ARIZONA ACADEMIC STANDARDS

KINDERGARTEN

State of Arizona
Arizona Department of Education

ARIZONA ACADEMIC STANDARDS
KINDERGARTEN

CONTENTS

Additional information about the Arizona Academic Standards including glossaries of terms may be found at http://www.ade.az.gov/standards/contentstandards.asp.

The Arts Standard 2006

Kindergarten

ARIZONA ACADEMIC STANDARDS IN THE ARTS
ARTICULATED FOR KINDERGARTEN

Philosophy and Rationale for the Arts

The arts are essential in education for they provide students with the means to think, feel, and understand the world around them in ways unique and distinct from other academic disciplines. These skills have been recognized as essential to lifelong success both in and out of school by a variety of education and civic leaders, including the National Association of State Boards of Education, the Education Commission of the States, the Arts Education Partnership, and *BusinessWeek*.

Arts Education in Arizona

Arizona has recognized the importance of arts education for its students in a variety of ways, including:

- Requiring music and visual arts be taught in grades K-8
- Creating high quality certifications (endorsements) for teachers in the areas of dance, music, theatre and visual arts
- Requiring a fine arts high school credit for admission to our state's universities
- Adopting Academic Standards in the Arts, with rigorous, sequential guidelines for creating quality arts education for Arizona's students.

Arts Standards Articulation for Kindergarten

- The Arts Standards are divided into four discipline areas: dance, music, theatre and visual arts.
- The Music Standard is articulated for <u>general music</u> by grade level for Kindergarten – 8th grade.
- The remaining Standards (Dance, Theatre, Visual Arts) are articulated by **skill level**, reflecting the variety of ways in which the arts are taught in Arizona schools. Included in this **Kindergarten** packet are the **Beginning Skill Level Performance Objectives** for Dance, Theatre and Visual Arts. If your students are more advanced, or if you would like to see how these skill articulated standards build on one other, the Department encourages you to view the standards in their entirety at http://www.ade.az.gov/standards/contentstandards.asp.
- All Four Arts Standards are organized under three strands: **Create**, **Relate** and **Evaluate**. **Create** performance objectives refer to the creation and performance within the discipline. **Relate** performance objectives refer to the social/historical/interdisciplinary nature of the discipline. **Evaluate** performance objectives refer to the critique and criticism aspects of the discipline.

Additional Resources for Arts Education

Additional resources on arts education can be accessed at http://www.ade.az.gov/asd/arts/ or by calling the Department's Arts Education Specialist at 602-364-1534.

BEGINNING DANCE

Strand 1 - Create

Concept 1: Body	
Beginning Objectives	
Healthy Practices	PO 101 Identify and apply healthy and safe dance practices (e.g. alignment, strength, endurance, proper nutrition, warming up the body, **somatic practices**).
Anatomy	PO 102 Perform isolated and coordinated dance movement for the head, neck, joints, and body parts of the torso and limbs.
Dynamic Alignment	PO 103 Identify and demonstrate the elements of **dynamic alignment** through basic movement patterns.
Fundamental Movement Patterns	PO 104 Identify and demonstrate basic fundamental movement patterns including breath, head/tail, core/distal, body half, upper/lower, front/back and cross/lateral
Body Skills	PO 105 Identify and demonstrate basic body skills including balance, strength, flexibility, coordination, endurance and agility.

Concept 2: Movement Skills	
Beginning Objectives	
Axial/Non-locomotor	PO 101 Identify and perform basic **axial /non-locomotor movements** (e.g. bending, twisting, reaching turning).
Locomotor	PO 102 Identify and perform basic **locomotor movements** (e.g. walk, run, hop, skip, jump, slide, gallop, leap, crawl, roll).
Axial and locomotor combinations	PO 103 Perform basic movement combinations that utilize both axial and locomotor movements.
Articulation of movement skills	PO 104 Identify and use breath support, initiation of movement, connectivity, and transition from one movement to another.

Strand 1 – Create (continued)

Concept 3: Elements of Dance	
Beginning Objectives	
Time: Tempo *See also "Relating Dance and Music"*	PO 101 Demonstrate moving to a steady beat in different tempos.
Time: Meter	PO 102 Demonstrate the ability to organize beats into groups and move in time with the beats. (e.g. duple and triple time).
Time: Rhythm	PO 103 Demonstrate moving in relation to and coordination with changes in rhythms and meters.
Space: Direction, Facing, Pathway	PO 104 Identify and demonstrate movement in different directions (forward, back side).
Space: Level	PO 105 Identify and demonstrate shapes at low, middle and high level.
Space: Shapes	PO 106 Demonstrate and create a variety of solo shapes exploring the possibility of symmetrical, asymmetrical, twisted, curved, angular, flat etc.
Space: Size and Range	PO 107 Explore the possibilities of size and range in relation to shape and movement.
Space: Focus and Intent	PO 108 Discuss and identify various points of focus (e.g. inner/outer, near/far, single/multi)
Energy: Movement Qualities	PO 109 Use appropriate terminology to identify and demonstrate the 6 qualities of movement (e.g. swing, suspend, sustained, percussive, collapse, vibratory)
Energy: Effort	PO 110 Use appropriate terminology to identify and demonstrate the Laban effort principles (e.g. bound/free, sudden/sustained, direct/indirect, strong/light

Strand 1 – Create (continued)

Concept 4: Improvisation/Choreography	
Beginning Objectives	
Improvisational Strategies	PO 101 Identify and apply **improvisational strategies** (e.g. leading/following, shadowing/mirroring, verbal cues, emotional response).
Using the Elements of Dance to Communicate	PO 102 Discuss and explore how the elements of dance can be used to communicate meaning.
Ideas and Themes	PO 103 Discuss and explore ideas and themes used to create dances (e.g. literal/abstract, emotions, stories, social themes, nature, text).
Choreographic Processes	PO 104 Identify the choreographic process used to create dances.
Choreographic Forms	PO 105 Identify various choreographic forms (e.g. Narrative, ABA, Suite, Recurring Theme, Abstract, Broken Form, Chance).
Choreographic Principles	PO 106 Identify the choreographic principles used in dance (e.g. contrast, unity, balance).
Technology	PO 107 Discuss and identify the ways to document dance (e.g. photography, video, writing, drawing, and computer programs).
	PO 108 Use technology as a motivator for improvisation or choreography.

Concept 5: Performance Values	
Beginning Objectives	
Focus and Concentration	PO 101 Identify and demonstrate concentration and focus in dance.
Kinesthetic and Spatial Awareness	PO 102 Discuss and explore the concept of personal and general space.
Performance Qualities	PO 103 Identify and perform dance with performance qualities of focus, performance energy and facial expression.

Concept 6: Production Design	
Beginning Objectives	
Production terms, crew, elements	PO 101 Define **production terminology** and appropriate performance etiquette.
Marketing and budget	PO 102 Identify marketing tools and sequence for a dance production.
Technology	PO 103 Identify the ways that technology can be used in production.

ARIZONA ACADEMIC STANDARDS IN THE ARTS
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Strand 2 - Relate

Concept 1: Dance Forms/History Beginning Objectives	
History and Development of Dance Forms	PO 101 Identify the origins of various dance forms and the individuals who helped develop them (e.g. ballet, modern, jazz, tap, hip-hop).
Technique and Theory of Various Dance Forms	PO 102 Identify and discuss the theoretical and technical differences of the various dance forms.
Technology	PO 103 Identify and discuss the ways in which technology is used in dance.

Concept 2: Social and Cultural Influences Beginning Objectives	
Cultural Dances	PO 101 Identify, practice, perform, and respond to dances from a variety of cultures, heritages and environments.
Meaning of Cultural Dances	PO 102 Identify the meaning, purpose and the roles people play in various **social/cultural** and **folk** dances.
Contemporary Cultural Dances	PO 103 Identify current dance styles in society and/or various cultures (see social/cultural dances).

Concept 3: Dance and Literacy Beginning Objectives	
Using text to create movement	PO 101 Use movement to express images, ideas, situations, and feelings from text (e.g. books, poetry, original writing, articles).
Using text to describe and understand movement	PO 102 Use words to express images, ideas and feelings that are danced.

Concept 4: Dance and other disciplines Beginning Objectives	
Using movement with other disciplines	PO 101 Use movement to express ideas, concepts, feelings and images (e.g. numbers, patterns, symbols, sounds, textures, animals) found in other disciplines.
Integrating dance and other art forms	PO 102 Respond to movement through a different art medium (e.g. draw a picture, write a poem, sing a song).
Careers	PO 103 Identify possible career opportunities in dance.

Strand 2 – Relate (continued)

Concept 5: Dance and Music	
Beginning Objectives	
Elements of music	PO 101 Identify and explore (e.g. discussion, body percussion, locomotors, other body movements) the tempo and meter of various music examples.
Rhythmic Patterns/Variations	PO 102 Explore and respond physically to the ways in which movement can be used to mirror and/or contrast sounds, rhythms, and tempos.
Technology	PO 103 Explore the technology available for creating sound for dance.

Strand 3 – Evaluate

Concept 1: Understanding Dance	
Beginning Objectives	
Dance Terminology	PO 101 After observing a brief movement study, use dance terminology to identify the movements and/or the **elements of dance** being used.
Production Elements	PO 102 After observing a dance, identify the production elements being used (e.g. lighting, sound, costumes, props, scenery).
Communicating Meaning	PO 103 Discuss how movement can be used to communicate main ideas, themes or feelings.
Evaluation Criteria	PO 104 Identify the criteria used to evaluate dance performance and technique (e.g. performance values, choreographic principles, elements of movement).
Personal Interpretation	PO 105 Identify your personal reaction to a dance through discussion, writing, movement or art making.
Technology	PO 106 Use technology to identify and discuss technical training and performance aspects in dance.

Concept 2: Professionalism	
Beginning Objectives	
Classroom, rehearsal and performance behaviors	PO 101 Identify and demonstrate appropriate **classroom, rehearsal and performance behaviors** (e.g. be attentive and respond appropriately to vocal, musical or observed cues, be on time, dress appropriately, work cooperatively, be respectful to self and others).
Audience Etiquette	PO 102 Identify and demonstrate appropriate **audience behavior** (e.g. watch attentively, remain quiet, appropriate applause).
Portfolio collection and maintenance	PO 103 At regular intervals, record and discuss movement skills acquired, choreography and performances. Maintain records for future use.

KINDERGARTEN MUSIC

Strand 1: Create

Concept 1:
Singing, alone and with others, music from various genres and diverse cultures.
PO 1. Exhibiting singing and speaking voices.
PO 2. Echoing spoken **rhythmic** patterns.
PO 3. Singing music from memory.

Concept 2:
Playing instruments, alone and with others, music from various genres and diverse cultures.
PO 1. Maintaining a steady **beat**.
PO 3. Echoing rhythm patterns.

Concept 3:
Improvising rhythms, melodies, variations, and accompaniments
(Teachers and students may choose from a variety of sound sources e.g., body percussion, found objects, non-pitched instruments, pitched instruments, computer generated sound sources.)
PO 1.   **Improvising** an answer to a teacher-performed statement (to a steady **beat**)

Concept 4:
Composing and arranging music.
No objectives for Kindergarten.

Concept 5:
Reading and notating music.
PO 2. Distinguishing melodic shape.
PO 4. Recognizing non-standard musical notation

Strand 2: Relate

Concept 1:
Understanding the relationships among music, the arts, and other disciplines outside the arts.
PO 1. Exploring the relationship between music and dance by responding to sounds through movement.
PO 4. Exploring and analyzing the relationship of music to language arts, visual arts, literature

Concept 2:
Understanding music in relation to history and culture.
PO 1. Discovering various uses of music in daily experiences (e.g., songs of celebration, seasons).

Concept 3:
Understanding music in relation to self and universal themes.
PO 1. Describing what a piece of music makes them think of or about.
PO 2. Describing why they like their favorite piece of music.

Strand 3: Evaluate

Concept 1:
Listening to, analyzing, and describing music.
PO 1. Identifying singing/speaking voice.
PO 2. Naming classroom instruments.
PO 4. Identifying music as fast or slow (**tempo**) and as loud or soft (**dynamics**), high or low (**pitch**).
PO 3. Identifying sounds as high and low.

Concept 2:
Evaluating music and music performances.
PO 1. Expressing personal reactions to a music performance through drawings (I like it because…).
PO 2. Listening attentively while others perform and showing appropriate audience behavior for the context and style of the music performed.

BEGINNING THEATRE

Strand 1 - Create

Concept 1: Collaboration
Beginning Objectives
PO 101. Demonstrate respect for others' opinions by respectfully listening while ideas are articulated.
PO 102. Cooperate in the dramatic process.
PO 103. Demonstrate the ability to collaborate while coming to consensus in the dramatic process.
PO 104. Follow established theatre safety rules.

Concept 2: Acting
Beginning Objectives
PO 101. Imagine and describe **characters**, their relationships, what they want and why (e.g., through variations of **movement** and **gesture**, vocal **pitch**, **volume**, and **tempo**).
PO 102. Sustain a **scene** using appropriate language or **movement** with the teacher **role-**playing or giving clues (e.g., from literature or students' personal experiences).
PO 104. Describe or illustrate recalled sensory experiences.
PO 105. Work cooperatively and follow established safety rules.

Concept 3: Theatre Technology and Design
Beginning Objectives
PO 101. Describe and/or document the **setting**/**environment** of a story to be dramatized (e.g., through words, drawings, technical elements).
PO 102. Establish a playing **space** and an **audience space**.
PO 103. Illustrate the use of line, shape, texture, color, **space**, and **balance** to represent the **environment** of a story.
PO 104. Select/document/arrange materials (e.g., **props**, furniture, **costumes**, **sound**) to create the **setting**/**environment** of the story to be dramatized.
PO 108. Use available art materials, tools, and resources to convey the characters through costumes, accessories, and make-up designs for a scene or production.

Concept 4: Playwriting
Beginning Objectives
PO 101. Identify various sources (e.g., books, family stories, nature, imagination, paintings, poetry) for theatrical work.
PO 102. Retell a story including its **theme**, **setting**, storyline, **plot**, physical descriptions of the **characters**, and **theme**.
PO 103. Improvise by imitating life experiences, knowledge of literature, social issues, and/or historical situations, and create imaginary **scenes** that include **characters**, **setting**, and storyline.
PO 104. Create original, brief stories through **improvisation** that include a storyline and **characters**.
PO 105. Describe or illustrate recalled sensory experiences to create **characters** and **plot**.

Strand 1 – Create (continued)

Concept 5: Directing
Beginning Objectives
PO 101. Lead peers in **warm-ups** and theatre games.
PO 102. Demonstrate leadership skills in small group work.
PO 103. Lead small groups in planning a **scene** and rehearsing the **scene** for in-class **performance**.
PO 106. Conduct exercises for actors in sensory recall.
PO 107. Develop an understanding and discuss the role of the director in the production process.

Strand 2 – Relate

Concept 1: Collaboration
Beginning Objectives
PO 101. Describe, illustrate and/or implement how the use of collaboration affects daily life and different **environments**.

Concept 2: Acting
Beginning Objectives
PO 101. Describe how the **characters** in a situation might be similar to or different from a real life experience.
PO 102. Describe how place and time affect **characters** and story in class **improvisations**, **scripts**, and productions of theatre and/or other media.
PO 103. Identify current and historical periods and cultures (e.g., western/eastern traditions) in dramatic **scenes**, **scripts**, and informal and **formal productions**.
PO 104. Demonstrate how interrelated conditions (time, place, other **characters**, and the situation) influence the **characters** and stories in **informal productions** of theatre, film/video, and **electronic media**.
PO 105. Infer a character's motivations and emotions and predict future action.

Concept 3: Theatre Technology and Design
Beginning Objectives
PO 101. Compare and contrast the historic setting, culture, and geography of a story, and how they influence and affect the visual/aural representation of it in a classroom, on **stage**, or in media.
PO 102. Identify and explain the historical and cultural influences on the visual/aural elements from a variety of works (e.g., fairy tales, books, **plays**) for dramatizations.

Strand 2 – Relate (continued)

Concept 4: Playwriting Beginning Objectives
PO 101. Read and analyze stories and short **plays** from a variety of cultures and historical periods to identify their essential playwriting elements (e.g., storyline, **conflict**, **characters**, **theme**).
PO 102. Determine how place, time, and social and cultural conditions affect **characters** and the storyline in class **improvisations**, **scripts**, and productions of theatre and/or other media.
PO 103. Describe how a **character**'s **motivation** and emotions can predict future **action** or the resolution to a **conflict** in the story.
PO 104. Discuss story **themes**, **plot**, **characters**, **dialogue**, and **actions** and how they compare/contrast to real life situations.
PO 105. Identify current and historical periods and cultures (e.g. western/eastern traditions) in dramatic scenes, scripts, and informal and formal productions.
PO 106. Describe how place and time affect characters and story in class improvisations, scripts, and productions of theatre and/or other media.

Concept 5: Directing Beginning Objectives
PO 101. Identify and explain the influence of time and place (history and **environment**) on the **characters** and the story to be dramatized.
PO 102. Use a variety of sources (e.g., pictures, music, poetry, **texts**, library, artifacts) to research the **characters**, story, and **environment** for a dramatization.
PO 103. Evaluate research materials for appropriateness and usefulness to support **character**, story development, and **design**.
PO 104. Identify and explain the roles of the different artists in theatre (actor, **designer**/technician, playwright, director).
PO 105. Identify current and historical periods and cultures (e.g., western/eastern traditions) in dramatic scenes, scripts, and informal and formal productions.

Strand 3: Evaluate

Concept 1: Collaboration
Beginning Objectives

PO 101. Describe the ways in which the group participated in the collaborative process.

Concept 2: Acting
Beginning Objectives

PO 101. Demonstrate respectful **audience** behavior.

PO 102. Describe the believable **actions** and **dialogue** of improvised **characters** in classroom **scenes**.

PO 103. Identify and describe the **characters**, **environment**, and story elements in a variety of written and performed **events**.

PO 104. Justify the perception of a **performance** and critique its production elements.

PO 105. Evaluate and justify, with examples, the meanings constructed from a dramatic text or performance relating to daily life.

Concept 3: Theatre Technology and Design
Beginning Objectives

PO 101. Evaluate the playing **space** and **setting** used for a variety of dramatic works, classroom **scenes**, and informal or **formal productions**.

PO 103. Evaluate how line, shape, texture, color, **space**, **balance**, and/or pattern help illustrate the **environment** of a story.

PO 104. Evaluate the **environment**, **setting**, **lights**, **sound**, **costumes** and **props** in a variety of performed dramatic works to determine the mood and meaning of the story.

