Standards Come Alive: Connecting Your Practice and Curriculum to State Guidelines*. St. Paul, MN: Redleaf press.

Hart, B. & Risley, T. (1995). *Meaningful differences in the everyday experiences of young American children*. Paul H. Brookes Publishing Co.

Hemmeter, M.L., Joseph, G.E., Smith, B.J. and Sandall, S. (2001). *Division of Early Childhood recommended practices: Improving practices for young children with special needs and their families*. Longmont, CO: Sopris West. 83

National Association for Sports and Physical Education (2002). *Active start: Physical activity for children birth to five years*. Reston, VA: Author

National Research Council and Institute of Medicine (2000). *From neurons to neighborhoods: The Science of early childhood development*. Committee on Integrating the Science of Early Childhood Development. Jack P. Shonkoff and Deborah A. Phillips, editors. Board on Children, Youth, and Families, Commission on Behavioral and Social Sciences and Education. Washington, DC: National Academy Press.

Nurss, J. (1987). *Readiness for kindergarten*. ERIC/EECE Digest. Available at: [www.kidsource.com/kidsource/content/readiness\\_for\\_k.html](http://www.kidsource.com/kidsource/content/readiness_for_k.html)

*Pre-Kindergarten Standards: Guidelines for teaching and learning*. 2003. CTB/ McGraw-Hill. March 10, 2003. <http://www.ctb.com/static/resources/prekstandards.jsp>

Sweet, J.E., & Jacobson, M. (2001). *365 Activities for fitness, food, and fun for the whole family*. New York, NY: McGraw-Hill.

U. S. Department of Health and Human Services (1996). *Physical activity and health: A report of the Surgeon General*. Washington, DC: Author.

## **HEALTH & PHYSICAL DEVELOPMENT WEBSITES**

[www.childdevelopmentinfo.com/health\\_safety/physical\\_fitness\\_guide\\_for\\_kids.htm](http://www.childdevelopmentinfo.com/health_safety/physical_fitness_guide_for_kids.htm) (Child Development Institute Physical Fitness Guide for Kids and Teens)  
[www.aahperd.org/naspe/template.cfm?template=toddlers.html](http://www.aahperd.org/naspe/template.cfm?template=toddlers.html) (National Association for Sport and Physical Education (NASPE) Physical Activity Guidelines for Infants and Toddlers)  
[www.aahperd.org/NASPE/pdf\\_files/brochure.pdf](http://www.aahperd.org/NASPE/pdf_files/brochure.pdf) (NASPE's Kids in Action: Fitness for Children Birth to Age 5)  
[www.kidshealth.org](http://www.kidshealth.org) ( Nemours Foundation KidsHealth)  
[www.pbs.org/teachersource/prek2/issues/index.shtm](http://www.pbs.org/teachersource/prek2/issues/index.shtm) (PBS Teacher Source)  
[www.fitness.gov/funfit/funfit.html](http://www.fitness.gov/funfit/funfit.html) (The President's Council for Physical Fitness and Sports: Fit 'n Active Kids)  
[www.doe.nv.gov/equity/prekstandards.htm](http://www.doe.nv.gov/equity/prekstandards.htm) (To download complete copy of Nevada's Pre-K Standards)  
[www.ed.gov](http://www.ed.gov) (Federal Even Start Family Literacy)  
[www.pbs.org](http://www.pbs.org) (PBS)  
[www.naeyc.org](http://www.naeyc.org) (National Association for the Education of Young Children (See Position Statement on School Readiness and Signs of Quality Programs)  
[www.nas.edu](http://www.nas.edu) or [www.4nationalacademies.org](http://www.4nationalacademies.org) (National Research Council)  
[www.ed.gov](http://www.ed.gov) (U.S. Department of Education)  
[www.ala.org/ALSCTemplate.cfm?Section=ALSC](http://www.ala.org/ALSCTemplate.cfm?Section=ALSC) (American Library Association)  
[www.nea.org/parents](http://www.nea.org/parents) (National Education Association)  
[www.ncpie.org/](http://www.ncpie.org/) (National Coalition for Parent Involvement in Education)  
[www.npin.org](http://www.npin.org) (National Parent Involvement Network)  
[www.pta.org](http://www.pta.org) (Parent Teacher Association)  
[www.virtualpre-k.org/reno/en/](http://www.virtualpre-k.org/reno/en/) (Virtual Pre-K website)  
[www.teachersandfamilies.com](http://www.teachersandfamilies.com) (Teachers and Families Working Together)  
[www.teachersfirst.com](http://www.teachersfirst.com) (Teachers First website)

## **LANGUAGE & EARLY LITERACY**

Backes, L. (2001). "Best books for kids who (think they) hate to read." Prima Publishing.

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

Cook, R., Tessier, A, & Klein, D. M. (1999). Adapting early childhood curricula for children in inclusive settings (5th Ed.). Prentice Hall.

Copple, C. (2003). A World of Differences: Readings and teaching young children in diverse society. National Association for the Education of Young Children.

Crosser, S. (1998). "He has a summer birthday: The kindergarten entrance age dilemma." ERIC Digest . (Eric Document Reproduction Service No. ED423079 98). Available at: [www.kidsource.com/kidsource/content5/kindergarten.entrance.html](http://www.kidsource.com/kidsource/content5/kindergarten.entrance.html).

Cummins, J. (2000). Language, power, and pedagogy: Bilingual children in the crossfire. Clevedon, England. Multilingual Matters Ltd.

Delpit, L. (1995). Other people's children: Cultural conflict in the classroom. New Press.

Derman-Sparks, L. (1989). Anti-biased curriculum: Tools for empowering young children, A.B.C. Task Force.

Dinwiddie, S. (1999). "Kindergarten readiness." Available at: [www.kidsource.com/better.world.press/kindergarten.html](http://www.kidsource.com/better.world.press/kindergarten.html)

Fillmore, L. W., & Snow, C. (2000). What early childhood teachers need to know about language. Eric Digest. US: District of Columbia.

Golant, S., & Golant, M. (1999). "Kindergarten: It isn't what it used to be." (3rd ed.). McGraw-Hill.

- Gonzalez-Mena, J. (2001). *Multicultural issues in child care*. Mayfield Publishing Company.
- Hale, J. E., (2001). *Learning while black: Creating educational excellence for African American children*. John Hopkins University Press.
- Hale-Benson, J. E. (1986). *Black children, their roots, culture and learning styles*. John Hopkins University Press.
- Hannigan, I. (1998). "Off to school: A parent's-eye view of the kindergarten year." National Association for the Education of Young Children.
- Hart, B. & Risley, T. (1995). "Meaningful differences in the everyday experiences of young American children." Paul H. Brookes Publishing Co.
- Hauser, J. F. (1993). "Growing up reading: Learning to read through creative play." Williamson Publishing.
- Hearne, B. & Stevenson, D. (2000). "Choosing books for children: A commonsense guide." University of Illinois Press
- Hill, M. W. (1995). "Home: Where Reading and Writing Begin." Heinemann.
- Kagan, S.L. (2000). *Early schooling: The national debate*. New Haven CT: Yale University Press.
- Katz, L., & McClennan, D. (1997). *Fostering social competence in young children. The teacher's role*. National Association for the Education of Young Children.
- Kaye, P. (1994). "Games for reading: Playful ways to help your child read." Pantheon Books.
- Klein, M. D., & Chen, D. (2001). *Working with children from culturally diverse backgrounds*. Delmar Thomson Publishing.
- Ladd, G.W. (1990). Having friends, keeping friends, making friends, and being liked by peers in the classroom: Predictors of children's early school adjustment? *Child Development* 61 (4), 1081-1100.
- Levin, D. E. (1998). "Remote control childhood? Combating the hazards of media culture." National Association for the Education of Young Children
- Levine, R. A. (1996). *Child care and culture: Lessons from Africa*. Cambridge University Press.
- National Association for the Education of Young Children and the International Reading Association (1998). *Learning to read and write: Developmentally appropriate practices for young children*. Washington, DC
- National Research Council (2001). *Eager to learn: Educating our preschoolers*. Committee on Early Childhood Pedagogy. Barbara T. Bowman, M. Suzanna Donovan, and M. Susan Burns, editors. Commission on Behavioral and Social Sciences and Education. Washington, DC: National Academy Press.
- National Research Council and Institute of Medicine (2000). *From neurons to neighborhoods: The Science of early childhood development*. Committee on Integrating the Science of Early Childhood Development. Jack P. Shonkoff and Deobrah A. Phillips, editors. Board on Children, Youth, and Families, Commission on Behavioral and Social Sciences and Education. Washington, DC: National Academy Press.
- Neuman, S.B., Copple, C, & Bredekamp, S. (2000) *Learning to read and write: Developmentally appropriate practices for young children*. Washington, DC: NAEYC.
- Nurss, J. (1987). *Readiness for kindergarten*. ERIC/EECE Digest. Available at: [www.kidsource.com/kidsource/content/readiness\\_for\\_k.html](http://www.kidsource.com/kidsource/content/readiness_for_k.html)
- Odean, K. (1998). *Great books for boys*. Ballantine Publishing Group.

Odean, K. (1997). Great books for girls. Ballantine Publishing Group.

Ogbu, J. U. (1992). Understanding cultural diversity and learning. Educational Researcher, 21(8), 5-14. Pre-Kindergarten Standards: Guidelines for teaching and learning. 2003. CTB/ McGraw-Hill. March 10, 2003. <http://www.ctb.com/static/resources/prekstandards.jsp>

Rubin, K., Bukowski, W., & Parker, J.G. (1998). Peer interactions, relationships and groups. In W. Damon (Ed.), Handbook of child psychology, Volume 3: Social, Emotional, and Personality Development, fifth Edition. (pp. 619-200). John Wiley & Sons.

Schwarz, I.S., Joseph, G. E., Chou, H.Y., Horn, E.M., Sandall, S. R., Wolery, R., & Lieber, J. (2002). Building blocks for teaching preschoolers with special needs. Paul H. Brookes Publishing Co.

Tabors, P. (1997). One child, two languages: A guide for preschool educators of children learning English as a second language. Paul H. Brookes Publishing.

Taylor, D. (1999). "Family literacy: Young children learning to read and write." Heinemann.

Taylor, D. & Strickland, D. (1991). "Family storybook reading." Heinemann.

Vygotsky, L. (1986). Thought and language. The Massachusetts Institute of Technology.

York, S. (2003). Roots & Wings: Affirming culture in early childhood programs. Redleaf Press.