PO 105. Evaluate the **environment** for safety issues that may effect the production.

Concept 4: Playwriting
Beginning Objectives

PO 101. Recall and evaluate the storyline of a class **improvisation** or **performance**.

PO 102. Recall and evaluate the **character**'s **actions** in a class **improvisation** or **performance**.

PO 103. Describe how **plot**, **character**, and **environment** in **plays**, film/video, and **electronic media** are related to personal life.

PO 104. Identify by **genre** a dramatic concept, **script**, classroom, or **formal production**.

PO 105. Identify and describe the characters, environment, and story elements in a variety of written and performed events.

Concept 5: Directing
Beginning Objectives

PO 101. Explain and justify the basic elements of a dramatic **text** (e.g., problem/solution, beginning, middle and end, **characters**, and **environment**) and **performance** essentials (e.g., visibility and audibility of actors, appropriateness of **setting**).

PO 102. Explain and justify personal preferences for specific elements and/or moments in dramatizations.

PO 103. Identify and describe the **characters**, **environment**, and story elements in a variety of written and performed **events**.

BEGINNING VISUAL ARTS: Early Elementary Grades

Strand 1: Create

Concept 1:
Creative Process - The student will develop, revise, and reflect on ideas for expression in his or her own artwork.
Beginning Objectives for Early Elementary Grades

PO 001. Contribute to a discussion about ideas for his or her own artwork .

Concept 2:
Materials, Tools, and Techniques • The student will use materials, tools, and techniques in his or her own artwork.
Beginning Objectives for Early Elementary Grades

PO 001.   Identify and experiment with materials, tools, and techniques in his or her own artwork .

PO 002. Use materials, tools, and techniques appropriately in his or her own artwork .

Concept 3:
Elements and Principles • The student will use elements of art and principles of design in his or her own artwork.
Beginning Objectives for Early Elementary Grades

PO 001. Identify and use **elements** in his or her own artwork.

Concept 4:
Meanings or Purposes • The student will express ideas to communicate meanings or purposes in artwork.
Beginning Objectives for Early Elementary Grades

PO 001. Describe and explain his or her own artwork .

Concept 5:
Quality - The student will apply criteria to assess the quality of in-progress and finished artwork.
Beginning Objectives for Early Elementary Grades

PO 001. Identify successful aspects of his or her own artwork and possible revisions.

Strand 2 – Relate

Concept 1:
Artworlds - The student will describe the role that art plays in culture and how it reflects, records, and interacts with history in various times, places, and traditions.
Beginning Objectives for Early Elementary Grades

PO 001. Contribute to a discussion about who artists are, what they do, and why they create art.

PO 002. Discuss how an artwork is used to communicate stories, ideas, and emotions.

Concept 2:
Materials, Tools, and Techniques - The student will identify/analyze the use of materials, tools, and techniques in artwork.
Beginning Objectives for Early Elementary Grades

PO 001. Identify the relationship between tools, materials, and/or techniques.

Concept 3:
Elements and Principles - The student will explore the artistic traditions and visual conventions from diverse cultures, which often differ from the elements and principles traditionally used in many Western cultures.
Beginning Objectives for Early Elementary Grades

PO 001. Identify visual/tactile characteristics of artworks from a diverse culture, different place, or time.

Concept 4:
Meanings or Purposes – The student will interpret meanings or purposes of artwork based on contextual information.
Beginning Objectives for Early Elementary Grades

PO 001. Interpret meanings and/or purposes of an artwork using subject matter and **symbols**.

Concept 5:
Quality - The student will investigate and /or speculate about what characteristics in artworks are valued by various cultures.
Beginning Objectives for Early Elementary Grades

PO 001. Contribute to a discussion about why artworks have been valued within the context of the culture in which they were made.

PO 002. Demonstrate respect while responding to others' artwork.

ARIZONA ACADEMIC STANDARDS IN THE ARTS
ARTICULATED FOR KINDERGARTEN

Strand 3 – Evaluate

Concept 1:
Art Issues and Values   - The student will justify general conclusions about the nature and value of art.
Beginning Objectives for Early Elementary Grades
PO 001. Form and support opinions about art (e.g., what art is and why it is important).
PO 002. Distinguish art from other objects.
PO 003.   Discuss reasons why people value art (e.g., sentimental, financial, religious, political, and historical).

Concept 2:
Materials, Tools, and Techniques - The student will reflect on, and determine how materials, tools, and techniques affect meanings, purposes, and value in artworks.
Beginning Objectives for Early Elementary Grades
PO 001. Describe the visual effects created by an artist's use of tools, materials, and techniques in an artwork.

Concept 3:
Elements and Principles - The student will judge the effectiveness of the artist's use of elements of art and principles of design in communicating meanings and/or purposes, in artworks.
Beginning Objectives for Early Elementary Grades
PO 001. Identify an element in an artwork that supports its meaning and/or purpose.

Concept 4:
Meanings or Purposes - The student will judge an artist's success in communicating meaning or purpose in their artwork.
Beginning Objectives for Early Elementary Grades
PO 001. Discuss how an artist communicates meaning and/or purpose in an artwork.

Concept 5:
Quality - The student will apply criteria for judging the quality of specific artwork.
Beginning Objectives for Early Elementary Grades
PO 001. Compare an original artwork with a reproduction (e.g., make a museum/artist's studio visit to compare details, size, luminosity, three dimensionality, surface texture).

Comprehensive Health Education/ Physical Activity Standards 1997

Readiness (Kindergarten)

Comprehensive Health Rationale

Parents and Guardians

It is understood that parents and guardians are the primary educators in their children's health; therefore, it is important to include the applicable statutes and state Board of Education rule in the comprehensive health education standards. Parents and guardians must be provided opportunities to preview school district policies, curriculum and take-home materials.

The ultimate goal of comprehensive health education is to help young people in Arizona achieve their fullest potential by attaining their highest level of health and wellness as students and adults. Basic to health education is the knowledge about the importance of the interrelationships of physical, behavioral, and social well-being and the prevention of diseases and other health problems. Students should learn to accept responsibility for personal health decisions and practices, work with others to maintain a healthy environment, as well as become informed consumers.

Rationale for Standard 1: Students comprehend concepts related to health promotion and disease prevention.

Comprehension of health promotion strategies and disease prevention concepts enables students to become health literate, self-directed learners, which establishes a foundation for leading healthy and productive lives.

Rationale for Standard 2: Students demonstrate the ability to access accurate health information.

Accessing valid health information and health promoting products and services is important in the prevention, early detection and treatment of most health problems. Applying skills of information analysis, organization, comparison, synthesis and evaluation to health issues provides a foundation for individuals to move toward becoming health literate and responsible, productive citizens.

Rationale for Standard 3: Students demonstrate the ability to practice health-enhancing behaviors and reduce health risks.

Research confirms that many diseases and injuries can be prevented by reducing harmful and risk-taking behaviors. Accepting responsibility and practicing health-enhancing behaviors can contribute to a positive quality of life.

Rationale for Standard 4: Students analyze the influence of culture, media, technology and other factors on health.

Health is influenced by a variety of factors that coexist within society. The ability to analyze, evaluate and interpret the influence of culture, media and technology on health

is important in a rapidly changing world. The health literate, responsible and productive citizen draws upon the contributions of these factors to strengthen individual, family and community health.

Rationale for Standard 5: Students demonstrate the ability to use interpersonal skills to enhance health.

Personal, family and community health are enhanced through effective communication. The ability to organize and to convey information, beliefs, opinions, and feelings (both verbal and nonverbal) are skills that strengthen interactions and can reduce or avoid conflict. When communicating, individuals who are health literate demonstrate care, consideration, and respect for self and others.

Rationale for Standard 6: Students demonstrate the ability to use goal setting and decision-making skills to enhance health.

Decision-making and goal setting are essential lifelong skills needed to implement and sustain health-enhancing behaviors. These skills make it possible for individuals to transfer health knowledge into healthy lifestyles, thus improving the quality of life.

Rationale for Standard 7: Students demonstrate the ability to advocate for personal, family and community health.

Quality of life is dependent on an environment that protects and promotes the health of individuals, families and communities. Responsible citizens who are health literate communicate and advocate for positive health in their communities.

§ 15-102. Parental involvement in the school; definition
A. The governing board, in consultation with parents, teachers and administrators, shall develop and adopt a policy to promote the involvement of parents and guardians of children enrolled in the schools within the school district, including:
  1. A plan for parent participation in the schools which is designed to improve parent and teacher cooperation in such areas as homework, attendance and discipline.
  2. Procedures by which parents may learn about the course of study for their children and review learning materials.
  3. Procedures by which parents who object to any learning material or activity on the basis that it is harmful may withdraw their children from the activity or from the class or program in which the material is used. Objection to a learning material or activity on the basis that it is harmful includes objection to a material or activity because it questions beliefs or practices in sex, morality or religion.
B. The policy adopted by the governing board pursuant to this section may also include the following components:
  1. A plan by which parents will be made aware of the district's parental involvement policy and the provisions of this section, including:
  (a) Rights under the family educational rights and privacy act of 1974 relating to access to children's official records.
  (b) The parent's right to inspect the school district policies and curriculum.

2. Efforts to encourage the development of parenting skills.
3. The communication to parents of techniques designed to assist the child's learning experience in the home.
4. Efforts to encourage access to community and support services for children and families.
5. The promotion of communication between the school and parents concerning school programs and the academic progress of the parents' children.
6. Identifying opportunities for parents to participate in and support classroom instruction at the school.
7. Efforts to, with appropriate training, support parents as shared decision makers and to encourage membership on school councils.
8. The recognition of the diversity of parents and the development of guidelines that promote widespread parental participation and involvement in the school at various levels.
9. The development of preparation programs and specialized courses for certificated employees and administrators that promote parental involvement.
10. The development of strategies and programmatic structures at schools to encourage and enable parents to participate actively in their children's education.

C. For the purposes of this section, "parent" means the parent or person who has custody of the child.

R7-2-303. Sex Education

A. Instruction in sex education in the public schools of Arizona shall be offered only in conformity with the following requirements.
1. Common schools: Nature of instruction; approval; format.
   a. Supplemental/elective nature of instruction. The common schools of Arizona may provide a specific elective lesson or lessons concerning sex education as a supplement to the health course study.
   i. This supplement may only be taken by the student at the written request of the student's parent or guardian.
   ii. Alternative elective lessons from the state-adopted optional subjects shall be provided for students who do not enroll in elective sex education.
   iii. Elective sex education lessons shall not exceed the equivalent of one class period per day for one-eighth of the school year for grades K-4.
   iv. Elective sex education lessons shall not exceed the equivalent of one class period per day for one-quarter of the school year for grades 5-8.
   b. Local governing board approval. All elective sex education lessons to be offered shall first be approved by the local governing board.
   i. Each local governing board contemplating the offering of elective sex education shall establish an advisory committee with membership representative of district size and the racial and ethnic composition of the community to assist in the development of lessons and advise the local governing board on an ongoing basis.
   ii. The local governing board shall review the total instruction materials for lessons presented for approval.
   iii. The local governing board shall publicize and hold at least two public hearings for the purpose of receiving public input at least one week prior to

the local governing board meeting at which the elective sex education lessons will be considered for approval.

    iv. The local governing board shall maintain for viewing by the public the total instructional materials to be used in approved elective sex education lessons within the district.

  c. Format of instruction.

    i. Lessons shall be taught to boys and girls separately.

    ii. Lessons shall be ungraded, require no homework, and any evaluation administered for the purpose of self-analysis shall not be retained or recorded by the school or the teacher in any form.

    iii. Lessons shall not include tests, psychological inventories, surveys, or examinations containing any questions about the student's or his parents' personal beliefs or practices in sex, family life, morality, values or religion.

2. High Schools: Course offering; approval; format.
   a. A course in sex education may be provided in the high schools of Arizona.
   b. The local governing board shall review the total instructional materials and approve all lessons in the course of study to be offered in sex education.
   c. Lessons shall not include tests, psychological inventories, surveys, or examinations containing any questions about the student's or his parents' personal beliefs or practices in sex, family life, morality, values or religion.
   d. Local governing boards shall maintain for viewing by the public the total instructional materials to be used in all sex education courses to be offered in high schools within the district.

3. Content of instruction: Common schools and high schools.
   a. All sex education materials and instruction shall be age appropriate, recognize the needs of exceptional students, meet the needs of the district, recognize local community standards and sensitivities, shall not include the teaching of abnormal, deviate, or unusual sexual acts and practices, and shall include the following:

   i. Emphasis upon the power of individuals to control their own personal behavior. Pupils shall be encouraged to base their actions on reasoning, self-discipline, sense of responsibility, self-control and ethical considerations such as respect for self and others; and

   ii. Instruction on how to say "no" to unwanted sexual advances and to resist negative peer pressure. Pupils shall be taught that it is wrong to take advantage of, or to exploit, another person.

   b. All sex education materials and instruction which discuss sexual intercourse shall:

   i. Stress that pupils should abstain from sexual intercourse until they are mature adults;

   ii. Emphasize that abstinence from sexual intercourse is the only method for avoiding pregnancy that is 100 percent effective;

   iii. Stress that sexually transmitted diseases have severe consequences and constitute a serious and widespread public health problem;

     iv. Include a discussion of the possible emotional and psychological consequences of preadolescent and adolescent sexual intercourse and the consequences of preadolescent and adolescent pregnancy;

     v. Promote honor and respect for monogamous heterosexual marriage; and

     vi. Advise pupils of Arizona law pertaining to the financial responsibilities of parenting, and legal liabilities related to sexual intercourse with a minor.

B. Certification of compliance. All districts offering a local governing board-approved sex education course of lesson shall certify, under the notarized signature of both the president of the local governing board and the chief administrator of the school district, compliance with this rule except as specified in paragraph (C). Acknowledgment of receipt of the compliance certification from the state Board of Education is required as a prerequisite to the initiation of instruction. Certification of compliance shall be in a format and with such particulars as shall be specified by the Department of Education.

C. All districts offering state Board approved sex education lessons or courses prior to the effective date of this rule shall comply with this rule on or before June 30, 1990.

§ 15-716. Instruction on acquired immune deficiency syndrome; department assistance

A. Each common, high and unified school district may provide instruction to kindergarten programs through the twelfth grade on acquired immune deficiency syndrome and the human immunodeficiency virus.

B. Each district is free to develop its own course of study for each grade. At a minimum, instruction shall:
   1. Be appropriate to the grade level in which it is offered.
   2. Be medically accurate.
   3. Promote abstinence.
   4. Discourage drug abuse.
   5. Dispel myths regarding transmission of the human immunodeficiency virus.

C. No district shall include in its course of study instruction which:
   1. Promotes a homosexual life-style.
   2. Portrays homosexuality as a positive alternative life-style.
   3. Suggests that some methods of sex are safe methods of homosexual sex.

D. At the request of a school district, the department of health services or the department of education shall review instruction materials to determine their medical accuracy.

E. At the request of a school district, the department of education shall provide the following assistance:
   1. A suggested course of study.
   2. Teacher training
   3. A list of available films and other teaching aids.

F. At the request of a parent, a pupil shall be excused from instruction on the acquired immune deficiency syndrome and the human immunodeficiency virus as provided in subsection A of this section. The school district shall notify all parents of their ability to withdraw their child from the instruction.

ADDENDUM
A Brief Description of Ten Major Content Areas in
Comprehensive School Health Education

1. **Community Health** includes topics such as individual responsibility; healthful school, home and community environments; community health resources and facilities; official and nonofficial health agencies; health service careers; pollution control; community involvement; current issues; and trends in medical care.

2. **Consumer Health** addresses health care resources i.e., knowing what is available and how to be an educated consumer.

3. **Environmental Health** addresses individual and community responsibility, pollution, effects of environment on health, environmental protection agencies, population density, world health, waste disposal, sanitation, laws and career choices.

4. **Family Life Education** covers information about family dynamics, building relationships, child abuse, choices about relationships, family planning, parenting skills, sex education, and sexually transmitted diseases such as HIV infection and AIDS.

5. **Injury Prevention and Safety** includes learning about first aid and emergency health care and addresses the prevention of unintentional injuries. (Many schools include violence prevention and homicide as health issues within this content area.)

6. **Mental and Emotional Health** includes building self-esteem, effectively coping with stress, and communication skills, among others.

7. **Nutrition** addresses a balanced diet, food preparation, reading and understanding food labels, differences in nutritional needs for pregnant women, and more.

8. **Personal Health** includes physical fitness and lifetime activities, cardiovascular health, sleep, rest, relaxation, recreation, growth and development, oral health, vision and hearing, body systems and their functions, aging, personal wellness plans, and positive health habits and choices.

9. **Prevention and Control of Disease** addresses heart disease, stroke, diabetes, cancer, HIV/AIDS and others.

10. **Substance Use and Abuse** refers to the use and misuse of tobacco, alcohol, and other drugs and often includes topics such as positive decision-making, individual responsibility, substances beneficial to humankind, the classification of substances and their effects on the body, and the formation of habits and their influence.

The ten major content areas in this addendum are provided to assist local school districts in developing sequential curricula. It will be left to the discretion of the local district to determine the emphasis of each of the content areas. The Comprehensive Health Education and Physical Activity Standards are the required competency indicators, while the addendum is a tool to be used by school districts as a cross-reference.

COMPREHENSIVE HEALTH STANDARDS
READINESS (KINDERGARTEN)

STANDARD 1

Students comprehend concepts related to health promotion and disease prevention.

- **1CH-R1. Identify personal well-being health behaviors**

   PO 1. Name healthy behaviors that relate to:
   - a) personal hygiene (tooth brushing, flossing, hand washing, grooming, etc.)
   - b) nutrition (eating a variety of foods, trying new foods, eating at least five fruits and vegetables per day)
   - c) physical activity (participating in some form of physical activity every day)

   PO 2. Demonstrate healthy behaviors that relate to:
   - a) personal hygiene (tooth brushing, flossing, hand washing, grooming, etc.)
   - b) nutrition (eating a variety of foods, trying new foods, eating at least five fruits and vegetables per day)
   - c) physical activity (participating in some form of physical activity every day)

- **1CH-R2. Identify basic emotions (e.g., love, fear, anger) that affect physical health**

   PO 1. Recognize different feelings (emotions) (e.g., mad, sad, happy, frustration, fear, pride)

   PO 2. Describe, through pictures, a variety of emotions experienced daily

- **1CH-R3. Identify basic anatomy (e.g., legs, arms, hands, feet)**

   PO 1. Name body parts by teacher illustration

   PO 2. Locate at least five out of seven body parts illustrated

- **1CH-R4. Describe how the family influences personal health**

   PO 1. Describe healthy family activities (e.g., preparing meals, doctor visits)

   PO 2. Describe how families share time together

- **1CH-R5. Identify elements of the environment (air, water, ground and pollutants) that affect personal health**

   PO 1. Identify different types of pollution

   PO 2. Describe something in the air, water, and ground that affect personal health

COMPREHENSIVE HEALTH STANDARDS
READINESS (KINDERGARTEN)

- **1CH-R6. Identify basic symptoms of, and prevention strategies for, common illnesses and diseases**

    PO 1. List signs and symptoms of common illnesses
    PO 2. Name common communicable diseases

- **1CH-R7. Describe why the body needs nutrients for energy, growth and body maintenance**

    PO 1. Describe why the body needs food
    PO 2. Identify healthy snack choices

- **1CH-R8. Identify safe and healthy eating habits**

    PO 1. Select foods that contribute to good health
    PO 2. State the importance of breakfast
    PO 3. List safe eating habits

STANDARD 2

Students demonstrate the ability to access accurate health information.