## **LANGUAGE & EARLY LITERACY WEBSITES**

[www.ciera.org](http://www.ciera.org) (Center for the Improvement of Early Reading (CIERA))

[www.ed.gov](http://www.ed.gov) (Federal Even Start Family Literacy)

[www.hippyusa.org](http://www.hippyusa.org) (Home Instruction for Parents of Preschool Youngsters))

[www.reading.org](http://www.reading.org) (International Reading Association)

[www.familit.org](http://www.familit.org) (National Center for Family Literacy)

[www.nifl.org](http://www.nifl.org) (National Institute for Literacy)

[www.patnc.org](http://www.patnc.org) (Parents as Teachers National Center)

[www.pbs.org](http://www.pbs.org) (PBS)

[www.naeyc.org](http://www.naeyc.org) (National Association for the Education of Young Children (See Position Statement on School Readiness and Signs of Quality Programs))

[www.nas.edu](http://www.nas.edu) or [www.4nationalacademies.org](http://www.4nationalacademies.org) (National Research Council)

[www.pppctr.org](http://www.pppctr.org) (Practical Parenting Partnerships)

[www.rif.org](http://www.rif.org) (Reading is Fundamental)

[www.ed.gov](http://www.ed.gov) (U.S. Department of Education - America Reads Program)

[www.ala.org/ALSCTemplate.cfm?Section=ALSC](http://www.ala.org/ALSCTemplate.cfm?Section=ALSC) (American Library Association)

[www.reading.org/choices](http://www.reading.org/choices) (International Reading Association Children's Book Council Joint Committee)

[www.nypl.org/branch/kids/gloria.html](http://www.nypl.org/branch/kids/gloria.html) (New York Public Library, listing 100 Picture Books Everyone Should Know.)

[www.cbcbooks.org/](http://www.cbcbooks.org/) (Children's Book Council)

[www.familyeducation.com](http://www.familyeducation.com) (Family Education Network)

[www.icdlbooks.org/](http://www.icdlbooks.org/) (International Children's Digital Library).

[www.nea.org/parents](http://www.nea.org/parents) (National Education Association)

[www.ncpie.org/](http://www.ncpie.org/) (National Coalition for Parent Involvement in Education)

[www.npin.org](http://www.npin.org) (National Parent Involvement Network)

[www.acs.ualgary.ca/~dkbrown/](http://www.acs.ualgary.ca/~dkbrown/) (The Children's Literature Web Guide)

[www.pta.org](http://www.pta.org) (Parent Teacher Association)

[www.teachersandfamilies.com](http://www.teachersandfamilies.com) (Teachers and Families Working Together)

[www.teachersandfamilies.com/open/psreading.cfm](http://www.teachersandfamilies.com/open/psreading.cfm) (Listing of books to read with your child)  
[www.teachersfirst.com/100books.htm](http://www.teachersfirst.com/100books.htm) (A listing of good books for children)  
[www.teachersandfamilies.com/open/readingtips.html](http://www.teachersandfamilies.com/open/readingtips.html) (Tips for reading to your preschool child)  
[www.teachersfirst.com/getsource.cfm?id=997](http://www.teachersfirst.com/getsource.cfm?id=997) (Examples of finger plays for children)  
[www.teachersandfamilies.com/open/parent/index.html](http://www.teachersandfamilies.com/open/parent/index.html) (Parenting tips related to reading and literacy)  
[www.readwritethink.org/resources/index.asp](http://www.readwritethink.org/resources/index.asp) (Additional listing of resources for children)  
[www.carolhurst.com](http://www.carolhurst.com) (Carol Hurst's Children's Literature site)

## **MATH LITERATURE**

Reading is a great way to communicate mathematical concepts to children. It also is a wonderful opportunity to spend time together. You will find most of these books at your local library.