- **2CH-R1. Identify resources and health helpers from home and school that provide health and emergency information**

    PO 1. Name who are health helpers
    PO 2. Identify emergency medical service (e.g., dial 911)
    PO 3. Illustrate access to emergency medical service

- **2CH-R2. Demonstrate the ability to locate home and school health helpers**

    PO 1. State your name, physical address and phone number
    PO 2. Describe resources (health helpers) available at home and at school

COMPREHENSIVE HEALTH STANDARDS
READINESS (KINDERGARTEN)

STANDARD 3

Students demonstrate the ability to practice health-enhancing behaviors and reduce health risks.

- **3CH-R1. Identify basic personal health needs and the roles exercise, nutrition, hygiene and relationships play in maintaining them**

  PO 1. Discuss the value of good health habits (e.g., adequate sleep, exercise, nutrition)
  PO 2. Demonstrate universal precautions through examples (e.g., not touching blood/bodily fluids, hand washing)

- **3CH-R2. Identify behaviors that are safe and those that are harmful**

  PO 1. List safe behaviors and harmful behaviors
  PO 2. Name safety rules for walking, riding in a car and on a bike

- **3CH-R3. Identify types of injuries and their causes**

  PO 1. List injuries and causes
  PO 2. Draw a picture of someone injured and show the cause of the injury

- **3CH-R4. Identify stressful situations, feelings and physical responses**

  PO 1. Recognize stressful situations
  PO 2. Recognize feelings and physical responses to stress

STANDARD 4

Students analyze the influence of culture, media, technology and other factors on health.

- **4CH-R1. Identify the different foods of various cultures**

  PO 1. List different foods from various cultures
  PO 2. Use foods from various cultures to make a meal (using the food guide pyramid)

- **4CH-R2. Identify media influences on health behaviors**

  PO 1. List at least two health behaviors that are influenced by the media
  PO 2. List how media influences health behaviors

COMPREHENSIVE HEALTH STANDARDS
READINESS (KINDERGARTEN)

STANDARD 5

Students demonstrate the ability to use interpersonal skills to enhance health.

- **5CH-R1. Identify verbal and nonverbal communication**

  PO 1. Differentiate between nonverbal and verbal communication

- **5CH-R2. Describe characteristics of responsible individuals, friends and family**

  PO 1. List what makes a person responsible
  PO 2. Practice responsible health behavior

- **5CH-R3. Identify a need, want and feeling**

  PO 1. Same as concept

- **5CH-R4. Identify how to communicate care, consideration, and respect of self and others**

  PO 1. Demonstrate (show) how to communicate care, consideration, and respect of self and others

- **5CH-R5. Identify characteristics of attentive listening skills that build and maintain healthy relationships**

  PO 1. List characteristics of attentive listening skills
  PO 2. Illustrate behavior that demonstrates active listening

- **5CH-R6. Identify refusal skills that enhance health**

  PO 1. List refusal skills
  PO 2. Identify when to use refusal skills (when to say "no")

- **5CH-R7. Identify behaviors in conflict situations**

  PO 1. Name behaviors seen in conflicts

- **5CH-R8. Differentiate between negative and positive behaviors used in conflict situations**

  PO 1. Identify negative and positive behaviors in conflict situations

- **5CH-R9. Demonstrate nonviolent strategies to resolve conflict**

  PO 1. Same as concept

COMPREHENSIVE HEALTH STANDARDS
READINESS (KINDERGARTEN)

STANDARD 6

Students demonstrate the ability to use goal setting and decision-making skills to enhance health.

- **6CH-R1. Identify the decision-making process**

    PO 1. List steps in the decision-making process

- **6CH-R2. Set a personal health goal and record progress toward achievement**

    PO 1. List your personal health goals
    PO 2. Record progress toward achievement

STANDARD 7

Students demonstrate the ability to advocate for personal, family and community health.

- **7CH-R1. Identify accurate health information**

    PO 1. Describe accurate health information (hygiene, safety, environmental, disease prevention, nutrition, self-care, conflict resolution)

- **7CH-R2. Identify positive health choices**

    PO 1. List positive health choices

Physical Activity Standards Rationale

A wealth of information has been accumulated to point to the importance of physical activity in promoting health and wellness. Evidence also indicates that habits (lifestyles) established in youth are likely to influence adult lifestyles and associated health and wellness. Physical activity, a primary risk factor for many chronic health conditions, is an integral part of comprehensive school health education but also must be promoted as an important educational goal. Meeting physical activity standards includes both promotion of physical activity among youth and promotion of lifelong physical activity that will enhance workplace skills, fitness and wellness associated with quality of life. Achieving lifetime physical activity standards results in learning real life skills. Higher order skills include decision-making and problem solving required to become informed, lifetime physical activity consumers.

Rationale for Standard 1: Students demonstrate proficiency and the achievement of higher order cognitive skills necessary to enhance motor skills.

Movement competence implies the development of sufficient ability to enjoy participation in physical activities and re-establish a foundation to facilitate continued motor skill acquisition and increased ability to engage in developmentally appropriate daily physical activities. In addition to achieving competence in a few movement forms, which increases the likelihood of lifetime activity participation, the students apply concepts from exercise science disciplines that will help them achieve independence in developing movement competence in new movement forms. The focus is on movement forms appropriate for lifetime activity involvement and the establishment of personal competence.

Rationale for Standard 2: Students comprehend basic physical activity principles and concepts that enable them to make decisions, solve problems and become self-directed lifelong learners who are informed physical activity consumers.

Accessing accurate physical activity information, products and services is important to become informed, responsible physical activity consumers.

Rationale for Standard 3: Students exhibit a physically active lifestyle.

The intent of this standard is to establish patterns of regular participation in meaningful physical activity. This standard connects what is taught in school with students' choices for physical activity outside of school. Students are more likely to participate in physical activities if they have had opportunities to develop interests that are personally meaningful to them.

Rationale for Standard 4: Students achieve and maintain a health-enhancing level of physical fitness.

The intent of this standard is for the student to achieve a health-enhancing level of physical fitness. Students should be encouraged to develop personal fitness levels above those necessary for health-enhancement, based on unique personal needs and interests and necessary for many work situations and active leisure participation. Health-related fitness components include cardio-respiratory endurance, muscular strength and endurance, flexibility, and body composition. Expectations for students' fitness levels should be established on a personal basis, taking into account variation in entry levels, rather than setting a single standard for all children at a given grade level.

Rationale for Standard 5: Students develop self-initiated behaviors that promote effective personal and social interactions in physical activity settings.

The intent of this standard is achievement of self-initiated behaviors that promote personal and group success in activity settings. Behaviors such as safe practices, adherence to rules and procedures, etiquette, cooperation and teamwork, ethical behavior in sports, and positive social interaction are necessary for all students to develop effective communication skills.

Rationale for Standard 6: Students demonstrate understanding and respect for differences among people in physical activity settings.

The intent of this standard is to develop respect for similarities and differences through positive interaction among participants in physical activity. Similarities and differences include characteristics of culture, ethnicity, motor performance, disabilities, physical characteristics (e.g., strength, size, shape), gender, race and socioeconomic status.

Rationale for Standard 7: Students develop behavioral skills (self-management skills) essential to maintaining a physically active lifestyle.

The intent of this standard is for students to develop an awareness of the intrinsic benefits of participation in lifelong physical activity. Physical activity can provide opportunities for enjoyment, physical fitness and personal challenge.

PHYSICAL ACTIVITY STANDARDS
READINESS (KINDERGARTEN)

STANDARD 1

Students demonstrate proficiency and the achievement of higher order cognitive skills necessary to enhance motor skills.

- **1PA-R1. Demonstrate progress toward the mature form of selected manipulative, locomotor and nonlocomotor skills**

    PO 1. Demonstrate a variety of manipulative skills (e.g., strike, throw, dribble, kick, roll, catch, trap, punt and volley)
    PO 2. Demonstrate locomotor skills (e.g., walk, run, hop, jump, skip, slide, gallop and leap)
    PO 3. Demonstrate a variety of nonlocomotor skills (e.g., bend, turn, twist, balance, stretch, push, pull, rock and sway)

- **1PA-R2. Demonstrate mature form in walking and running**

    PO 1. Same as concept

- **1PA-R3. Identify fundamental movement patterns (e.g., skip, strike)**

    PO 1. Recognize movement patterns of manipulative, locomotor, and nonlocomotor skills

- **1PA-R4. Identify a beginning movement vocabulary (e.g., personal space, high/low levels, fast/slow speeds, light/heavy weights, balance, twist)**

    PO 1. Demonstrate an understanding of movement concepts in physical activity (space awareness, body awareness, qualities of movement, and relationships)

- **1PA-R5. Describe appropriate concepts to performance (e.g., change direction while running)**

    PO 1. Perform movement concepts in physical activity
    a)   *space awareness*: personal space, direction, level, pathways, planes
    b*) body awareness:* shapes, balance, body weight transfer, flight
    c*) qualities of movement:* time, speed, force, flow
    d) *relationships:* among body parts, objects and people with people

PHYSICAL ACTIVITY STANDARDS
READINESS (KINDERGARTEN)

STANDARD 2

Students comprehend basic physical activity principles and concepts that enable them to make decisions, solve problems and to become self-directed lifelong learners who are informed physical activity consumers.

- **2PA-R1. Identify that physical activity is necessary to build good physical fitness**

    PO 1. Explain that physical fitness is the ability to work and play with energy to spare
    PO 2. Identify feelings that result from participation in fitness activities

- **2PA-R2. Identify that there are different parts of physical fitness**

    PO 1. Explain that warm-up activity and cool-down are essential parts of a fitness activity

- **2PA-R3. Identify the different parts of physical fitness**

    PO 1. Demonstrate aerobic, muscular strength, muscular endurance and flexibility activities

STANDARD 3

Students exhibit a physically active lifestyle.

- **3PA-R1. Engage in moderate to vigorous physical activity**

    PO 1. Participate regularly in moderate to vigorous physical activity
    PO 2. Participate in gross motor activity of a moderate to vigorous nature

- **3PA-R2. Select and participate in activities that require some physical exertion during personal choice times**

    PO 1. Explain how some physical exertion is good for personal well-being
    PO 2. Participate in a wide variety of activities outside of physical education class

- **3PA-R3. Identify likes and dislikes connected with participation in physical activity**

    PO 1. Explain how exercise is good for one's health

PHYSICAL ACTIVITY STANDARDS
READINESS (KINDERGARTEN)

STANDARD 4

Students achieve and maintain a health-enhancing level of physical fitness.

- **4PA-R1. Sustain moderate to vigorous physical activity for short periods of time**

    PO 1. Same as concept

- **4PA-R2. Identify the physiological signs (e.g., fast heart rate, increased breathing) of moderate physical activity**

    PO 1. Recognize that moderate physical activity increases heart rate and breathing rate

STANDARD 5

Students develop self-initiated behaviors that promote effective personal and social interactions in physical activity settings.

Students know and are able to do the following:

- **5PA-R1. Apply, with teacher reinforcement, classroom rules and procedures and safe practices**

    PO 1. Follow identified rules and procedures
    PO 2. Work in a group setting without interfering with others
    PO 3. Handle and care for equipment safely and responsibly

- **5PA-R2. Share space and equipment with others**

    PO 1. Take turns using a piece of equipment
    PO 2. Participate in physical activity, respecting others' personal space

STANDARD 6

Students demonstrate understanding and respect for differences among people in physical activity settings.

- **6PA-R1. Interact positively with students in class regardless of personal differences (e.g., race, gender, disability)**

    PO 1. Participate with peers without regard to personal differences (e.g., race, gender, ability)

- **6PA-R2. Demonstrate cooperation with others in group tasks**

    PO 1. Demonstrate willingness to participate in all group activities
    PO 2. Explain how sharing with others can lead to positive feelings (e.g., acceptance, belonging to the group)

PHYSICAL ACTIVITY STANDARDS
READINESS (KINDERGARTEN)

STANDARD 7
Students develop behavioral skills (self-management skills) essential to maintaining a physically active lifestyle.

- **7PA-R1. Engage in physical activities**

    PO 1. Explain that activity is good for one's health
     PO 2. Identify feelings that result from participation in physical activities
      PO 3. Participate in a variety of activities that require varying degrees of physical exertion (e.g., large group games, aerobic activities, fine motor)

- **7PA-R2. Try new movement activities and skills**

    PO 1. Participate in a wide variety of physical activities

Foreign and Native
Language Standards 1997

Readiness (Kindergarten)

Foreign and Native Language* Standards Rationale

Today's students prepare for the tomorrow in which they will need to function in varied contexts. The constant shrinking of the globe will expand their experience beyond that of previous generations to include contacts with other languages and cultures, both in their private lives and in their work. Languages are increasingly demanded in a wide range of professions. To succeed, students will need new tools, many of which are available primarily, if not solely, through the study of other languages. They include:

- ***the ability to communicate well for varied purposes.*** In other languages, as well as in English, effective communication requires an understanding of both the target language and culture under study and one's own, which implies the ability to interact confidently within many arenas, including the workplace and communities where the language is spoken.

- ***a solid foundation in basic subject matter and skills.*** All core subjects must contribute to this end, in an integrated fashion, to aid students in realizing the connections among the parts of their education. Basic subject matter includes the development of verbal reasoning, and listening skills and knowledge of the great achievements of human cultures, e.g., artistic, literary, scientific. The study of another language has been shown to enhance student performance in other academic fields. Learnings from other fields can also be reinforced in the foreign language classroom.

- ***an understanding and appreciation of the diversity of languages and cultures, including one's own.*** These tools aid students to function as responsible, informed, and confident citizens and enhance their personal development. They allow the finding of one's own place in the wider world.

Introduction to the Foreign Language Standards

The foreign language standards state what students need to know about languages and cultures, including their own; what students need to be able to do; and how this knowledge and these abilities relate to the subject matter of other core areas. The standards are stated clearly and in measurable terms:

- what students need to **know** in order to function successfully as they enter a new millennium that promises major changes in communications and contacts with other languages and cultures;

- what students need to be able to **do**. Knowing about a language and its culture(s), while essential, is not sufficient; students will develop skills for functioning effectively in varied contexts; and

- the integration of foreign languages into the rest of the curriculum so that the connections
are clear and so that learning in all areas is facilitated, including the development of a deeper understanding of one's own language and culture. The five strands under which the standards are organized–Communication, Culture, Connections, Comparisons and Communities–are meant to be interwoven among themselves as well, rather than taught as separate entities. Meeting the standards for each one will contribute to reaching the standards of the others.

These standards for foreign language study are highly challenging for all students. They assume an extended sequence of learning throughout the students' school career, thus reflecting the likely nature of schools in the future. Meeting these standards will require the study of grammar–the forms and structures of the language–as well as effective learning strategies. Students will also need to use technologies that will bring the language and the culture to them in new ways and enhance their opportunities to learn.

In these standards we refer to "the target language," which may stand for "world language," "foreign language," "second language," or "heritage language" (i.e., the language that is the predominant language in the home).

Descriptions of Language Abilities for Each Level

Readiness

Students use basic vocabulary related to people, places, things and actions close to their own lives. They express themselves in phrases, short sentences and memorized material. Their language is characterized by an emerging control of the most common basic grammatical forms and structures. Because comprehension of oral and written language normally exceeds production, students are able to comprehend simple descriptions, narratives, and authentic materials such as advertisements, on topics studied in class. Pronunciation and fluency are such that students often might not be understood by native speakers. They are able to write accurately what they can say.

Foundations

Students speak and write extemporaneously using short sentences and sentence strings in present tense on topics within their experience with the language. They can describe, ask and answer questions; engage in simple conversations; and carry out simple realistic functions such as ordering a meal, buying something, or introducing themselves or others to a group. Since their knowledge of the forms and structures of the language has grown rapidly but their practice has been limited, their speech is likely to contain numerous linguistic errors. Students are comprehensible to sympathetic listeners who have experience with non-native speakers of their language. Their written language still mirrors their oral language, although they may be able to express more ideas more accurately in writing, given time to reflect, review and revise.

Essentials

Students speak with somewhat longer utterances and begin to display an ability to connect phrases and sentences to show relations between ideas expressed. Although patterns of errors are still common, students now speak and write extemporaneously in past, present and future time, using vocabulary related to their own lives and interests. Accent and intonation are generally accurate, although pauses and false starts may be common, as students give simple instructions and directions, make comparisons, solve problems together, and engage in conversations on a range of topics including leisure activities, professions and current events. In written work, students' spelling and punctuation are mostly accurate; and they organize their ideas well.

Proficiency

Students use paragraph-length connected discourse to narrate, describe, and discuss ideas and opinions. On topics of interest to them and within their experience, they show few patterns of linguistic errors, they are generally comprehensible to native speakers of the language, and their vocabulary is sufficient to avoid awkward pauses. They are able to circumvent linguistic gaps or lapses by "finding another way to say it." Given time to reflect and revise, they are able to express their ideas completely and interestingly in writing, with generally accurate grammar, vocabulary, spelling, accents and punctuation. They comprehend most authentic expository and fictional material produced for contemporary native speakers.

Distinction

Students show almost no patterns of linguistic errors and are able to carry out almost any task that they can execute in English, albeit with less fluency and control or breadth of vocabulary and grammar. They can argue a point effectively and extemporaneously, explaining their point of view in detail. In writing, their ideas are well organized and clearly, completely, and interestingly presented, with accurate use of the language's writing system. They can comprehend any non-technical material produced for the general public of native speakers in the standard language

FOREIGN AND NATIVE LANGUAGE STANDARDS
READINESS (KINDERGARTEN)

STANDARD 1: COMMUNICATION
Students understand and interpret written and spoken communication on a variety of topics in the target language.