Aker, Suzanne. *What Comes in 2s, 3s, & 4s?* Simon & Shuster.  
Allen, Pamela. *Mr. Archimedes' Bath.* Lothrop, Lee, and Shepard Books.  
Anno, Mitsumasa. *Anno's Counting Book.* Thomas Y. Crowell.  
Anno, Mitsumasa. *Anno's Counting House.* Thomas Y. Crowell.  
Anno, Mitsumasa. *Anno's Hat Trick.* Thomas Y. Crowell.  
Anno, Mitsumasa. *Anno's Math Games.* Thomas Y. Crowell.  
Asbjornsen, Peter Christen. *The Three Billy Goats Gruff.* Harcourt.  
Bang, Molly. *Ten, Nine, Eight.* Greenwillow Books.  
Barchers, Suzanne and Peter Rauen. *Storybook Stew: Cooking with Books Kids Love.*  
Bufano, Remo. *Jack and the Bean Stalk.* Macmillan.  
Carle, Eric. *My Very First Book of Numbers.* Philomel.  
Carle, Eric. *1, 2, 3 To the Zoo.* Philomel.  
Carle, Eric. *The Grouchy Ladybug.* Philomel.  
Carle, Eric. *Rooster Off to See the World.* Philomel.  
Carle, Eric. *Today's Monday.* Philomel.  
Carle, Eric. *The Very Busy Spider.* Philomel.  
Carle, Eric.. *The Hermit Crab.*Philomel.  
Children's Television Workshop. *The The Very Hungry Caterpillar Sesame Street Book of Shapes (Book of Numbers and Book of Puzzles).* New York Preschool Press. Time-Life Books.  
Christelow, Eileen. *Five Little Monkeys Sitting in a Tree.* Clarion Books.  
Conford, Ellen. *What's Cooking, Jenny Archer.* Turtleback.  
Cooke, Tom. *Sesame Street Cookie Monster's Little Kitchen: A Chunky Book.*  
Crews, Donald. *Ten Black Dots.* Greenwillow Books.  
Falwell, Cathryn. *Feast for 10.* Clarion Books.  
Feelings, Muriel. *Moja Means One: Swahili Counting Book.* Dial.  
Florian, Douglas. *A Year in the Country.* Greenwillow Books.  
Galdone, Paul. *Goldilocks and the Three Bears.* Seabury Press.  
Giganti, Paul Jr. *How Many Snails?* Greenwillow Books.  
Heinst, Marie. *My First Book of Numbers.* Dorling Kindsley Inc.  
Hoban, Tana. *Exactly the Opposite.* Macmillan Publishing Co., Inc.  
Hoban, Tana. *More than One.* Macmillan Publishing Co., Inc.  
Hoban, Tana. *1, 2, 3.* Macmillan Publishing Co., Inc.  
Hoban, Tana. *Round and Round and Round.* Macmillan Publishing Co., Inc.  
Hoban, Tana. *Where is It?* Macmillan Publishing Co., Inc.  
Hughes, Shirley. *Rhymes for Annie Rose.* Lothrop, Lee, and Shepard Books.  
Hughes, Shirley. *The Nursery Collection.* Lothrop, Lee, and Shepard Books.

Hulme, Joy N. Sea Squares. Hyperion Books for Children.  
Hutchins, Pat. Clocks and More Clocks. Macmillan Publishing Co., Inc.  
Hutchins, Pat. The Doorbell Rang. Macmillan Publishing Co., Inc.  
Inkpen, Mick. Kipper's Book of Numbers. Red Wagon Books.  
Pelham, David. Sam's Pizza: Your Pizza to Go. Dutton Books.  
Plummer, David and John Archambault. Counting Kittens. Silver Press.  
Prelutsky, John. Read Aloud Rhymes for the Very Young. A. Knopf.  
Tafari, Nancy. Who's Counting? William Morrow & Co.  
Ward, Cindy. Cookie's Week. G. P. Putman's Sons.

## **MATHEMATICS RESEARCH ARTICLES**

Berk, L.E. (2001). Development through the lifespan. Boston. Allyn & Bacon.

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

Dinwiddie, S. (1999). Kindergarten readiness. Available at: [www.kidsource.com/better.world.press/kindergarten.html](http://www.kidsource.com/better.world.press/kindergarten.html)

Golant, S., & Golant, M. (1999). Kindergarten: It isn't what it used to be. (3rd ed.). McGraw-Hill.

Hannigan, I. (1998). Off to school: A parent's-eye view of the kindergarten year. National Association for the Education of Young Children.

Hart, B. & Risley, T. (1995). Meaningful differences in the everyday experiences of young American children. Paul H. Brookes Publishing Co.

Kagan, S.L. (2000). Early schooling: The national debate. New Haven CT: Yale University Press.

Klein, M. D., & Chen, D. (2001). Working with children from culturally diverse backgrounds. Delmar Thomson Publishing.

Levin, D. E. (1998). Remote control childhood? Combating the hazards of media culture. National Association for the Education of Young Children.

National Research Council and Institute of Medicine (2000). From neurons to neighborhoods: The Science of early childhood development. Committee on Integrating the Science of Early Childhood Development. Jack P. Shonkoff and Deobrah A. Phillips, editors. Board on Children, Youth, and Families, Commission on Behavioral and Social Sciences and Education. Washington, DC: National Academy Press.

National Research Council (2002). Helping Children Learn Mathematics. Washington, D.C.: National Academy Press

Nurss, J. (1987). Readiness for kindergarten . ERIC/EECE Digest . Available at: [www.kidsource.com/kidsource/content/readiness\\_for\\_k.html](http://www.kidsource.com/kidsource/content/readiness_for_k.html)

Pre-Kindergarten Standards: Guidelines for teaching and learning. 2003. CTB/ McGraw-Hill. March 10, 2003. <http://www.ctb.com/static/resources/prekstandards.jsp>

Schwarz, I.S., Joseph, G. E., Chou, H.Y., Horn, E.M., Sandall, S. R., Wolery, R., & Lieber, J. (2002). Building blocks for teaching preschoolers with special needs. Paul H. Brookes Publishing Co.

Baroody, A. A Guide to Teaching Mathematics in the Primary Grades. Allyn and Bacon. Boston. 1989.

Bredenkamp, S. and T. Rosegrant. Reaching Potentials: Transforming Early Childhood Curriculum and Assessment. Vol 2. National Association for the Education of Young Children. Washington, DC. 1995.