- **1FL-R1. Respond to simple commands**

- **1FL-R2. Read and understand simple words and expressions**

- **1FL-R3. Comprehend short conversations/stories on familiar topics**

- **1FL-R4. Identify people and objects based on oral and written descriptions**

- **1FL-R5. Interpret gestures, intonation and other visual or auditory cues**

- **1FL-R6. Comprehend the main ideas and identify the principal characters of short stories or children's literature**

STANDARD 2: COMMUNICATION
Students engage in oral and written exchanges which include providing and obtaining information, expressing feelings and preferences, and exchanging ideas and opinions in the target language.

- **2FL-R1. Greet people, make small talk and close conversations**

- **2FL-R2. Give and follow simple instructions and ask and answer questions**

- **2FL-R3. Express likes and dislikes**

- **2FL-R4. Describe people, places and things in their daily lives**

- **2FL-R5. Identify occupations in the target language**

FOREIGN AND NATIVE LANGUAGE STANDARDS
READINESS (KINDERGARTEN)

STANDARD 3: COMMUNICATION
Students present information and ideas in the target language on a variety of topics to listeners and readers.

- **3FL-R1. Recite short and simple materials (i.e., stories, songs, poems, advertisements and popular sayings) with appropriate expression**

- **3FL-R2. Write or orally present short messages**

- **3FL-R3. Present descriptions of familiar people, places and things to a group**

- **3FL-R4. Read and recite short poems or stories with appropriate expression**

STANDARD 4: CULTURE
Students know "what to do when" and "what to say while doing it" in the culture and use this knowledge to interact appropriately. They also understand the relationships between cultural perspectives, products and practices within cultures.

- **4FL-R1. Use appropriate gestures and oral expressions for greetings, leave-takings and courtesy phrases**

- **4FL-R2. Participate in age-appropriate cultural activities such as games, songs, celebrations and short dialogues**

- **4FL-R3. Identify and describe a variety of objects from the cultures, e.g., toys, dress, buildings, foods**

- **4FL-R4. Identify parts of the world where the target language is spoken**

STANDARD 5: CONNECTIONS
Students use the target language and authentic sources to reinforce and/or learn other content from the other subject areas.

- **5FL-R1. Explore topics related to other school subjects in the target language including weather terms, math facts, measurements, animals or geographical concepts**

- **5FL-R2. Read or listen to and talk about age-appropriate folk tales, short stories, poems and songs that are written for native speakers**

FOREIGN AND NATIVE LANGUAGE STANDARDS
READINESS (KINDERGARTEN)

STANDARD 6: COMPARISONS
Students develop insights into their own language and their own culture through the study of the target language.

- **6FL-R1. Recognize that words are borrowed from one language by another**

- **6FL-R2. Make basic comparisons between the celebrations of the target culture and their own culture (e.g., Halloween and Dia de los Muertos; Bastille Day and Independence Day)**

- **6FL-R3. Recognize that cultures have artifacts, such as symbols, advertisements and songs, that serve similar purposes**

STANDARD 7: COMMUNITIES
Students use the target language within and beyond the school setting.

- **7FL-R1. Participate in a school or community celebration**

- **7FL-R2. Perform a song or skit in the target language for an audience**

- **7FL-R3. Understand and listen to presentations about occupations and careers**

Reading Standard Articulated by Grade Level 2003

Kindergarten

Reading Standard Articulated by Grade Level

INTRODUCTION

Reading is a complex skill that involves learning language and using it effectively in the active process of constructing meaning embedded in text. It requires students to fluently decode the words on a page, understand the vocabulary of the writer, and use strategies to build comprehension of the text. It is a vital form of communication in the 21st century and a critical skill for students of this "information age" as they learn to synthesize a vast array of texts.

The Reading Standard Articulated by Grade Level will provide a clear delineation of what students need to know and be able to do at each grade level. This allows teachers to better plan instructional goals for students at any grade.

BACKGROUND

The state Board of Education adopted the Arizona Academic Standards in 1996 to define what Arizona's students need to know and be able to do by the end of twelfth grade. Developed by committees comprised of educators, parents, students, and business and community leaders, these standards were written in grade-level clusters with benchmarks at grades 3, 5, 8, and high school.

RATIONALE

Requirements in the *No Child Left Behind Act of 2001* (NCLB) and the standard practice of conducting periodic review of the state academic standards prompted the decision by the Arizona Department of Education to refine and articulate the academic standards for mathematics and reading by grade level. This refinement and articulation project was started in July 2002, and was completed in March 2003.

METHODOLOGY

Work teams for reading consisted of a representative sample of educators from around the state designed to include large and small schools, rural and urban schools, and ethnic diversity. National reading consultants, university professors, and test company consultants advised the teams. The goal was to articulate, or align, the current academic standards by grade level (K-12).

The Reading Articulation Teams utilized information from the National Council of Teachers of English and the findings of the National Reading Panel, which promote quality instruction, based on current, pedagogical, and researched practices.

The articulation process included a restructuring of the Arizona Academic Content Standards to better facilitate the alignment of performance objectives by grade level, while maintaining the content integrity of the existing standards. Over a period of

months, the articulation team and smaller sub-committees of the teams refined the documents. Reasonableness, usefulness, and appropriateness were the guidelines for the articulation process.

External reviews by nationally recognized consultants brought a broad perspective to the articulation process. Internal reviews by university and local experts provided additional validation.

Another important step in the project was the request for public comment. In December 2002, drafts of the Standards Articulated by Grade Level, along with a survey to gather feedback, were posted on the Arizona Department of Education website. This provided the public with easy access to the documents, and the survey allowed reviewers a means for submitting comments. The public and all educators had the opportunity to submit comments and suggestions, either electronically or in writing, until the survey closing date of January 31, 2003. In January, six public hearings were held throughout the state, offering further opportunities for public input.

After all the public comments were collected and organized by topic, the articulated teams met one last time to determine what modifications to the standards documents would be appropriate, based on this information. All public comments were given equal consideration.

The completion of the standards articulation process was followed by the development of rationales, glossaries, and crosswalks. These additional documents were designed to assist educators with the transition from the 1996 standards to the Reading Standard Articulated by Grade Level.

READING STANDARD ARTICULATED BY GRADE LEVEL
KINDERGARTEN

Strand 1: Reading Process

Reading Process consists of the five critical components of reading, which are Phonemic Awareness, Phonics, Fluency, Vocabulary and Comprehension of connected text. These elements support each other and are woven together to build a solid foundation of linguistic understanding for the reader.

Concept 1: Print Concepts
Demonstrate understanding of print concepts.

PO 1. Recognize that print represents spoken language and conveys meaning (e.g., his/her own name, *Exit* and *Danger* signs).

PO 2. Hold a book right side up and turn pages in the correct direction.

PO 3. Start at the top left of the printed page, track words from left to right, using return sweep, and move from the top to the bottom of the page.

PO 4. Identify different parts of a book (e.g., front cover, back cover, title page) and the information they provide.

PO 5. Distinguish between printed letters and words.

PO 6. Recognize that spoken words are represented in written language by specific sequences of letters.

PO 7. Recognize the concept of words by segmenting spoken sentences into individual words.

PO 8. Demonstrate the one-to-one correlation between a spoken word and a printed word.

Concept 2: Phonemic Awareness
Identify and manipulate the sounds of speech.

PO 1. Distinguish spoken rhyming words from non-rhyming words (e.g., run, sun versus run, man).

PO 2. Orally produce rhyming words in response to spoken words (e.g., What rhymes with hat?)

PO 3. Orally produce groups of words that begin with the same initial sound (alliteration).

PO 4. Blend two or three spoken syllables to say words.

PO 5. Blend spoken simple onsets and rimes to form real words (e.g., onset /*c*/ and rime /*at*/ makes cat).

PO 6. Blend spoken phonemes to form a single syllable word (e.g., /*m*/…/*a*/…/*n*/…makes man).

PO 7. Identify the initial and final sounds (not the letter) of a spoken word.

PO 8. Segment one-syllable words into its phonemes, using manipulatives to mark each phoneme (e.g., *dog* makes /d/…/o/…/g/ while the student moves a block or tile for each phoneme).

READING STANDARD ARTICULATED BY GRADE LEVEL
KINDERGARTEN

Concept 3: Phonics
Decode words, using knowledge of phonics, syllabication, and word parts.

PO 1. Identify letters of the alphabet (upper and lower case).

PO 2. Recognize that a new word is created when a specific letter is changed, added, or removed.

PO 3. Say letter sounds represented by the single-lettered consonants and vowels.

Concept 4: Vocabulary
Acquire and use new vocabulary in relevant contexts.

PO 1. Determine what words mean from how they are used in a sentence, heard or read.

PO 2. Sort familiar words into basic categories (e.g., colors, shapes, foods).

PO 3. Describe familiar objects and events in both general and specific language.

Concept 5: Fluency
Read fluently.

(Grades 1-12)

Concept 6: Comprehension Strategies
Employ strategies to comprehend text.

PO 1. Make predictions based on title, cover, illustrations, and text.

PO 2. Derive meaning from books that are highly predictable, use repetitive syntax, and have linguistic redundancy.

READING STANDARD ARTICULATED BY GRADE LEVEL
KINDERGARTEN

Strand 2: Comprehending Literary Text

Comprehending Literary Text identifies the comprehension strategies that are specific in the study of a variety of literature.

Concept 1: Elements of Literature
Identify, analyze, and apply knowledge of the structures and elements of literature.

PO 1. Participate (e.g., react, speculate, join in, read along) when predictably patterned selections of fiction and poetry are read aloud.

PO 2. Identify elements of a story, including characters, setting, and key events.

PO 3. Retell or re-enact a story, placing the events in the correct sequence.

PO 4. Determine whether a literary selection, that is heard, is realistic or fantasy.

Concept 2: Historical and Cultural Aspects of Literature
Recognize and apply knowledge of the historical and cultural aspects of American, British, and world literature.

(Grades 1-12)

READING STANDARD ARTICULATED BY GRADE LEVEL
KINDERGARTEN

Strand 3: Comprehending Informational Text

Comprehending Informational Text delineates specific and unique skills that are required to understand the wide array of informational text that is a part of our day-to-day experiences.

Concept 1: Expository Text
Identify, analyze, and apply knowledge of the purpose, structures, and elements of expository text.

PO 1. Identify the purpose for reading expository text.

PO 2. Restate facts from listening to expository text.

PO 3. Respond appropriately to questions based on facts in expository text, heard or read.

Concept 2: Functional Text
Identify, analyze, and apply knowledge of the purpose, structures, clarity, and relevancy of functional text.

PO 1. Sequentially follow a two or three-step set of directions (e.g., recipes, center directions, classroom procedures, science experiments) using picture clues.

PO 2. Identify signs, symbols, labels, and captions in the environment.

Concept 3: Persuasive Text
Explain basic elements of argument in text and their relationship to the author's purpose and use of persuasive strategies.

(Grades 3-12)

Writing Standard Articulated by Grade Level 2004

Kindergarten

Writing Standard Articulated by Grade Level

INTRODUCTION

The purpose of the Writing Standard Articulated by Grade Level is to equip students with the skills and knowledge needed to participate in society as literate citizens. The ability to communicate effectively in writing will be essential to their success in their communities and careers. Students may realize personal fulfillment and enjoyment as they learn to become proficient writers and continue as writers throughout their lives.

Writing is a complex skill that involves learning language and using it effectively to convey meaning through text. This standard recognizes that students' abilities in writing develop from their earliest stages with phonetic spelling; to limited understanding of a certain genre; to the ability to produce conventional, coherent, unified documents. Their ideas are expressed in various forms, such as notes, lists, letters, journal writing, stories, web postings, instant messaging, essays, and reports. Effective writing may be evaluated by examining the use of ideas, organization, voice, word choice, sentence fluency, and conventions.

The Writing Standard Articulated by Grade Level will provide a clear delineation of what students need to know and be able to do at each grade level. This allows teachers to better plan instructional goals for students at any grade.

BACKGROUND

The state Board of Education adopted the Arizona Academic Standards in 1996 to define what Arizona's students need to know and be able to do by the end of twelfth grade. Developed
by committees comprised of educators, parents, students, and business and community leaders, these standards were written in grade-level clusters with benchmarks at grades 3, 5, 8, and high school.

RATIONALE

Requirements in the No Child Left Behind Act of 2001 (NCLB) and the standard practice of conducting periodic review of the state academic standards prompted the decision by the Arizona Department of Education to refine and articulate the academic standards for mathematics, reading, writing, and science by grade level. This refinement and articulation project was started in December 2003, and was completed in June 2004.

METHODOLOGY

Writing Standard refinement began in January 2004, expanding the standard to include performance objectives for all grade levels, kindergarten through twelfth grade. The writing articulation teams consisted of educators from around the state, representing large and small schools, rural and urban schools, and ethnic diversity. National consultants, university professors, and Arizona Department of Education staff advised the teams. The goal was to articulate and align the current academic standards by grade level (K-12).

The Writing Articulation Committee utilized resources and information from current, effective classroom practices, from other states' standards, and from the National Council of Teachers of English, which promotes quality literacy instruction.

The articulation process included a restructuring of the Arizona Academic Content Writing Standards to better facilitate the alignment of performance objectives by grade level, while maintaining the content integrity.

Over a period of months, the articulation team and smaller subcommittees of the teams refined the documents. Reasonableness, usefulness, and appropriateness were the guidelines for the articulation process.

External reviews by nationally recognized consultants brought a broad perspective to the articulation process. Internal reviews by university and local experts provided additional validation.

Another important step in the project was the request for public comment. In May 2004, a draft of the Writing Standard Articulated by Grade Level, along with a survey to gather feedback, was posted on the Arizona Department of Education website. This provided the public with easy access to the documents, and the survey allowed reviewers a means for submitting comments. The public and all educators had the opportunity to submit comments and suggestions, either electronically or in writing, until the public review closing date of May 27, 2004. In May, three public hearings were held throughout the state, offering further opportunities for public input.

Based on public comment and online survey results, the articulation team met to determine necessary modifications to the standard. All public comments were given equal consideration.

Included in the standard articulation process the development of a rationale, glossary, and a crosswalk (correlation between the 1996 Writing Standard and revised, articulated standard). These additional documents were designed to assist educators with the transition from the 1996 Writing Standards to the 2004 Writing Standard Articulated by Grade Level.

WRITING STANDARD ARTICULATED BY GRADE LEVEL
KINDERGARTEN

Strand 1: Writing Process

Research has established the major steps of the writing process. These steps are identified in the five concepts of this strand, each supported with specific performance objectives. While all steps are needed and used by effective writers as they compose text, different skills may be emphasized in individual assignments. These steps may be used recursively as a piece moves toward completion. Throughout the process, students should reflect on their own writing skills, set goals, and evaluate their own progress.

Concept 1: Prewriting
Prewriting includes using strategies to generate, plan, and organize ideas for specific purposes.

PO 1. Generate ideas through class discussion.

PO 2. Draw a picture about ideas generated through class discussion.

Concept 2: Drafting
Drafting incorporates prewriting activities to create a first draft containing necessary elements for a specific purpose.

PO 1. Communicate by drawing, telling, or writing for a purpose.

PO 2. Create a group draft, scripted by the teacher.

Concept 3: Revising
Revising includes evaluating and refining the rough draft for clarity and effectiveness. (Ask: Does this draft say what you want it to say?)

PO 1. Reread original draft scripted by teacher or individual.

PO 2. Add additional details with prompting.

Concept 4: Editing
Editing includes proofreading and correcting the draft for conventions.

PO 1. Review the draft for errors in conventions, with prompting. (See Strand 2)

Concept 5: Publishing
Publishing includes formatting and presenting a final product for the intended audience.

PO 1. Share a finished piece of writing.

Italics denotes a repetition of a performance objective (learned in an earlier grade) that is to be applied to more complex writing.
The bulleted (lettered) items within a performance objective indicate specific content to be taught.
Words shown in bold print are referenced in the glossary.

WRITING STANDARD ARTICULATED BY GRADE LEVEL
KINDERGARTEN

Strand 2: Writing Elements

Strand 2 focuses on the elements of effective writing. Good writing instruction incorporates multiple performance objectives into an integrated experience of learning for the student. The order of the concepts and performance objectives is not intended to indicate a progression or hierarchy for writing instruction. Instructional activities may focus on just one concept or many.

Concept 1: Ideas and Content
Writing is clear and focused, holding the reader's attention throughout. Main ideas stand out and are developed by strong support and rich details. Purpose is accomplished.

PO 1. Use pictures that convey meaning.

PO 2. Use pictures with **imitative text**, letters, or recognizable words to convey meaning.

PO 3. Use labels, captions, or picture descriptors to expand meaning.

Concept 2: Organization
Organization addresses the structure of the writing and integrates the central meaning and patterns that hold the piece together.

PO 1. Show a clear sense of coordination between text and pictures (e.g., A reader can readily see that they go together.)

PO 2. Consistently write left to right and top to bottom.

PO 3. Space appropriately between words with some degree of accuracy.

Concept 3: Voice
Voice will vary according to the type of writing, but should be appropriately formal or casual, distant or personal, depending on the audience and purpose.

PO 1. Create pictures or text with distinctive personal style and originality.

Concept 4: Word Choice
Word choice reflects the writer's use of specific words and phrases to convey the intended message and employs a variety of words that are functional and appropriate to the audience and purpose.

PO 1. Select labels, captions, or descriptors to enhance pictures.

PO 2. Use words, labels, or short phrases that clearly go with picture text.

Concept 5: Fluency
Fluency addresses the rhythm and flow of language. Sentences are strong and varied in structure and length.

PO 1. Attempt **simple sentences.** (Some may be fragments.)

Italics denotes a repetition of a performance objective (learned in an earlier grade) that is to be applied to more complex writing.
The bulleted (lettered) items within a performance objective indicate specific content to be taught.
Words shown in bold print are referenced in the glossary.

WRITING STANDARD ARTICULATED BY GRADE LEVEL
KINDERGARTEN

Concept 6: Conventions Conventions addresses the mechanics of writing, including capitalization, punctuation, spelling, grammar and usage, and paragraph breaks.
PO 1. Distinguish between upper and lower case letters.

PO 2. Write the 26 letters of the alphabet in:
    a.   lower case
    b.   upper case (capital letters)

PO 3. Use capital letters to begin "important" words, although may be inconsistent or experimental.
PO 4. Use spaces between words.
PO 5. Write left to right and top to bottom.
PO 6. Use punctuation in writing, although may be inconsistent or experimental.
PO 7. Use knowledge of letter sound relationship to spell simple words with some consonants and few vowels (e.g., *I lik t d nts.* – I like to draw knights.)
PO 8. Use resources (e.g., **environmental print, word walls**) to spell correctly.
PO 9. Write own name on personal work.

Italics denotes a repetition of a performance objective (learned in an earlier grade) that is to be applied to more complex writing.
The bulleted (lettered) items within a performance objective indicate specific content to be taught.
Words shown in bold print are referenced in the glossary.

WRITING STANDARD ARTICULATED BY GRADE LEVEL
KINDERGARTEN

Strand 3: Writing Applications

Writing skills particular to the applications listed here may be taught across the curriculum, although some applications may lend themselves more readily to specific content areas. It is imperative that students write in all content areas in order to increase their communication skills, and ultimately to improve their understanding of content area concepts. When appropriate, other content standards are referenced to show interdisciplinary connections.

Concept 1: Expressive

Expressive writing includes personal narratives, stories, poetry, songs, and dramatic pieces. Writing may be based on real or imagined events.

PO 1. Create **narratives** by drawing, dictating, and/or **emergent writing**.

PO 2. Participate in writing simple poetry, rhymes, songs, or chants.

Concept 2: Expository

Expository writing includes nonfiction writing that describes, explains, informs, or summarizes ideas and content. The writing supports a thesis based on research, observation, and/or experience.

PO 1. Participate in creating expository texts (e.g.**,** labels**,** lists, observations, journals, summaries) through drawing or writing.

Concept 3: Functional

Functional writing provides specific directions or information related to real-world tasks. This includes letters, memos, schedules, directories, signs, manuals, forms, recipes, and technical pieces for specific content areas.

PO 1. Participate in writing a variety of functional text (e.g., classroom rules, letters, experiments, recipes, notes/messages, labels, directions, posters, graphs/tables).
(See R00-S3C2; M00-S2C1)

PO 2. Participate in writing communications, with teacher as scribe, including:
    a. **friendly letters**
    b. thank-you notes

Concept 4: Persuasive

Persuasive writing is used for the purpose of influencing the reader. The author presents an issue and expresses an opinion in order to convince an audience to agree with the opinion or to take a particular action.

(Grades 3-HS)

Italics denotes a repetition of a performance objective (learned in an earlier grade) that is to be applied to more complex writing.
The bulleted (lettered) items within a performance objective indicate specific content to be taught.
Words shown in bold print are referenced in the glossary.

WRITING STANDARD ARTICULATED BY GRADE LEVEL
KINDERGARTEN

Concept 5: Literary Response
Literary response is the writer's reaction to a literary selection. The response includes the writer's interpretation, analysis, opinion, and/or feelings about the piece of literature and selected elements within it.

PO 1. Participate in a group discussion, based on a literature selection, that identifies the:
    a. character(s)
    b. **setting**
    c. sequence of events
(See R00-S2C1)

PO 2. Participate in a group discussion in response to a given piece of literature that connects:
    a. text to self (personal connection)
    b. text to world (social connection)
    c. text to text (compare within multiple texts)
(See R00-S2C1*)*

Concept 6: Research
Research writing is a process in which the writer identifies a topic or question to be answered. The writer locates and evaluates information about the topic or question, and then organizes, summarizes, and synthesizes the information into a finished product.
PO 1. Participate in a creating a simple class report where the teacher is the scribe.

Italics denotes a repetition of a performance objective (learned in an earlier grade) that is to be applied to more complex writing.
The bulleted (lettered) items within a performance objective indicate specific content to be taught.
Words shown in bold print are referenced in the glossary.

Language Arts Standards 1996

Standard 3: Listening and Speaking
Standard 4: Viewing and Presenting

Readiness (Kindergarten)

Language Arts Standards Rationale
A Vision for Arizona's Students

Arizona's students must be able to communicate effectively in their schools and communities. The communication skills of reading, writing, listening, speaking, viewing and presenting form the core of language and literacy. The ultimate purpose of the following language arts standards is to ensure that all students be offered the opportunities, the encouragement and the vision to develop the language skills they need to pursue lifelong goals, including finding personal enrichment and participating as informed members of society. The language art standards presented in this document are organized into four areas:

- Reading
- Writing
- Listening and Speaking
- Viewing and Presenting

Reading, writing, listening and speaking are commonly recognized as language skills. Visual communication skills have long been applied in language arts classrooms through the use of media and visual resources. However, with the increase in the availability and variety of media, students are faced with numerous demands for interpreting and creating visual messages. In this document, viewing (interpreting visual messages) and presenting (creating visual messages) are the two aspects of visual communication. Resources available for teaching visual communication range from charts, graphs and photographs to the most sophisticated electronic media.

The interdependency of reading, writing, listening, speaking, viewing and presenting requires that language arts skills be integrated in two ways:

- Within language art
- Across other content areas

Students use language skills to understand academic subject matter and to enrich their lives. They develop literacy at different rates and in a variety of ways. Consequently, interdependent language arts skills and processes should be taught in a variety of learning situations.

Assessment of language arts skills and processes should be comprehensive, authentic and performance based. Multiple assessment methods should be used to evaluate a student's knowledge base and the application of reading, writing, listening, speaking, viewing and presenting. Assessment tasks should reflect those experiences encountered in the home, community and workplace. Issues concerning assessment of specific populations pose complex questions with no simple solutions. As programs and assessments are developed, these issues must be resolved to enable all students to meet the standards.

In conclusion, the standards in the language arts framework form the core of every student's ability to function effectively in society. Students will need a wide repertoire of communication strategies and skills to succeed as learners, citizens, workers and fulfilled individuals in the 21st century.

LANGUAGE ARTS STANDARD
STRAND 3 – LISTENING AND SPEAKING AND
STRAND 4 – VIEWING AND PRESENTING
READINESS (KINDERGARTEN)

STANDARD 3: LISTENING AND SPEAKING
Students effectively listen and speak in situations that serve different purposes and involve a variety of audiences.

- **LS-R1. Tell or retell a personal experience or creative story in a logical sequence**

- **LS-R2. Follow simple directions**

- **LS-R3. Share ideas, information, opinions and questions**

- **LS-R4. Listen and respond to stories, poems and nonfiction**

- **LS-R5. Participate in group discussions**

STANDARD 4: VIEWING AND PRESENTING
Students use a variety of visual media and resources to gather, evaluate and synthesize information and to communicate with others.

- **VP-R1. Recognize and respond to visual messages such as logos, symbols and trademarks**

- **VP-R2. Identify story events or information from visual media**

- **VP-R3. Create visual representations of personal experiences through media such as drawing, painting, acting and puppeteering**

Mathematics Standard Articulated by Grade Level 2008

Kindergarten

Mathematics Standard Articulated by Grade Level

The Arizona Mathematics Standard Articulated by Grade Level describes a connected body of mathematical understandings and competencies that provide a foundation for all students. This standard is coherent, focused on important mathematics, and well articulated across the grades. Concepts and skills that are critical to the understanding of important processes and relationships are emphasized.

The need to understand and use a variety of mathematical strategies in multiple contextual situations has never been greater. Utilization of mathematics continues to increase in all aspects of everyday life, as a part of cultural heritage, in the workplace, and in scientific and technical communities. Today's changing world will offer enhanced opportunities and options for those who thoroughly understand mathematics.

Communication, problem solving, reasoning and proof, connections, and representation are the process standards as described in the *Principles and Standards for School Mathematics* from the National Council of Teachers of Mathematics (NCTM). These process standards are interwoven within each of the content strands of the Arizona Mathematics Standard and are explicitly connected to the teaching of specific performance objectives in the grade level documents. The process standards emphasize ways to acquire and apply the content knowledge. Mathematics education should enable students to fulfill personal ambitions and career goals in an informational age. In the NCTM *Principles and Standards* document it asks us to "*Imagine a classroom, a school, or a school district where all students have access to high-quality, engaging mathematics instruction. There are ambitious expectations for all, with accommodations for those who need it".*[1] The Arizona Mathematics Standard Articulated by Grade Level is intended to facilitate this vision.

BACKGROUND

The State Board of Education adopted the Mathematics Standard Articulated by Grade Level in 2003 to define what Arizona students need to know and be able to do at each grade level through the end of tenth grade. Developed by a committee comprised of a diverse group of educators, this standard was written in response to the requirements of *No Child Left Behind Act of 2001* (NCLB).

RATIONALE

In 2007 the State Board of Education began the process for increasing the high school graduation requirement in mathematics from two to four years. This requirement was approved in December 2007 effective with the graduating class of 2013. This increase, along with the need to complete a periodic review of the standard, prompted the Arizona Department of Education to initiate the process of refining and rearticulating the Mathematics Standard. This refinement and articulation project began in June 2007 and was completed in June 2008.

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[1] National Council of Teachers of Mathematics, Principles and Standards for School Mathematics, NCTM Publications, Reston, VA, 2000, p. 3.

METHODOLOGY

Work teams representing populations from around the state were formed. These groupings were comprised of large and small schools, rural and urban schools, and were ethnically diverse. Included were classroom teachers, curriculum directors, mathematics teacher leaders, Career and Technical Education teachers, second-career teachers, and university/community college faculty. The goal was to revise and articulate the Mathematics Standard K-12 to align with the increased state requirement of four years of high school mathematics.

The mathematics revision teams utilized the National Council of Teachers of Mathematics *Principles and Standards* as a reference in the development of the revised Mathematics Standard. Additionally, the findings and recommendations from the National Mathematics

Advisory Panel, the American Diploma Project Benchmarks, the National Assessment of Educational Progress Framework, the Curriculum Focal Points, the Framework for 21st Century Skills, and other states' frameworks were used as guiding documents.

The revision grade level teams created draft documents with performance objectives articulated to the appropriate grade levels. Over a period of months, these teams and smaller sub-committees of teams refined the draft documents based on clarity, cohesiveness, and comprehensiveness. Reasonableness, usefulness, and appropriateness were key guidelines for the articulation process. The measurability of each performance objective was also a consideration.

External reviews by nationally recognized consultants brought a broader perspective to the refinement process. Another important step in the process was the gathering of public comment. In March 2008, drafts of the Revised Mathematics Standard Articulated by Grade Level, along with a survey to gather feedback, were posted on the Arizona Department of Education website. This provided the public with easy access to the documents, and a survey allowed reviewers a means for submitting comments. Also, crosswalks were created from the Draft 2008 Mathematics Standard to the 2003 Mathematics Standard and were posted on the website. The public had the opportunity to submit comments and suggestions, either electronically or in writing, until the survey closing date of March 28, 2008. Additionally, five public hearings were held in March throughout the state offering further opportunities for public feedback.

After all the public comments were collected, organized, and categorized by grade level and topic, the revision teams met to determine what modifications to the standard document would be appropriate. Upon completion of the revision work, crosswalks were created to assist educators with the transition from the 2003 Arizona Mathematics Standard Articulated by Grade Level to the revised 2008 Mathematics Standard.

ORGANIZATION OF THE MATHEMATICS STANDARD

The Mathematics Standard Articulated by Grade Level is divided into five main strands:
    Number and Operations
    Data Analysis, Probability, and Discrete Mathematics
    Patterns, Algebra, and Functions
    Geometry and Measurement
    Structure and Logic.

Each strand is divided into concepts that broadly define the skills and knowledge that students are expected to know and be able to do. Under each concept are performance objectives (POs) that more specifically delineate the ideas to be taught and learned.

The comprehensive document (K-12) is designed so that teachers can read the performance objectives across grade levels to incorporate learning from previous, current, and future grade levels. The standard is separated into two separate documents due to the addition of College Work Readiness (grades 11-12). The first document spans grade levels K through 6, and the second document covers grades 7 through College Work Readiness. Viewing the Mathematics Standard document from left to right helps the teacher to see the mathematics continuum across the grade levels. There is a purposeful clustering of performance objectives in order to emphasize certain key understandings. Every effort was made to eliminate repetitions. The intent was to build on the learning in previous grade levels, connect important ideas, and highlight new content each year. This coherency supports students in developing new understandings and skills. Looking down each individual column enables a teacher to see the performance objectives that students are expected to know and be able to do at any grade level.

This organization does not imply that the teaching and learning of mathematics should be fragmented or compartmentalized. Mathematics is a highly interconnected discipline; important mathematical ideas from all five mathematics strands need to be continuously integrated as needed to make meaning and connections to other concepts and performance objectives. In each grade level document, these connections are highlighted.

The order of the strands, concepts, and performance objectives (POs) in the Mathematics Standard document are not intended to be a checklist for mathematics instruction. Mathematical concepts develop with a spiraling of ideas/skills that are interconnected and dependent on each other, and this is reflected in the standard document. Effective instruction often incorporates several performance objectives into an integrated experience of learning for the student.
The content in College Work Readiness (grades 11-12) is a new addition to the Mathematics Standard. This content is separated into the five main strands. Performance objectives highlighted in italics in the document have been identified as core to an Algebra II course. As districts/schools create additional high school mathematics courses, they may select from the comprehensive set of performance objectives contained within the five strands.

New to the 2008 Mathematics Standard is the development of more comprehensive grade level documents. The format of these documents will support the implementation of the revised standard. After each concept statement, there are summary expectations appropriate for that specific grade level. These statements provide a roadmap for instruction. Teachers will notice that there are now three columns of information. The first column lists the performance objectives with accompanying strand/concept and content area connections. The middle column highlights explicit connections to Strand 5, Concept 2 performance objectives. These performance objectives are grounded in the core processes of logic, reasoning, problem-solving and proof. The third column provides instructional support to teachers in the form of explanation and examples.

MATHEMATICS STANDARD ARTICULATED BY GRADE LEVEL
KINDERGARTEN

Every student should understand and use all concepts and skills from the previous grade levels. The standard is designed so that new learning builds on preceding skills. Communication, Problem-solving, Reasoning & Proof, Connections, and Representation are the process standards that are embedded throughout the teaching and learning of all mathematical strands.

Strand 1: Number and Operations

Number sense is the understanding of numbers and how they relate to each other and how they are used in specific context or real-world application. It includes an awareness of the different ways in which numbers are used, such as counting, measuring, labeling, and locating. It includes an awareness of the different types of numbers such as, whole numbers, integers, fractions, and decimals and the relationships between them and when each is most useful. Number sense includes an understanding of the size of numbers, so that students should be able to recognize that the volume of their room is closer to 1,000 than 10,000 cubic feet. Students develop a sense of what numbers are, i.e., to use numbers and number relationships to acquire basic facts, to solve a wide variety of real-world problems, and to estimate to determine the reasonableness of results.

Concept 1: Number Sense

Understand and apply numbers, ways of representing numbers, and the relationships among numbers and different number systems.

In Grade K, students develop basic ideas of number and use numbers to think about objects and the world around them. They practice counting objects in sets, and they think about how numbers are ordered.

Performance Objectives	*Process Integration*	*Explanations and Examples*
Students are expected to:		
PO 1. Express whole numbers 0 to 20 using and connecting multiple representations. Connections: M00-S1C1-02, M00-S1C1-04, M00-S1C3-01, M00-S2C1-01, M00-S2C1-02, M00-S2C3-01, M00-S4C4-02	M00-S5C2-04. Represent a problem situation using words, numbers, pictures, physical objects, or symbols.	Students should be given multiple opportunities to count objects and recognize that a number represents a specific quantity. Once this is established, students can begin to read and write numerals (numerals are the symbols for the quantities). Continued on next page

The bulleted items within a performance objective indicate the specific content to be taught.

MATHEMATICS STANDARD ARTICULATED BY GRADE LEVEL
KINDERGARTEN

Performance Objectives	*Process Integration*	*Explanations and Examples*
Students are expected to:		
		Although kindergarten students are not yet working on place value, teaching the teen numbers as one group of ten and extra ones is foundational to understanding both the concept and the symbol that represents each teen number. For example, when focusing on the number "14," students should count out fourteen objects using one-to-one correspondence and THEN use those objects to make one group of ten and four extra ones. Students should connect the representation to the symbol "14." Students apply their number sense when graphing, patterning, sorting, and measuring.
PO 2. Count forward to 20 and backward from 10 with or without objects using different starting points. Connections: M00-S1C1-01, M00-S1C3-01, M00-S2C1-02, M00-S2C3-01, M00-S4C4-02	M00-S5C2-04. Represent a problem situation using words, numbers, pictures, physical objects, or symbols.	This objective includes counting aloud and using one-to-one correspondence. Counting should be reinforced throughout the day, not in isolation. Examples: • Count the number of chairs of the students who are absent. • Count the number of stairs, shoes, etc. Counting up to 20 objects should also be reinforced when collecting data to create charts and graphs, sorting objects, and measuring.
PO 3. Identify numbers which are one more or less than a given number to 20. Connections: M00-S1C2-02	M00-S5C2-04. Represent a problem situation using words, numbers, pictures, physical objects, or symbols.	Emphasize the language of "before" and "after" when talking about one more and one less. This is not intended to introduce addition and subtraction but lays a foundation for comparing, ordering, adding, and subtracting.

The bulleted items within a performance objective indicate the specific content to be taught.

Performance Objectives	_Process Integration_	_Explanations and Examples_
Students are expected to:		
PO 4. Compare and order whole numbers through 20. Connections: M00-S1C1-01, M00-S2C1-02	M00-S5C2-04. Represent a problem situation using words, numbers, pictures, physical objects, or symbols.	Students should develop a strong sense of the relationship between quantities and numerals (M00-S1C1-01) before they begin comparing and ordering numbers. Students use sets of objects, pictures, numerals, number lines and comparative language to compare and order whole numbers. For example, using shuffled numeral or domino-like cards, students put them in correct ascending order.
PO 5. Recognize and compare the ordinal position of at least five objects. Connections: M00-S2C1-02, M00-S4C4-01	M00-S5C2-04. Represent a problem situation using words, numbers, pictures, physical objects, or symbols.	Using ordinal numbers should be reinforced throughout the day, not in isolation. Examples: • Position when students are standing in line. • Position of chairs in a row.

The bulleted items within a performance objective indicate the specific content to be taught.

MATHEMATICS STANDARD ARTICULATED BY GRADE LEVEL
KINDERGARTEN

Strand 1: Number and Operations
Concept 2: Numerical Operations

Understand and apply numerical operations and their relationship to one another.

In Grade K, students build a foundation for learning how to add and subtract by putting together and taking apart numbers through ten. They apply strategies to solve contextual and numerical problems.