- Brewer, JoAnn. *Introduction to Early Childhood Education*. 2nd Edition. Allyn and Bacon. Boston. 1995.
- Clements, D.H. and M. Battista. *Constructivist Learning and Teaching*. *Arithmetic Teacher*. September 1990. pp 34-35.
- Ginsburg, H.P. *Children's Arithmetic: How They Learn It and How You Teach It*. (2nd edition). Austin, TX: Pro Ed. 1989.
- Kamii, C. *Children Reinvent Arithmetic*. Teachers College Press. New York. 1985.
- Mokros, J. *Beyond Facts and Flash Cards: Exploring Math With Your Kids*. Heinemann. Portsmouth, NH. 1996.
- Saracho, Olivia. *Right From the Start*. Allyn and Bacon. Boston. 1994.
- Smith, Susan Sperry. *Early Childhood Mathematics*. Allyn and Bacon. Boston 1997.
- Stenmark, J.K., V. Thompson, and G. Coates. *Family Math for Young Children*. University of California. 1997.
- Williams, C. and C. Kamii. "How Do Children Learn by Handling Objects?" *Young Children*. November 1986. pp 23-26.
- Carpenter, T.P., and Moser, J.M. (1983). The acquisition of addition and subtraction concepts. In *The acquisition of mathematical concepts and processes*, eds. R. Lesh and M. Landau, 7-44. New York: Academic Press.
- Carpenter, T.P. and Moser, J.M. (1984). The acquisition of addition and subtraction concepts in grades one through three. *Journal for Research in Mathematics Education*, 15: 179-202.
- Carpenter, T.P., Ansell, E., Franke, M.C., Fennema, E., and Weisbeck, L. (1993). Models of problem solving: A study of kindergarten children's problem-solving processes. *Journal for Research in Mathematics Education*, 24(5): 427-440.
- Carpenter, T.P., Carey, D., and Kouba, U. (1990). A problem solving approach to the operations. In *Mathematics for the young child*, ed. J.N. Payne, 111-131. Reston, VA: National Council of Teachers of Mathematics.
- Ginsberg, H.P. (1996). Toby's math. In *The nature of mathematical thinking*, eds. R.J. Sternberg and T. Ben-Zeev, 175-202. Hillsdale, NJ: Lawrence Erlbaum Associates.
- McCully, E.A. (1992). *Mirette on the high wire*. New York: G.P. Putnam & Sons.
- National Council of Teachers of Mathematics. (1989). *Curriculum and evaluation standards for school mathematics*. Reston, VA: Author.
- Peterson, P., Fennema, E., and Carpenter, T. (1989). Using knowledge of how students think about mathematics. *Educational Leadership*, 46(4): 42-46.
- Resnick, L., Bill, V., Lesgold, S., and Leer, N. (1991). Thinking in arithmetic class. In *Teaching advanced skills to at-risk students*, eds. B. Means, C. Chelmer, and M. Knapp. San Francisco: Jossey-Bass.
- Schwartz, L.L. (1994). Calendar reading: A tradition that begs remodeling. *Teaching Children Mathematics*, 1: 104-109.
- Singer, M. (1993). *Puppy says 1,2,3*. Hong Kong: Reader's Digest Young Families, Inc.
- Smith, S.S. (1997). *Early childhood mathematics*. Needham Heights, MA: Allyn & Bacon.
- Vygotsky, L.S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

## **MATH WEBSITES**

Math in the Home: [www.ed.gov/pubs/parents/Math/mathhome.html](http://www.ed.gov/pubs/parents/Math/mathhome.html)  
Who Measures What in Our Neighborhood?: [www.ed.uiuc.edu/ups/curriculum2002/measure/overview.shtml](http://www.ed.uiuc.edu/ups/curriculum2002/measure/overview.shtml)  
Understand measurable attributes of objects and the units, systems, and processes of measurement [www.standards.nctm.org/document/chapter4/meas.htm#bp1](http://www.standards.nctm.org/document/chapter4/meas.htm#bp1)  
Apply appropriate techniques, tools, and formulas to determine measurement: [www.standards.nctm.org/document/chapter4/meas.htm#bp2](http://www.standards.nctm.org/document/chapter4/meas.htm#bp2)  
[www.illinoisearlylearning.org/tips.htm#math](http://www.illinoisearlylearning.org/tips.htm#math)  
[www.illinoisearlylearning.org/tips.htm](http://www.illinoisearlylearning.org/tips.htm)  
[www.theory.lcs.mit.edu/~emjordan/famMath.html](http://www.theory.lcs.mit.edu/~emjordan/famMath.html)  
[www.ed.gov/pubs/EarlyMath/title.html](http://www.ed.gov/pubs/EarlyMath/title.html)  
[www.doe.nv.gov/equity/prekstandards.htm](http://www.doe.nv.gov/equity/prekstandards.htm) (Download complete copy of Nevada's Pre-K Standards)  
[www.hippyusa.org](http://www.hippyusa.org) (Home Instruction for Parents of Preschool Youngsters))  
[www.patnc.org](http://www.patnc.org) (Parents as Teachers National Center)  
[www.pbs.org](http://www.pbs.org) (PBS)  
[www.naeyc.org](http://www.naeyc.org) (National Association for the Education of Young Children (See Position Statement on School Readiness and Signs of Quality Programs))  
[www.nas.edu](http://www.nas.edu) or [www.4nationalacademies.org](http://www.4nationalacademies.org) (National Research Council)  
[www.pppctr.org](http://www.pppctr.org) (Practical Parenting Partnerships)  
[www.nea.org/parents](http://www.nea.org/parents) (National Education Association)  
[www.ncpie.org/](http://www.ncpie.org/) (National Coalition for Parent Involvement in Education)  
[www.npin.org](http://www.npin.org) (National Parent Involvement Network)  
[www.pta.org](http://www.pta.org) (Parent Teacher Association)  
[www.teachersandfamilies.com](http://www.teachersandfamilies.com) (Teachers and Families Working Together)  
[www.teachersfirst.com/getsource.cfm?id=997](http://www.teachersfirst.com/getsource.cfm?id=997) (Examples of finger plays for children)  
[www.teachersandfamilies.com/open/parent/index.html](http://www.teachersandfamilies.com/open/parent/index.html) (Parenting tips related to reading and literacy)  
[www.readwritethink.org/resources/index.asp](http://www.readwritethink.org/resources/index.asp) (Additional listing of resources for children)  
[www.carolhurst.com](http://www.carolhurst.com) (Carol Hurst's Children's Literature site)  
[www.virtualpre-k.org](http://www.virtualpre-k.org) (Activities for parents to do with their children)