Performance Objectives	Process Integration	Explanations and Examples
Students are expected to:		
PO 1. Solve contextual problems by developing, applying, and recording strategies with sums and minuends to 10 using objects, pictures, and symbols. Connections: M00-S1C2-02, M00-S1C2-03, M00-S2C1-02, M00-S3C1-02, M00-S3C3-02	M00-S5C2-01. Identify the question(s) asked and any other questions that need to be answered in order to find a solution. M00-S5C2-02. Identify the given information that can be used to find a solution. M00-S5C2-03. Select from a variety of problem-solving strategies and use one or more strategies to arrive at a solution. M00-S5C2-04. Represent a problem situation using words, numbers, pictures, physical objects, or symbols.	In kindergarten, these contextual problems are word problems that apply the addition and subtraction strategies that are developed in M00-S1C2-02. Strategies may include counting on, using doubles, making a ten, etc. Students use the symbols +, -, and = to record number sentences.
PO 2. Develop and use multiple strategies to determine • sums to 10 and • differences with minuends to 10. Connections: M00-S1C1-03, M00-S1C2-01, M00-S1C2-03, M00-S2C1-02, M00-S3C1-02, M00-S3C3-01, M00-S3C3-02	M00-S5C2-04. Represent a problem situation using words, numbers, pictures, physical objects, or symbols. M00-S5C2-05. Explain and clarify mathematical thinking. M00-S5C2-06. Determine whether a solution is reasonable.	Use objects and pictures to develop addition and subtraction strategies. Strategies may include counting on, using doubles, making a ten, etc. Students record equivalent forms of numbers. For example, when finding sums of 5, students may list all of the sums: (2 + 3, 4 + 1, 0 + 5; etc.) and then they may write several types of equations (2 + 3 = 4 + 1; 5 = 2 + 3; 4 + 1 = 5; etc.).

The bulleted items within a performance objective indicate the specific content to be taught.

MATHEMATICS STANDARD ARTICULATED BY GRADE LEVEL
KINDERGARTEN

Performance Objectives	Process Integration	Explanations and Examples
Students are expected to:		
PO 3. Create word problems based on sums to 10 and differences with minuends to 10. Connections: M00-S1C2-01, M00-S1C2-02	M00-S5C2-04. Represent a problem situation using words, numbers, pictures, physical objects, or symbols.	Students tell an addition story or a subtraction story which applies the addition and subtraction facts covered in M00-S1C2-02. They use objects, pictures, or symbols to represent their word problems or act them out.

Strand 1: Number and Operations
Concept 3: Estimation

Use estimation strategies reasonably and fluently while integrating content from each of the other strands.

In Grade K, students use five and ten as benchmark numbers to develop their sense of quantity as well as to compare numbers.

Performance Objectives	Process Integration	Explanations and Examples
Students are expected to:		
PO 1. Identify quantities to 20 as more or less than 5 or as more or less than 10. Connections: M00-S1C1-01, M00-S1C1-02, M00-S2C3-01	M00-S5C2-05. Explain and clarify mathematical thinking.	Using 5 and 10 as benchmark numbers helps students further develop their sense of quantity as well as their ability to compare numbers. Students state whether a given number of items or a given number is closer to 0, 5, 10, or more than 10. Students also make observations such as "7" is two more than five or "4" is one less than five. This is helpful for mental math and lays the groundwork for using 10 as a benchmark number.

The bulleted items within a performance objective indicate the specific content to be taught.

MATHEMATICS STANDARD ARTICULATED BY GRADE LEVEL
KINDERGARTEN

Strand 2: Data Analysis, Probability, and Discrete Mathematics
This strand requires students to use data collection, data analysis, statistics, probability, systematic listing and counting, and the study of graphs. This prepares students for the study of discrete functions as well as to make valid inferences, decisions, and arguments. Discrete mathematics is a branch of mathematics that is widely used in business and industry. Combinatorics is the mathematics of systematic counting. Vertex-edge graphs are used to model and solve problems involving paths, networks, and relationships among a finite number of objects.

Concept 1: Data Analysis (Statistics)

Understand and apply data collection, organization, and representation to analyze and sort data.

In Grade K, students collect data to create object graphs and pictographs and apply number concepts to describe and interpret the graphs.

Performance Objectives	*Process Integration*	*Explanations and Examples*
Students are expected to:		
PO 1. Construct simple displays of data using objects or pictures. Connections: M00-S1C1-01, M00-S2C1-02, M00-S2C3-01, SC00-S1C4-01	M00-S5C2-05. Explain and clarify mathematical thinking.	Students create object graphs and pictographs using data relevant to their lives (e.g., favorite ice cream, eye color, pets, etc.). Graphs may be constructed by groups of students as well as by individual students. Counting up to 20 objects should be reinforced when collecting data to create charts and graphs.
PO 2. Ask and answer questions by counting, comparing quantities, and interpreting simple displays of data. Connections: M00-S1C1-01, M00-S1C1-02, M00-S1C1-04, M00-S1C1-05, M00-S1C2-01, M00-S1C2-02, M00-S2C1-01	M00-S5C2-05. Explain and clarify mathematical thinking.	Students describe the object graphs and pictographs they created in M00-S2C1-01. They should also ask and answer questions based on these graphs that reinforce other mathematics concepts such as counting, comparing, adding, subtracting, etc.

The bulleted items within a performance objective indicate the specific content to be taught.

MATHEMATICS STANDARD ARTICULATED BY GRADE LEVEL
KINDERGARTEN

Strand 2: Data Analysis, Probability, and Discrete Mathematics
Concept 2: Probability

Understand and apply data collection, organization, and representation to analyze and sort data.

In Grade K, there are no performance objectives in this concept. Performance objectives begin in Grade 4.

Strand 2: Data Analysis, Probability, and Discrete Mathematics
Concept 3: Systematic Listing and Counting

Understand and demonstrate the systematic listing and counting of possible outcomes.

In Grade K, students sort objects and describe how they sorted them.

Performance Objectives	*Process Integration*	*Explanations and Examples*
Students are expected to:		
PO 1. Sort, classify, count, and represent up to 20 objects and justify the sorting rule. Connections: M00-S1C1-01, M00-S1C1-02, M00-S1C3-01, M00-S2C1-01	M00-S5C2-05. Explain and clarify mathematical thinking.	Possible objects to sort include buttons, shells, shapes, beans, etc. After sorting and counting, it is important for students to explain how they sorted the objects, to answer a variety of counting questions that ask, "How many …", and to compare sorted groups using words such as, "alike" and "different." After sorting objects, students may create an object graph or a pictograph to represent their sort.

Strand 2: Data Analysis, Probability, and Discrete Mathematics
Concept 4: Vertex-Edge Graphs

Understand and apply vertex-edge graphs.

In Grade K, there are no performance objectives in this concept. Performance objectives begin in Grade 2.

The bulleted items within a performance objective indicate the specific content to be taught.

MATHEMATICS STANDARD ARTICULATED BY GRADE LEVEL
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Strand 3: Patterns, Algebra, and Functions
Patterns occur everywhere in nature. Algebraic methods are used to explore, model and describe patterns, relationships, and functions involving numbers, shapes, iteration, recursion, and graphs within a variety of real-world problem solving situations. Iteration and recursion are used to model sequential, step-by-step change. Algebra emphasizes relationships among quantities, including functions, ways of representing mathematical relationships, and the analysis of change.

Concept 1: Patterns
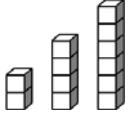
Identify patterns and apply pattern recognition to reason mathematically while integrating content from each of the other strands.

In Grade K, students study simple repeating and growing patterns in preparation for increasingly sophisticated patterns that can be represented with algebraic expressions in later grades.

Performance Objectives	*Process Integration*	*Explanations and Examples*
Students are expected to:		
PO 1. Recognize, describe, extend, create, and record simple repeating patterns.	M00-S5C2-04. Represent a problem situation using words, numbers, pictures, physical objects, or symbols. M00-S5C2-05. Explain and clarify mathematical thinking.	Repeating patterns repeat the same series over and over again. Verbal and movement patterns as well as patterns produced with physical objects such as blocks can be used. Students recognize when patterns are the same even though the terms in the sequences may be different. For example, *red, red, yellow, red, red, yellow, …* and *clap, clap, snap, clap, clap, snap, …* have the same pattern while the terms are different. Examples: • Snap, clap, snap, clap, snap, clap, … • □□, △ △, □□, △ △, …

The bulleted items within a performance objective indicate the specific content to be taught.

Performance Objectives	Process Integration	Explanations and Examples
Students are expected to:		

PO 2. Recognize, describe, extend, and record simple growing patterns.
 	
Connections: M00-S1C2-01, M00-S1C2-02
	M00-S5C2-04. Represent a problem situation using words, numbers, pictures, physical objects, or symbols.
	
	M00-S5C2-05. Explain and clarify mathematical thinking.
		Growing patterns repeat the same process over and over again.
		
		Example:
		• students can build snap cube towers that have 2 cubes, then 4 cubes, then 6 cubes, etc. which demonstrates the process of adding two over and over.
		
		    ○ 2, 4, 6, …
		
		    ○

Strand 3: Patterns, Algebra, and Functions
Concept 2: Functions and Relationships

Describe and model functions and their relationships.

In Grade K, there are no performance objectives in this concept. Performance objectives begin in Grade 2.

The bulleted items within a performance objective indicate the specific content to be taught.

Strand 3: Patterns, Algebra, and Functions
Concept 3: Algebraic Representations

Represent and analyze mathematical situations and structures using algebraic representations.

In Grade K, students learn what it means to add and subtract by joining and separating sets of objects. This lays the foundation for algebraic thinking.

Performance Objectives	*Process Integration*	*Explanations and Examples*
Students are expected to:		

PO 1. Record equivalent forms of whole numbers to 10 by constructing models and using numbers.
 	
Connections: M00-S1C2-02
	M00-S5C2-04. Represent a problem situation using words, numbers, pictures, physical objects, or symbols.
	
	M00-S5C2-05. Explain and clarify mathematical thinking.
		When students are working on sums and differences to 10, they build models and list equivalent forms.
		
		Example:
		• equivalent forms or expressions for "5" include
		    o 0 + 5,
		    o 1 + 4,
		    o 2 + 3,
		    o 3 + 2,
		    o 4 + 1,
		    o 5 + 0,
		    o 10 - 5,
		    o 9 - 4,
		    o 8 - 3,
		    o 7 - 2,
		    o 6 - 1, and
		    o 5 - 0.

PO 2. Compare expressions using spoken words and the symbol =. Connections: M00-S1C2-01, M00-S1C2-02	M00-S5C2-04. Represent a problem situation using words, numbers, pictures, physical objects, or symbols. M00-S5C2-05. Explain and clarify mathematical thinking.	Students understand that the equal sign means "the same quantity as," and they should use that language accordingly. Continued on next page

The bulleted items within a performance objective indicate the specific content to be taught.

Performance Objectives	_Process Integration_	_Explanations and Examples_
Students are expected to:		
		In order to compare expressions students must first build and write equivalent forms of a number and determine that several expressions can be written to represent that number. Since the quantities of the expressions are the same, an "=" can be used to represent that equivalence. Students can then be exposed to a string of equations and explain how they are related. Example: • $\quad 6 = 3 + 3$ $\quad\quad 3 + 3 = 4 + 2$ $\quad\quad 4 + 2 = 5 + 1$ $\quad\quad 5 + 1 = 6$

Strand 3: Patterns, Algebra, and Functions
Concept 4: Analysis of Change

Analyze how changing the values of one quantity corresponds to change in the values of another quantity.

In Grade K, there are no performance objectives in this concept. Performance objectives begin in Grade 4.

The bulleted items within a performance objective indicate the specific content to be taught.

MATHEMATICS STANDARD ARTICULATED BY GRADE LEVEL
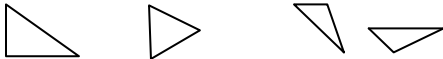# KINDERGARTEN

Strand 4: Geometry and Measurement
Geometry is a natural place for the development of students' reasoning, higher thinking, and justification skills culminating in work with proofs. Geometric modeling and spatial reasoning offer ways to interpret and describe physical environments and can be important tools in problem solving. Students use geometric methods, properties and relationships, transformations, and coordinate geometry as a means to recognize, draw, describe, connect, analyze, and measure shapes and representations in the physical world. Measurement is the assignment of a numerical value to an attribute of an object, such as the length of a pencil. At more sophisticated levels, measurement involves assigning a number to a characteristic of a situation, as is done by the consumer price index. A major emphasis in this strand is becoming familiar with the units and processes that are used in measuring attributes.

Concept 1: Geometric Properties

Analyze the attributes and properties of 2- and 3- dimensional figures and develop mathematical arguments about their relationships.

In Grade K, students develop basic ideas related to geometry as they name, draw, describe, and compare simple two- and three-dimensional figures and find these shapes around them.

Performance Objectives	*Process Integration*	*Explanations and Examples*
Students are expected to:		
PO 1. Identify, analyze, and describe circles, triangles, and rectangles (including squares) in different orientations and environments. Connections: M00-S4C1-02	M00-S5C2-05. Explain and clarify mathematical thinking.	Examples of environments in which students would be encouraged to identify shapes would include nature, buildings, and the classroom. Students should be exposed to many types of triangles in many different orientations in order to eliminate the misconception that a triangle is always "right-side-up" and equilateral. By definition, a square is a special kind of rectangle. Although most kindergarteners do not yet understand the hierarchy of shapes, it is good to teach with this idea in mind. In addition, a square turned on a vertex is still a square (not a diamond).

The bulleted items within a performance objective indicate the specific content to be taught.

Performance Objectives	*Process Integration*	*Explanations and Examples*
Students are expected to:		
PO 2. Build, draw, compare, describe, and sort 2-dimensional figures (including irregular figures) using attributes. Connections: M00-S4C1-01	M00-S5C2-05. Explain and clarify mathematical thinking.	Students interact with many types of shapes beyond the basic circles, triangles, and rectangles (including squares). Students describe the number of sides, number of vertices, curved/straight sides, size, etc.

Strand 4: Geometry and Measurement
Concept 2: Transformation of Shapes

Apply spatial reasoning to create transformations and use symmetry to analyze mathematical situations.

In Grade K, there are no performance objectives in this concept. Performance objectives begin in Grade 1.

Strand 4: Geometry and Measurement
Concept 3: Coordinate Geometry

Specify and describe spatial relationships using rectangular and other coordinate systems while integrating content from each of the other strands.

In Grade K, there are no performance objectives in this concept. Performance objectives begin in Grade 4.

The bulleted items within a performance objective indicate the specific content to be taught.

MATHEMATICS STANDARD ARTICULATED BY GRADE LEVEL
KINDERGARTEN

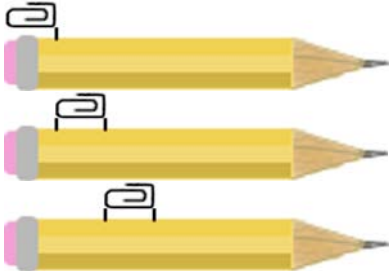**Strand 4: Geometry and Measurement**
Concept 4: Measurement

Understand and apply appropriate units of measure, measurement techniques, and formulas to determine measurements.

In Grade K, students informally develop early measurement concepts. This is an important precursor to measurement in later grades when students measure objects with tools.

Performance Objectives	*Process Integration*	*Explanations and Examples*
Students are expected to:		
PO 1. Compare and order objects according to observable and measureable attributes. Connections: M00-S1C1-05, SC00-S1C1-05, SC00-S1C3-02, SC00-S5C1-02	M00-S5C2-05. Explain and clarify mathematical thinking. M00-S5C2-06. Determine whether a solution is reasonable.	Students use ordinal number language to describe the position of the ordered objects. They also use language such as *longer than or wider than,* etc. Students order objects by length (first-graders will order according to weight and capacity). For this performance objective, students order by directly comparing objects without using measurement tools.

The bulleted items within a performance objective indicate the specific content to be taught.

MATHEMATICS STANDARD ARTICULATED BY GRADE LEVEL
KINDERGARTEN

Performance Objectives	Process Integration	Explanations and Examples
Students are expected to:		
PO 2. Use the attribute of length to describe and compare objects using non-standard units. Connections: M00-S1C1-01, M00-S1C1-02, SC00-S1C2-03	M00-S5C2-05. Explain and clarify mathematical thinking. M00-S5C2-06. Determine whether a solution is reasonable.	Processes to compare objects using non-standard units include: • demonstrating the process of iteration using multiple constant units, • demonstrating the process of iteration using one unit multiple times, • estimating a measured length to the nearest whole unit, and • using the same non-standard unit to compare the lengths of two objects. Students use their counting skills while measuring with non-standard units. In a natural environment, not all objects will measure to an exact whole unit. Students determine whether the "extra" is closer to the previous whole unit or the next whole unit and use the word "about" to describe the measurement.

The bulleted items within a performance objective indicate the specific content to be taught.

MATHEMATICS STANDARD ARTICULATED BY GRADE LEVEL
KINDERGARTEN

Strand 5: Structure and Logic
This strand emphasizes the core processes of problem solving. Students draw from the content of the other four strands to devise algorithms and analyze algorithmic thinking. Strand One and Strand Three provide the conceptual and computational basis for these algorithms. Logical reasoning and proof draws its substance from the study of geometry, patterns, and analysis to connect remaining strands. Students use algorithms, algorithmic thinking, and logical reasoning (both inductive and deductive) as they make conjectures and test the validity of arguments and proofs. Concept two develops the core processes as students evaluate situations, select problem solving strategies, draw logical conclusions, develop and describe solutions, and recognize their applications.

Concept 1: Algorithms and Algorithmic Thinking

Use reasoning to solve mathematical problems.

In Grade K, there are no performance objectives in this concept. Performance objectives begin in Grade 4.

The bulleted items within a performance objective indicate the specific content to be taught.

MATHEMATICS STANDARD ARTICULATED BY GRADE LEVEL
KINDERGARTEN

Strand 5: Structure and Logic
Concept 2: Logic, Reasoning, Problem Solving, and Proof

Evaluate situations, select problem-solving strategies, draw logical conclusions, develop and describe solutions, and recognize their applications.

In Grade K, students begin to build the understanding that doing mathematics involves solving problems and discussing how they solved them. Students also begin to develop their mathematical communication skills as they participate in mathematical discussions involving questions like "How did you get that?" and "Why is that true?"

Performance Objectives	*Process Integration*	*Explanations and Examples*
Students are expected to:	Some of the Strand 5 Concept 2 performance objectives are listed throughout the grade level document in the Process Integration Column (2nd column). Since these performance objectives are connected to the other content strands, the process integration column is not used in this section next to those performance objectives.	
PO 1. Identify the question(s) asked and any other questions that need to be answered in order to find a solution.		
PO 2. Identify the given information that can be used to find a solution.		
PO 3. Select from a variety of problem-solving strategies and use one or more strategies to arrive at a solution.		Problem solving strategies may include drawing pictures, using objects, acting out, making a chart or list, etc.
PO 4. Represent a problem situation using any combination of words, numbers, pictures, physical objects, or symbols.		Students need opportunities to connect the different representations and explain the connections. Representations should include numbers, words (including mathematical language), pictures, and/or physical objects. Students should be able to use all of these representations as needed.