## **SCIENCE RESEARCH**

Berk, L.E. (2001). *Development through the lifespan*. Boston. Allyn & Bacon.

Bharat C., J. (1979). *Sharing Nature with Children*. Amanda Publications.

Breen, M., & Friestad, K. (2000). *The Kids' Book of Weather Forecasting*. Williamson Publishing.

Catherall, E. (1990). *Exploring Weather*. Steck-Vaughn Library.

Charlesworth, R., & Lind, K. K. (2003). *Math and Science for Young Children, (4th Ed.)*. Thomson- Delmar Learning.

Feldman, J. (2005). *Best of Dr. Jean, Science & Math*. Scholastic.

Humphries, J. (2000). *Exploring Nature with Children, Young Children, March* (p. 16).

MacDonald, S. (1996). *Squish, Sort, Paint and Build*. Gryphon House.

Matthews H., D. (1999). *Discovering Science in Nature*. Scholastic Early Childhood Today, 13 (8), (pg. 29).

Myrick W. M. (2007). Problem Solving, a Sensible Approach to Children's Science and Social Studies Learning-and Beyond, Young Children, September, (p. 35).

National Research Council (1996). National science education standards. Washington, DC: National Academy Press.

Rader, J., (1995). Rainy Day Activity Book. (1st Ed.). Doubleday

Rogers, D. (1989). Weather. Marshall Cavendish.

### **SCIENCE WEBSITES**

[www.stevespanglerscience.com](http://www.stevespanglerscience.com)

[www.learner.org/jnorth/spring1998/critters/tulip/TMTulip.html](http://www.learner.org/jnorth/spring1998/critters/tulip/TMTulip.html)

[www.cccturtle.org/contents.htm](http://www.cccturtle.org/contents.htm)

[www.nyelabs.kcts.org/flash\\_go.html](http://www.nyelabs.kcts.org/flash_go.html)

[www.bubbles.org/pbfa2.htm](http://www.bubbles.org/pbfa2.htm)

[www.exploratorium.edu/](http://www.exploratorium.edu/)

[www.doe.nv.gov/equity/prekstandards.htm](http://www.doe.nv.gov/equity/prekstandards.htm) (Download complete copy of Nevada's Pre-K Standards)

[www.hippyusa.org](http://www.hippyusa.org) (Home Instruction for Parents of Preschool Youngsters)

[www.patnc.org](http://www.patnc.org) (Parents as Teachers National Center)

[www.pbs.org](http://www.pbs.org) (PBS)

[www.naeyc.org](http://www.naeyc.org) (National Association for the Education of Young Children See Position Statement on School Readiness and Signs of Quality Programs)

[www.nas.edu](http://www.nas.edu) or [www.4nationalacademies.org](http://www.4nationalacademies.org) (National Research Council)

[www.pppctr.org](http://www.pppctr.org) (Practical Parenting Partnerships)

[www.familyeducation.com](http://www.familyeducation.com) (Family Education Network)

[www.icdlbooks.org/](http://www.icdlbooks.org/) (International Children's Digital Library).

[www.nea.org/parents](http://www.nea.org/parents) (National Education Association)

[www.ncpie.org/](http://www.ncpie.org/) (National Coalition for Parent Involvement in Education)

[www.npin.org](http://www.npin.org) (National Parent Involvement Network)

[www.pta.org](http://www.pta.org) (Parent Teacher Association)

[www.teachersandfamilies.com](http://www.teachersandfamilies.com) (Teachers and Families Working Together)

### **SOCIAL STUDIES & SOCIAL EMOTIONAL RESEARCH**

Bandura, A. (1997). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice-Hall.

Berk, L.E. (2001). Development through the lifespan. Boston. Allyn & Bacon.

Bredenkamp, S., & Copple, C. (1997). Developmentally Appropriate Practice in Early Childhood Programs. Washington, DC: National Association for the Education of Young Children.

Bronsan, M. (2000). Recognizing & Supporting the Development of Self-Regulation in Young Children, Young Children, 55(2): 32-36 NAEYC: Washington, DC.

Casas, Paula. (2002). Toward the ABCs: Building a Healthy Social and Emotional Foundation for Learning and Living. Retrieved January 20, 2003, from [www.ounceofprevention.org/publications/pdf/Towards%20the%20ABCs2.pdf](http://www.ounceofprevention.org/publications/pdf/Towards%20the%20ABCs2.pdf)

Cook, R., Tessier, A, & Klein, D. M. (1999). Adapting early childhood curricula for children in inclusive settings (5th Ed.). Prentice Hall.

- Copple, C. (2003). *A World of Differences: Readings and Teaching Young Children in Diverse Society*. National Association for the Education of Young Children.
- Delpit, L. (1995). *Other people's children: Cultural Conflict in the Classroom*. New Press.
- Derman-Sparks, L. (1989). *Anti-biased curriculum: Tools for empowering young children*, A.B.C. Task Force.
- Dinwiddie, S. (1999). Kindergarten readiness. Available at: [www.kidsource.com/better.world.press/kindergarten.html](http://www.kidsource.com/better.world.press/kindergarten.html)
- Gonzalez-Mena, J. (2001). *Multicultural issues in child care*. Mayfield Publishing Company.
- Gronlund, G. (2006). *Make Early Learning Standards Come Alive: Connecting Your Practice and Curriculum to State Guidelines*. St. Paul, MN: Redleaf press.
- Hale, J. E., (2001). *Learning while black: Creating educational excellence for African American children*. John Hopkins University Press.
- Hale-Benson, J. E. (1986). *Black children, their roots, culture and learning styles*. John Hopkins University Press.
- Hart, B. & Risley, T. (1995). *Meaningful differences in the everyday experiences of young American children*. Paul H. Brookes Publishing Co.
- Hemmeter, M.L., Joseph, G.E., Smith, B.J. and Sandall, S. (2001). *Division of Early Childhood recommended practices: Improving practices for young children with special needs and their families*. Longmont, CO: Sopris West. 83
- Kaiser, B & Rasminsky, J. (2003). *Challenging Behavior in Young Children: Understanding, Preventing, and Responding Effectively*. Allyn and Bacon.
- Katz, L., & McClennan, D. (1997). *Fostering social competence in young children. The teacher's role*. National Association for the Education of Young Children.
- Klein, M. D., & Chen, D. (2001). *Working with children from culturally diverse backgrounds*. Delmar ThomsonPublishing.
- Ladd, G.W. (1990). Having friends, keeping friends, making friends, and being liked by peers in the classroom: Predictors of children's early school adjustment? *Child Development* 61 (4), 1081-1100.
- Levin, D. (1994). *Teaching Children in Violent Times: Building a Peaceable Classroom*. Cambridge, MA: Educators for Social Responsibility.
- Levin, D. E. (1998). *Remote control childhood? Combating the hazards of media culture*. National Association for the Education of Young Children
- Levine, R. A.(1996). *Child care and culture: Lessons from Africa*. Cambridge University Press.
- Marshall, H.H.(1995). Beyond "I Like the Way.." *Young Children*. January, 50(2): pp 26- 28. NAEYC: Washington, DC.
- National Research Council, (2001). *Eager to learn: Educating our preschoolers*. Committee on Early Childhood Pedagogy. Barbara Bowman, M., Suzanna Donovan, and M. Susan Burns, editors. Commission on Behavioral and Social Sciences and Education. Washington, DC: National Academy Press.
- National Research Council and Institute of Medicine (2000). *From neurons to neighborhoods: The Science of early childhood development*. Committee on Integrating the Science of Early Childhood Development. Jack P. Shonkoff and Deobrah A. Phillips, editors. Board on Children, Youth, and Families, Commission on Behavioral and Social Sciences and Education. Washington, DC: National Academy Press.
- Nurss, J. (1987). Readiness for kindergarten . *ERIC/EECE Digest* . Available at: [www.kidsource.com/kidsource/content/readiness\\_for\\_k.html](http://www.kidsource.com/kidsource/content/readiness_for_k.html)

- Ogbu, J. U. (1992). Understanding cultural diversity and learning. *Educational Researcher*, 21(8), 5-14. Pre-Kindergarten Standards: Guidelines for teaching and learning. 2003. CTB/ McGraw-Hill. March 10, 2003. <http://www.ctb.com/static/resources/prekstandards.jsp>
- Rubin, K., Bukowski, W., & Parker, J.G. (1998). Peer interactions, relationships and groups. In W. Damon (Ed.), *Handbook of child psychology, Volume 3: Social, Emotional, and Personality Development*, fifth Edition. (pp. 619-200). John Wiley & Sons.
- Schwarz, I.S., Joseph, G. E., Chou, H.Y., Horn, E.M., Sandall, S. R., Wolery, R., & Lieber, J. (2002). *Building blocks for teaching preschoolers with special needs*. Paul H. Brookes Publishing Co.
- Seefeldt, C. (2005). *Social Studies for the Preschool/Primary Child*. Seventh Edition. Upper Saddle Creek, NJ: Pearson/Merrill Prentice Hall.
- Shure, M.B. (2000). *I can problem solve: An interpersonal cognitive problem-solving program - Preschool*. Champaign, IL: Research Press.
- Tabors, P. (1997). *One child, two languages: A guide for preschool educators of children learning English as a second language*. Paul H. Brookes Publishing.
- Vygotsky, L.S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press
- Vygotsky, L. (1986). *Thought and language*. The Massachusetts Institute of Technology.
- York, S. (2003). *Roots & Wings: Affirming culture in early childhood programs*. Redleaf Press.