The bulleted items within a performance objective indicate the specific content to be taught.

MATHEMATICS STANDARD ARTICULATED BY GRADE LEVEL
KINDERGARTEN

Performance Objectives	*Process Integration*	*Explanations and Examples*
Students are expected to:	Some of the Strand 5 Concept 2 performance objectives are listed throughout the grade level document in the Process Integration Column (2nd column). Since these performance objectives are connected to the other content strands, the process integration column is not used in this section next to those performance objectives.	
PO 5. Explain and clarify mathematical thinking.		Students will often use objects and pictures to explain their thinking. Modeling different explanations to guide students is helpful.
PO 6. Determine whether a solution is reasonable.		

The bulleted items within a performance objective indicate the specific content to be taught.

Science Standard Articulated
by Grade Level 2004

Kindergarten

Science Standard Articulated by Grade Level

INTRODUCTION

Students are naturally curious about the world and their place in it. Sustaining this curiosity and giving it a scientific foundation must be a high priority in Arizona schools. Application of scientific thinking enables Arizona students to strengthen skills that people use every day: solving problems creatively, thinking critically, working cooperatively in teams, using technology effectively, and valuing lifelong learning.

Science education is much more than merely learning content. It is the active process of investigation and the critical review of evidence related to the world around us, both visible and invisible. Science is a dynamic process of gathering and evaluating information, looking for patterns, and then devising and testing possible explanations. Active engagement in scientific investigation leads students to think critically and to develop reasoning skills that allow them to become independent, lifelong learners. Science methods and thought processes have application well beyond the bounds of science and support learning goals in all subject areas.

The Arizona Science Standard Articulated by Grade Level has been written for ALL students. The science standard is set with the expectation that science instruction occurs at all grade levels – beginning in early grades with simple exploration, progressing to increasingly organized and sophisticated science investigations in higher grades.

Underlying all of the science standard strands are the five unifying concepts as identified in the National Science Education Standards (1995):
- Systems, Order, and Organization
- Evidence, Models, and Explanation
- Constancy, Change, and Measurement
- Evolution and Equilibrium
- Form and Function

This conceptual framework provides students with productive and insightful ways of considering and integrating a range of basic ideas that explain the natural world. Because the understanding and abilities associated with major conceptual and procedural schemes need to be developed over an entire education, the unifying concepts and processes transcend disciplinary boundaries.

These unifying concepts can be introduced in early grades and developed appropriately through the elementary grades and high school. Students should be explicitly shown how each of these unifying concepts apply to and connect life, physical, and Earth and space sciences. These science content areas can be taught in conjunction with each other, as well as with other subject areas in an interdisciplinary approach. The unifying concepts in science education help focus instruction and provide a link to other disciplines.

BACKGROUND

The state Board of Education adopted the Arizona Academic Standards in 1998 to define what Arizona's students need to know and be able to do by the end of twelfth grade. Developed by committees comprised of educators, parents, students, and business and community leaders, these standards were written in grade-level clusters with benchmarks at 3, 5, 8, and high school.

RATIONALE

Requirements in the *No Child Left Behind Act of 2001* (NCLB) and the need for periodic review of the state academic standards prompted the decision by the Arizona Department of Education (ADE) to refine and articulate the academic standard for science by grade level. This refinement and articulation project was started in April 2003, and was completed in May 2004.

METHODOLOGY

The Science Standard Revision Committee was composed of a statewide representation of scientists and science educators to reflect school districts large and small, rural and urban, as well as the ethnic diversity of Arizona. National science consultants, university professors, and community members advised the committee and provided valuable reviews of the work in progress. The goal was to articulate, or align, the current academic standards by grade level (K-8) and in high school with the state requirement of two years of high school science.

The committee utilized several nationally recognized publications to establish content guidelines during the development of the draft:
- National Research Council (NRC)
  - *National Science Education Standards*
  - *Inquiry and the National Science Education Standards*
  - *Designing Mathematics or Science Curriculum Programs*
- The American Association for the Advancement of Science
  - *Atlas of Science Literacy*
  - *Benchmarks for Science Literacy*
  - *Design for Science Literacy*
  - *Science for All Americans*
- *Science Framework for the 1996 and 2000 National Assessment of Educational Progress (NAEP)*

The committee created draft documents by first reviewing the existing standards. The performance objectives were articulated, or aligned, to the appropriate grade levels.

Over a period of months, subcommittees, composed of representatives of the full committee, met to refine the documents. A guiding principle in the articulation process was whether a performance objective was reasonable, useful, and appropriate. The measurability of each performance objective was also considered.

External reviews by nationally recognized consultants and reviews by university and local experts provided additional guidance and perspective to the committees.

Public review of the Science Standard Articulated by Grade Level occurred during the month of February 2004. A draft of the standard was placed on the ADE website with the option for individuals to make comments online. Six public hearings occurred throughout the state to collect additional comments. After all public comments were collected and organized, the committee met to review them and to recommend appropriate modifications to the standard. This final draft was presented to the state Board of Education in May 2004 for adoption as the Arizona Science Standard Articulated by Grade Level.

SCIENCE STANDARD ARTICULATED BY GRADE LEVEL
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The goal in the development of the standard was to assure that the six strands and five unifying concepts are interwoven into a fabric of science that represents the true nature of science. Students have the opportunity to develop both the skills and content knowledge necessary to be scientifically literate members of the community.

Strands 1, 2, and 3 are designed to be explicitly taught *and* embedded *within* each of the content Strands 4, 5, and 6, and are not intended to be taught in isolation. The processes, skills, and content of the first three strands are designed to "umbrella" and complement the content of Life Science, Physical Science, and Earth and Space Science.

Strand 1: Inquiry Process

Inquiry Process establishes the basis for students' learning in science. Students use scientific processes: questioning, planning and conducting investigations, using appropriate tools and techniques to gather data, thinking critically and logically about relationships between evidence and explanations, and communicating results.

Concept 1: Observations, Questions, and Hypotheses
Observe, ask questions, and make predictions.

PO 1. Observe common objects using multiple senses.

PO 2. Ask questions based on experiences with objects, organisms, and events in the environment. (See M00-S2C1-01*)*

PO 3. Predict results of an investigation based on life, physical, and Earth and space sciences (e.g.*,* the five senses, changes in weather).

Concept 2: Scientific Testing (Investigating and Modeling)
Participate in planning and conducting investigations, and recording data.

PO 1. Demonstrate safe behavior and appropriate procedures (e.g.*,* use of instruments, materials, organisms) in all science inquiry.

PO 2. Participate in guided investigations in life, physical, and Earth and space sciences.

PO 3. Perform simple measurements using non-standard units of measure to collect data.

Concept 3: Analysis and Conclusions
Organize and analyze data; compare to predictions.

PO 1. Organize (e.g.*,* compare, classify, and sequence) objects, organisms, and events according to various characteristics. (See M00-S4C4-01 and M00-S4C4-03)

PO 2. Compare objects according to their measurable characteristics (e.g.*,* longer/shorter, lighter/heavier). (See M00-S4C4-01)

Italics denote a repetition of a performance objective (learned in an earlier grade) that is to be applied to grade level content or at a higher level of complexity.
The bulleted items within a performance objective indicate specific content to be taught.

Concept 4: Communication
Communicate results of investigations.

PO 1. Communicate observations with pictographs, pictures, models, and/or words.
(See M00-S2C1-02)

PO 2. Communicate with other groups to describe the results of an investigation.
(See LS-R3 and LS-R5)

Strand 2: History and Nature of Science

Scientific investigation grows from the contributions of many people. History and Nature of Science emphasizes the importance of the inclusion of historical perspectives and the advances that each new development brings to technology and human knowledge. This strand focuses on the human aspects of science and the role that scientists play in the development of various cultures.

Concept 1: History of Science as a Human Endeavor
Identify individual and cultural contributions to scientific knowledge.

PO 1. Give examples of how diverse people (e.g*.,* children, parents, weather reporters, cooks, healthcare workers, gardeners) use science in daily life.

PO 2. Identify how diverse people and/or cultures, past and present, have made important contributions to scientific innovations (e.g., Jane Goodall [scientist], supports Strand 4; Louis Braille [inventor], supports Strand 4).

Concept 2: Nature of Scientific Knowledge
Understand how science is a process for generating knowledge.

No performance objectives at this grade level

Strand 3: Science in Personal and Social Perspectives

Science in Personal and Social Perspectives emphasizes developing the ability to design a solution to a problem, to understand the relationship between science and technology, and the ways people are involved in both. Students understand the impact of science and technology on human activity and the environment. This strand affords students the opportunity to understand their place in the world – as living creatures, consumers, decision makers, problem solvers, managers, and planners.

Concept 1: Changes in Environments
Describe the interactions between human populations, natural hazards, and the environment.

No performance objectives at this grade level

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Concept 2: Science and Technology in Society
Understand the impact of technology.

PO 1. Describe how simple tools (e.g., scissors, pencils, paper clips, hammers) can make tasks easier.

Strand 4: Life Science
Life Science expands students' biological understanding of life by focusing on the characteristics of living things, the diversity of life, and how organisms and populations change over time in terms of biological adaptation and genetics. This understanding includes the relationship of structures to their functions and life cycles, interrelationships of matter and energy in living organisms, and the interactions of living organisms with their environment.

Concept 1: Characteristics of Organisms
Understand that basic structures in plants and animals serve a function.

PO 1. Distinguish between living things and nonliving things.

PO 2. Name the following human body parts: (See 1CH-R3-01)
- head
- shoulders
- arms
- elbows
- wrists
- hands
- fingers
- legs
- hips
- knees
- ankles
- feet
- heels
- toes

PO 3. Identify the five senses and their related body parts:
- sight – eyes
- hearing – ears
- smell – nose
- taste – tongue
- touch – skin

Concept 2: Life Cycles
Understand the life cycles of plants and animals.

PO 1. Describe that most plants and animals will grow to physically resemble their parents.

Concept 3: Organisms and Environments
Understand the relationships among various organisms and their environment.

PO 1. Identify some plants and animals that exist in the local environment.

PO 2. Identify that plants and animals need the following to grow and survive:
- food
- water
- air
- space

PO 3. Describe changes observed in a small system (e.g., ant farm, plant terrarium, aquarium).

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Concept 4: Diversity, Adaptation, and Behavior
Identify plant and animal adaptations.
No performance objectives at this grade level

Strand 5: Physical Science

Physical Science affords students the opportunity to increase their understanding of the characteristics of objects and materials they encounter daily. Students gain an understanding of the nature of matter and energy, including their forms, the changes they undergo, and their interactions. By studying objects and the forces that act upon them, students develop an understanding of the fundamental laws of motion, knowledge of the various ways energy is stored in a system, and the processes by which energy is transferred between systems and surroundings.

Concept 1: Properties of Objects and Materials
Classify objects and materials by their observable properties.
PO 1. Identify the following observable properties of objects using the senses: • shape   • texture   • size   • color   (See M00-S4C1-02 and M00-S4C1-03)   PO 2. Compare objects by the following observable properties: • size   • color   • type of material   (See M00-S4C1-02)

Concept 2: Position and Motion of Objects
Understand spatial relationships and the way objects move.
PO 1. Describe spatial relationships (i.e., above, below, next to, left, right, middle, center) of objects. (See M00-S4C1-02 and 3SS-R1-01)

Concept 3: Energy and Magnetism
Investigate different forms of energy.
PO 1. Investigate how applied forces (push and pull) can make things move.   PO 2. Investigate how forces can make things move without another thing touching them (e.g., magnets, static electricity).   PO 3. Sort materials according to whether they are or are not attracted by a magnet.   PO 4. Identify familiar everyday uses of magnets (e.g., in toys, cabinet locks, decoration).

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SCIENCE STANDARD ARTICULATED BY GRADE LEVEL
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Strand 6: Earth and Space Science

Earth and Space Science provides the foundation for students to develop an understanding of the Earth, its history, composition, and formative processes, and an understanding of the solar system and the universe. Students study the regularities of the interrelated systems of the natural world. In doing so, they develop understandings of the basic laws, theories, and models that explain the world (NSES, 1995). By studying the Earth from both a historical and current time frame, students can make informed decisions about issues affecting the planet on which they live.

Concept 1: Properties of Earth Materials
Identify the basic properties of Earth materials.
PO 1. Identify rocks, soil, and water as basic Earth materials. PO 2. Compare physical properties (e.g., color, texture, capacity to retain water) of basic Earth materials. PO 3. Classify a variety of objects as being natural or man-made. PO 4. Identify ways some natural or man-made materials can be reused or recycled (e.g., efficient use of paper, recycle aluminum cans).

Concept 2: Objects in the Sky
Identify objects in the sky.
No performance objectives at this grade level

Concept 3: Changes in the Earth and Sky
Understand characteristics of weather conditions and climate.
PO 1. Identify the following aspects of weather: • temperature • wind • precipitation • storms PO 2. Describe observable changes in weather. PO 3. Give examples of how the weather affects people's daily activities.

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The bulleted items within a performance objective indicate specific content to be taught.
Approved 5.24.04 Updated 3.10.05

Social Studies Standard Articulated by Grade Level 2006

Kindergarten

Social Studies Standard Articulated by Grade Level

INTRODUCTION

To maintain the Union that supports our freedoms, we must rely on the knowledge, skills, and character of its citizens and those they elect to public office. Critical to the preservation and improvement of America's republican form of government is the study of our founding principles, namely those detailed in the United States Constitution, the Declaration of Independence, and *The Federalist Papers*. The standard includes the study of rich and diverse contributions that people of many backgrounds have made to American life and institutions while emphasizing our shared heritage. Well-informed citizens understand our political, cultural and economic interaction with the rest of the world. Geographic knowledge expands the understanding of our development and identity in the world. The standard requires that students attain knowledge of essential facts, concepts, people, and events as well as a firm grasp of reasoning, inquiry, and research skills. Students must learn how to frame and test hypotheses, distinguish logical from illogical reasoning, develop informed opinions based on different points of view, and employ reflective thinking and evaluation. In this way students will be prepared to fulfill their responsibilities as citizens of our democratic republic. The standard presents academic content and skills in the four interrelated disciplines of history, geography, civics/government, and economics that are essential to an understanding of our human experience, past and present.

BACKGROUND

The state Board of Education began the development process for the Arizona academic standards in 1996 to define what Arizona students need to know and be able to do by the end of twelfth grade. The Social Studies Standards were adopted in 2000 and partially revised in 2003. Developed by committees comprised of educators, subject matter experts, and business and community leaders, the Social Studies Standard was fully revised and written in articulated grade-specific performance objectives in 2004 - 2005.

RATIONALE

Requirements in the *No Child Left Behind Act of 2001* (NCLB) and the practice of periodic review of the state academic standards prompted the decision by the Arizona Department of Education to refine and articulate the academic standards for mathematics, reading, writing, and science by grade level. An articulation of the social studies standard was included in the process in order to provide consistency across content areas. The skills and content of social studies are not only a critical component of a comprehensive curriculum they also support student success in other areas.

METHODOLOGY

A committee to articulate the social studies standard was formed consisting of a representative sample of educators from around the state. It represented large and small schools, rural and urban districts, and ethnic diversity. Subject matter experts, university professors, and community members advised the committees. The goal was to articulate, or align, the current academic standards by grade level (K-12).

The Social Studies Articulation Committee utilized information from the National Council for the Social Studies, the National Council for Geographic Education, the Arizona Council on Economics Education, the Arizona Geographic Alliance, the Bill of Rights Institute, and other sources to promote quality instruction based on current, pedagogical, and research-based practices.

The articulation process included a restructuring of the Arizona Academic Content Standards to better facilitate the alignment of performance objectives by grade level, while maintaining the content integrity of the existing standards. Over a period of months, the articulation committees and smaller sub-committees refined the documents. Reasonableness, usefulness, and appropriateness were the guidelines for the articulation process.

External reviews by nationally recognized consultants and reviews by university and local experts provided additional guidance and perspective to the committee.

SOCIAL STUDIES STANDARD ARTICULATED BY GRADE LEVEL
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Kindergarten History Strands introduce the concept of exploration as a means of discovery and a way of exchanging ideas, goods, and culture. Important presidents and symbols of our country are also introduced.

Strand 1: American History

A study of American History is integral for students to analyze our national experience through time, to recognize the relationships of events and people, and to interpret significant patterns, themes, ideas, beliefs, and turning points in Arizona and American history. Students will be able to apply the lessons of American History to their lives as citizens of the United States.

Concept 1: Research Skills for History

Historical research is a process in which students examine topics or questions related to historical studies and/or current issues. By using primary and secondary sources effectively students obtain accurate and relevant information. An understanding of chronological order is applied to the analysis of the interrelatedness of events. These performance objectives also appear in Strand 2: World History. They are intended to be taught in conjunction with appropriate American or World History content, when applicable.

PO 1. Retell personal events to show an understanding of how history is the story of events, people, and places in the past.

PO 2. Listen to recounts of historical events and people and discuss how they relate to present day.

PO 3. Sequence recounts of historical events and people using the concepts of before and after.

PO 4. Use primary source materials (e.g., photos, artifacts) to study people and events from the past.

Concept 2: Early Civilizations   Pre 1500

The geographic, political, economic and cultural characteristics of early civilizations made significant contributions to the later development of the United States.

PO 1. Recognize that Native Americans are the original inhabitants of North America.

Concept 3: Exploration and Colonization   1500s – 1700s

The varied causes and effects of exploration, settlement, and colonization shaped regional and national development of the U.S.

PO 1. Recognize that explorers (e.g., Columbus, Leif Ericson) traveled to places in the world that were new to them.

PO 2. Recognize that exploration resulted in the exchange of ideas, culture, and goods (e.g., foods, animals, plants, artifacts).

Concept 4: Revolution and New Nation   1700s – 1820

The development of American constitutional democracy grew from political, cultural, and economic issues, ideas, and events.

PO 1. Recognize that George Washington was our first president.

PO 2. Recognize that the Fourth of July is our nation's birthday.

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italicized performance objectives - a performance objective repeated verbatim from year to year; it is understood that the depth, complexity, and difficulty level developmentally match the grade level expectations

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Concept 5: Westward Expansion   1800 – 1860
Westward expansion, influenced by political, cultural, and economic factors, led to the growth and development of the U.S.