# REFERENCES

- Pre-Kindergarten Standards: Guidelines for Teaching and Learning. 2003. CTB/ McGraw-Hill. March 10, 2003. <http://www.ctb.com/static/resources/prekstandards.jsp>
- Althouse, R., Johnson, M.H., & Mitchell, S. (2003). *The colors of learning: Integrating the visual arts into the early childhood curriculum*. NY: Teachers College Press.
- Bandura, A. (1997). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Berk, L.E. (2001). *Development through the lifespan*. Boston. Allyn & Bacon.
- Bredenkamp, S., & Copple, C. (2009). *Developmentally appropriate practice in early childhood programs- serving children from birth through age 8*, 3rd edition. Washington, DC: National Association for the Education of Young Children.
- Cole, M. (1999). Culture in development. In M. H. Bornstein & M.E. Lamb (Eds.), *Developmental psychology: An advanced textbook* (pp.73-124). Mahwah, NJ: Lawrence Erlbaum Associates Inc.
- Consortium of National Arts Education Associations (1994). *National standards for arts education. Dance, music, theater, visual arts: What every young American should know and be able to do in the arts*. Reston, VA: Author.
- Cummins, J. (1998). *Beyond adversarial discourse: Searching for common ground in the education of bilingual students*. Presentation to the California State Board of Education. Sacramento, California. February 1998. 26 pages.
- Cummins, J. (2000). *Language, power, and pedagogy: Bilingual children in the crossfire*. Clevedon, England. Multilingual Matters Ltd.
- Dewey, J. (1944). *Democracy and education*. New York: McMillan.
- 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.
- Edwards, Carolyn, Lella Gandini., George Forman, eds. (1998). *The Hundred Languages of Children: The Reggio Emilia Approach – Advanced Reflections* 2nd ed. Westport: Ablex Publishing.
- Fillmore, L. W., and Snow, C. (2000). *What early childhood teachers need to know about language*. Eric Digest. US: District of Columbia. 11(00). 40 pgs.
- Glassman, M. (2001). *A music learning theory for newborn and young children*. Chicago: G.I.A. Publications.
- Kagan, S.L. (2000). *Early schooling: The national debate*. New Haven CT: Yale University Press.
- Katz, L., & McClennan, D. (1997). *Fostering social competence in young children. The teacher's role*. Washington, DC: National Association for the Education of Young Children.
- Ladd, G.W. (1990). Having friends, keeping friends, making friends, and being liked by peers in the classroom: Predictors of children's early school adjustment? *Child Development* 61 (4), 1081-1100.
- National Association for Sports and Physical Education (2002). *Active start: Physical activity for children birth to five years*. Reston, VA: Author.

- National Association for the Education of Young Children and the International Reading Association (1998). Learning to read and write: Developmentally appropriate practices for young children. Washington, DC: Authors.
- National Association for the Education of Young Children and the National Council for Teachers of Mathematics (2002). Joint Position Statement. Early Childhood Mathematics: Promoting Good Beginnings.
- National Research Council (1996). National science education standards. Washington, DC: National Academy Press.
- National Research Council (2001). Eager to learn: Educating our preschoolers. Committee on Early Childhood Pedagogy. Barbara T. Bowman, M. Suzanna Donovan, and M. Susan Burns, editors. Commission on Behavioral and Social Sciences and Education. Washington, DC: National Academy Press.
- National Research Council (2002). Helping Children Learn Mathematics. Washington, D.C.: National Academy Press.
- National Research Council and Institute of Medicine (2000). From neurons to neighborhoods: The Science of early childhood development. Committee on Integrating the Science of Early Childhood Development. Jack P. Shonkoff and Deborah A. Phillips, editors. Board on Children, Youth, and Families, Commission on Behavioral and Social Sciences and Education. Washington, DC: National Academy Press.
- Nevada Pre-K Standards Draft (2003) Department of Education
- Nevada Pre-K Standards (2004) Nevada Department of Education
- Neuman, S.B., Copple, C., & Bredekamp, S. (2000) Learning to read and write: Developmentally appropriate practices for young children. Washington, DC: NAEYC.
- Rubin, K., Bukowski, W., & Parker, J.G. (1998). Peer interactions, relationships and groups. In W. Damon (Ed.), Handbook of child psychology, Volume 3: Social, Emotional, and Personality Development, fifth Edition. (pp. 619-200). New York: John Wiley & Sons.
- Piaget, J., & Inhelder, B. (1969). The psychology of the child. New York: Basic Books.
- Sandall, S.R., Joseph, G., Chou, H.Y., Schwartz, I. S., Horn, E., Lieber, J., Odom, S.L., & Wolery, R. (in press). Talking to practitioners: Focus group report on curriculum modifications in inclusive preschool classrooms. Journal of Early Intervention.
- Sanders, S. W. (2002) Active for life. Washington, DC: NAEYC.
- Seefeldt, C., Denton, K., Galper, A., & Younousai, T. (1999). Fostering Head Start parents' efficacy and the relationship between efficacy and children's achievement. Early Childhood Research Quarterly, 14, 99-109.
- Sparks-Derman, L. & Edwards Olsen, J. (2010). Anti-Bias Education for young Children and Ourselves. Washington, D.C.: National Association for the Education of young Children.
- U. S. Department of Health and Human Services (2008). Physical activity and health: A report of the Surgeon General. Washington, DC: Author.
- Vygotsky, L. (1986). Thought and language. Cambridge, MA: The Massachusetts Institute of Technology.