No performance objectives at this grade.

Concept 6: Civil War and Reconstruction   1850 – 1877
Regional conflicts led to the Civil War and resulted in significant changes to American social, economic, and political structures.

No performance objectives at this grade.

Concept 7: Emergence of the Modern United States   1875 – 1929
Economic, social, and cultural changes transformed the U.S. into a world power.

No performance objectives at this grade.

Concept 8: Great Depression and World War II   1929 – 1945
Domestic and world events, economic issues, and political conflicts redefined the role of government in the lives of U.S. citizens.

No performance objectives at this grade.

Concept 9: Postwar United States   1945 – 1970s
Postwar tensions led to social change in the U.S. and to a heightened focus on foreign policy.

PO 1. Recognize that astronauts (e.g., John Glenn, Neil Armstrong, Sally Ride) are explorers of space.

Concept 10: Contemporary United States   1970s – Present
Current events and issues continue to shape our nation and our involvement in the global community.

PO 1. Use information from written documents, oral presentations, and the media to discuss current local events.

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SOCIAL STUDIES STANDARD ARTICULATED BY GRADE LEVEL
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Strand 2: World History
A study of World History is integral for students to analyze the human experience through time, to recognize the relationships of events and people, and to interpret significant patterns, themes, ideas, beliefs, and turning points in American and world history. Students should be able to apply the lessons of World History to their lives as citizens of the United States and members of the world community.

Concept 1: Research Skills for History
Historical research is a process in which students examine topics or questions related to historical studies and/or current issues. By using primary and secondary sources effectively students obtain accurate and relevant information. An understanding of chronological order is applied to the analysis of the interrelatedness of events. These performance objectives also appear in Strand 1: American History. They are intended to be taught in conjunction with appropriate American or World History content, when applicable.

PO 1. Retell personal events to show an understanding of how history is the story of events, people, and places in the past.

PO 2. Listen to recounts of historical events and people and discuss how they relate to present day.

PO 3. Sequence recounts of historical events and people using the concepts of before and after.

PO 4. Use primary source materials (e.g., photos, artifacts) to study people and events from the past.

Concept 2: Early Civilizations
The geographic, political, economic and cultural characteristics of early civilizations significantly influenced the development of later civilizations.

PO 1. Recognize that groups of people in early civilizations (e.g., people of the Americas, Europeans, Asians, Africans) moved from place to place to hunt and gather food.

PO 2. Recognize that early civilizations improved their lives through advancements (e.g., domestication of animals, tools, farming methods, calendars).

Concept 3: World in Transition
People of different regions developed unique civilizations and cultural identities characterized by increased interaction, societal complexity and competition.

No performance objectives at this grade.

Concept 4: Renaissance and Reformation
The rise of individualism challenged traditional western authority and belief systems resulting in a variety of new institutions, philosophical and religious ideas, and cultural and social achievements.

No performance objectives at this grade.

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Concept 5: Encounters and Exchange
Innovations, discoveries, exploration, and colonization accelerated contact, conflict, and interconnection among societies world wide, transforming and creating nations.

PO 1. Recognize that explorers (e.g., Marco Polo, Magellan) traveled to places in the world that were new to them.

PO 2. Recognize that exploration resulted in the exchange of ideas, culture, and goods (e.g., foods, animals, plants, artifacts).

Concept 6: Age of Revolution
Intensified internal conflicts led to the radical overthrow of traditional governments and created new political and economic systems.

No performance objectives at this grade.

Concept 7: Age of Imperialism
Industrialized nations exerted political, economic, and social control over less developed areas of the world.

No performance objectives at this grade.

Concept 8: World at War
Global events, economic issues and political ideologies ignited tensions leading to worldwide military conflagrations and diplomatic confrontations in a context of development and change.

No performance objectives at this grade.

Concept 9: Contemporary World
The nations of the contemporary world are shaped by their cultural and political past. Current events, developments and issues continue to shape the global community.

PO 1. Use information from written documents, oral presentations, and the media to discuss current events

SOCIAL STUDIES STANDARD ARTICULATED BY GRADE LEVEL
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Strand 3: Civics/Government

The goal of the civics strand is to develop the requisite knowledge and skills for informed, responsible participation in public life; to ensure, through instruction, that students understand the essentials, source, and history of the constitutions of the United States and Arizona, American institutions and ideals (ARS 15-710). Students will understand the foundations, principles, and institutional practices of the United States as a representative democracy and constitutional republic. They will understand the importance of each person as an individual with human and civil rights and our shared heritage in the United States. Students will understand politics, government, and the responsibilities of good citizenship. Citizenship skills include the capacity to influence policies and decisions by clearly communicating interests and the ability to build coalitions through negotiation, compromise, and consensus. In addition, students will learn that the United States influences and is influenced by global interaction.

Concept 1: Foundations of Government
The United States democracy is based on principles and ideals that are embodied by symbols, people and documents.

PO 1. Recognize national symbols and monuments that represent American democracy and values:
  a) American flag
  b) Bald Eagle
  c) Statue of Liberty
  d) White House

PO 2. Recognize the Pledge of Allegiance and the National Anthem.

PO 3. Recognize the significance of national holidays:
  a) Thanksgiving
  b) Presidents' Day
  c) Martin Luther King, Jr. Day
  d) Constitution Day

PO 4. Identify Presidents George Washington and Abraham Lincoln as leaders of our democracy.
     (Connect with: Strand 1 Concept 4)

PO 5. Recognize that classmates have varied backgrounds but may share principles, goals, customs, and traditions.

Concept 2: Structure of Government
The United States structure of government is characterized by the separation and balance of powers.

PO 1. Identify the current President of the United States and Governor of Arizona. (Connect with: Strand 1 Concept 10)

Concept 3: Functions of Government
Laws and policies are developed to govern, protect, and promote the well-being of the people.

No performance objectives at this grade.

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Approved 9.26.05 Updated 5.22.06

SOCIAL STUDIES STANDARD ARTICULATED BY GRADE LEVEL
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Concept 4: Rights, Responsibilities, and Roles of Citizenship
The rights, responsibilities and practices of United States citizenship are founded in the Constitution and the nation's history.

PO 1. Identify examples of responsible citizenship in the school setting and in stories about the past and present.
 	
PO 2. Recognize the rights and responsibilities of citizenship:
     a)   elements of fair play, good sportsmanship, and the idea of treating others the way you want to be treated
     b)   importance of participation and cooperation in a classroom and community
     c)   why there are rules and the consequences for violating them
     d)   responsibility of voting   (every vote counts)
 	
PO 3. Discuss the importance of students contributing to a community (e.g., helping others, working together, cleaning up the playground).
 	
PO 4. Identify people who help keep communities and citizens safe (e.g., police, firefighters, nurses, doctors).

Concept 5: Government Systems of the World
Different governmental systems exist throughout the world. The United States influences and is influenced by global interactions.
No performance objectives at this grade.

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SOCIAL STUDIES STANDARD ARTICULATED BY GRADE LEVEL
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Strand 4: Geography

The goal of the geography strand is to provide an understanding of the human and physical characteristics of the Earth's places and regions and how people of different cultural backgrounds interact with their environment. Geographic reasoning is a way of studying human and natural features within a spatial perspective. Through the study of geography, students will be able to understand local, national, regional, and global issues. Students will interpret the arrangement and interactions of human and physical systems on the surface of the Earth. As these patterns have changed over time and are important to governments and economies, geographic reasoning will enhance students' understanding of history, civics, and economics.

Concept 1: The World in Spatial Terms

The spatial perspective and associated geographic tools are used to organize and interpret information about people, places and environments.

PO 1. Recognize the differences between maps and globes.

PO 2. Construct maps of a familiar place (e.g., classroom, bedroom, playground, neighborhood).

PO 3. Determine the relative location of objects using the terms near/far, behind/in front, over/under, left/right, up/down. **(Connect with: Science Strand 5 Concept 2, Math Strand 4 Concept 1)**

PO 4. Identify land and water on maps, illustrations, images, and globes.

PO 5. Locate continents and oceans on a map or globe

Concept 2:   Places and Regions

Places and regions have distinct physical and cultural characteristics.

PO 1. Recognize through images how people live differently in other places and times.

Concept 3: Physical Systems

Physical processes shape the Earth and interact with plant and animal life to create, sustain, and modify ecosystems.   These processes affect the distribution of resources and economic development. Science Strands are summarized as they apply to Social Studies content in Grades K-8. In High School, the Performance Objectives are a summary of skills and content for grades 9 -12. These concepts are reinforced in Social Studies classes, but assessed through Science.

(Science Strands are summarized below as they apply to Social Studies content in Grades K-8. These concepts are reinforced in Social Studies classes, but assessed through Science.)
Connect with:
Science Strand 4 Concept 3 - Identify plants and animals in the local environment.
Science Strand 6 Concept 1 - Identify the basic properties of earth materials (rocks, soil, water; natural or man-made; reusable and recyclable).
Science Strand 6 Concept 3 - Understand the characteristics of weather and how it affects people.

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Concept 4: Human Systems
Human cultures, their nature, and distribution affect societies and the Earth.

PO 1. Discuss the food, clothing, housing, recreation, and celebrations practiced by cultural groups in the local community.

PO 2. Discuss how land in the students' community is used for industry, housing, business, agriculture, and recreation.

PO 3. Describe how people earn a living in the community and the places they work. (Connect with: Strand 5 Concept 1)

Concept 5: Environment and Society
Human and environmental interactions are interdependent upon one another.   Humans interact with the environment- they depend upon it, they modify it; and they adapt to it. The health and well-being of all humans depends upon an understanding of the interconnections and interdependence of human and physical systems.

PO 1. Identify the origin of natural resources (e.g., fish from sea, minerals from the ground, wood from trees, food from farms).

PO 2. Recognize that resources are renewable, recyclable, and non-renewable.

Concept 6: Geographic Applications
Geographic thinking (asking and answering geographic questions) is used to understand spatial patterns of the past, the present, and to plan for the future.

PO 1.   Discuss geographic concepts related to current events.

Approved 9.26.05 Updated 5.22.06

SOCIAL STUDIES STANDARD ARTICULATED BY GRADE LEVEL
KINDERGARTEN

Strand 5: Economics

The goal of the economics strand is to enable students to make reasoned judgments about both personal economic questions and broader questions of economic policy. Students will develop an economic way of thinking and problem solving to understand and apply basic economic principles to decisions they will make as consumers, members of the workforce, citizens, voters, and participants in a global marketplace. This will prepare students to weigh both short-term and long-term effects of decisions as well as possible unintended consequences. The study of economics explains historical developments and patterns, the results of trade, and the distribution of income and wealth in local, regional, national, and world economies. Students will be able to analyze current issues and public policies and to understand the complex relationships among economic, political, and cultural systems.

Concept 1: Foundations of Economics
The foundations of economics are the application of basic economic concepts and decision-making skills. This includes scarcity and the different methods of allocation of goods and services.

PO 1. Discuss different types of jobs that people do.

PO 2. Match simple descriptions of work with the names of those jobs.

PO 3. Give examples of work activities that people do at home.

PO 4. Discuss differences between needs and wants.

PO 5. Recognize various forms of U.S. currency. (Connect with: Math Strand 1 Concept 1)

PO 6.   Recognize that people use money to purchase goods and services.

Concept 2: Microeconomics
Microeconomics examines the costs and benefits of economic choices relating to individuals, markets and industries, and governmental policies.

No performance objectives at this grade.

Concept 3: Macroeconomics
Macroeconomics examines the costs and benefits of economic choices made at a societal level and how those choices affect overall economic well being.

No performance objectives at this grade.

Concept 4: Global Economics
Patterns of global interaction and economic development vary due to different economic systems and institutions that exist throughout the world.

No performance objectives at this grade

Concept 5: Personal Finance
Decision-making skills foster a person's individual standard of living. Using information wisely leads to better informed decisions as consumers, workers, investors and effective participants in society.

No performance objectives at this grade.

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i.e. - (abbreviation for *that is*) precedes a specific list of items in which all of the items should be used; i.e. examples **will** be used in a testing situation
e.g. - (abbreviation for *for example*) precedes a list of examples provided as options; other examples may be appropriate but not included; e.g. examples **may** be used in a testing situation
italicized performance objectives - a performance objective repeated verbatim from year to year; it is understood that the depth, complexity, and difficulty level developmentally match the grade level expectations

Technology Standards 2000

Readiness (Kindergarten)

Technology Education Standards Rationale

Technology encompasses the tools and strategies for solving problems, using information, increasing productivity and enhancing personal growth. The word *technology* summons an image of a variety of tools ranging from shovels to gene splitters. When asked to develop the original Technology Standards, adopted in 1997, the Committee did so without the benefit of seeing the integration of various technologies into other curricular standards. Over the past four years, significant advances in technology have occurred. These changes have caused many national organizations to review what students need to know and be able to do in relation to technology. Therefore, when asked to review the current standards, the Revision Committee examined national standards (National Educational Technology Standards, Information Power, Information Technology in Education and Technology for All Americans), along with current Arizona standards. The Revision Committee also analyzed current research on technology skills important to business and industry. The Revision Committee reviewed technology that is currently integrated into other content area standards with the vision that as other standards are revised, technology will be seamlessly integrated.

The goal is to help students live, learn and work successfully and responsibly in an increasingly complex, technology-driven society. These Technology Standards are designed to provide foundational skills and processes that students need in order to work productively and creatively in their studies, at work and at home. Research on the transfer of learning strongly supports the position that instruction and educational activities should closely parallel the final desired behavior. It is essential that technology instruction be an integral part of a student's educational experience. Education's role is to help students meet the challenge of the future. Arizona must encourage, assist and provide all students with the required tools and instruction to enable them to acquire knowledge, develop skills and apply these tools successfully in our world.

The following definition of technology is supported in this document:

Technology is the application of tools to solve problems that extend human potential for the benefit of society

TECHNOLOGY EDUCATION STANDARDS
READINESS (KINDERGARTEN)

STANDARD 1: FUNDAMENTAL OPERATIONS AND CONCEPTS
Students understand the operations and function of technology systems and are proficient in the use of technology.

- **1T-R1. Communicate about basic technology components using developmentally appropriate and accurate terminology**

    PO 1. Use basic vocabulary related to the use of technology (e.g., mouse, keyboard, monitor, toolbar, menu, window, folder, icon, spreadsheet, word processor, cassette player, CD player versus DVD versus video tape, video camera)
    PO 2. Identify the components of a computer (e.g., mouse, keyboard, monitor, CPU, printer)

- **1T-R2. Use input devices and output devices successfully to operate computers, VCRs, audiotapes, and other technologies**
    See: Workplace Skills (7WP-R1)[2]

    PO 1. Demonstrate start up and shut down procedures of basic technology components (e.g., computers, tape recorders, cassette players, VCRs)
    PO 2. Use devices to complete a task (e.g., mouse, keyboard, printer, remote control, microphone)

STANDARD 2: SOCIAL, ETHICAL AND HUMAN ISSUES
Students understand the social, ethical and human issues related to using technology in their daily lives and demonstrate responsible use of technology systems, information and software.

- **2T-R1. Work cooperatively and collaboratively when using technology in the classroom**
    See: Arts {Theatre} (1AT-R5)

    PO 1. Demonstrate respect for other students while using technology (e.g., take turns, share resources)
    PO 2. Demonstrate appropriate behavior (e.g., use only your documents and folders)

- **2T-R2. Practice responsible use of technological devices**
    See: Arts {Visual} (1AV-R6) and Social Studies (2SS-R1)

    PO 1. Operate equipment to ensure equipment is unharmed (e.g., do not bang on keys; no food or objects near equipment; care for disks and CD-ROM; use proper shut down procedures) (*See Technology IT-R2, PO1*)
    PO 2. Recognize that damaging school equipment is destroying public property
    PO 3. Recognize that changing someone's work without permission is unacceptable

TECHNOLOGY EDUCATION STANDARDS
READINESS (KINDERGARTEN)

STANDARD 3: TECHNOLOGY PRODUCTIVITY TOOLS

Students use technology tools to enhance learning, to increase productivity and creativity, and to construct technology-enhanced models, prepare publications and produce other creative works.

- **3T-R1. Use technology drawing tools for communicating and illustrating**
  See: Language Arts (R-R5, PO1 and W-R3, PO1)

    PO 1. Using a drawing program, create a picture story with support from teacher, family members or student partners
    PO 2. Using a drawing program, add name and letters to illustrations

STANDARD 4: TECHNOLOGY COMMUNICATIONS TOOLS

Building on productivity tools, students will collaborate, publish, and interact with peers, experts and other audiences using telecommunications and media.

No concepts identified for this level

STANDARD 5: TECHNOLOGY RESEARCH TOOLS

Students will utilize technology-based research tools to locate and collect information pertinent to the task as well as evaluate and analyze information from a variety of sources.

No concepts identified for this level

STANDARD 6: TECHNOLOGY AS A TOOL FOR PROBLEM SOLVING AND DECISION-MAKING

Students use technology to make and support decisions in the process of solving real-world problems.

No concepts identified for this level

Workplace Skills Standards 1997

Readiness (Kindergarten)

Workplace Skills Standards Rationale

Most students will spend more than a third of their lives in a diverse and constantly changing workplace. Regardless of personal, career, or educational plans, students must demonstrate proficiency both in academics and the following workplace standards.

The Workplace Skills Standards are designed to be integrated into the traditional curriculum taught in schools at all levels and are most effectively learned in the context of an integrated effort involving parents, educators, business partners and members of the community. Student acquisition of critical workplace skills, with an emphasis on application, is a developmental process which encompasses an individual's entire lifetime. The demonstration of these skills is essential for individuals and contributes to the foundation of an educated citizenry.

WORKPLACE SKILLS STANDARDS
READINESS (KINDERGARTEN)

STANDARD 1

Students use principles of effective oral, written and listening communication skills to make decisions and solve workplace problems.

- **1WP-R1. Follow simple directions**

   PO 1. Identify the source of a direction
   PO 2. Complete directed work

- **1WP-R2. Relate a personal experience or other information in proper sequence**

   PO 1. Recognize and distinguish between personal and other information to share
   PO 2. Communicate information with a beginning, middle and end

- **1WP-R3. Speak in complete sentences**

   PO 1. Include subject-predicate information in oral expression

STANDARD 2

Students apply computation skills and data analysis techniques to make decisions and solve workplace problems.

> *Note: The Readiness Level is central to preparation for the workplace and is adequately covered in the Mathematics Standards **document.** The Proficiency and Distinction Levels include additional references to what students need to know and do as it relates to the workplace.*

- **2M-R1. Compare and sort objects by their physical attributes**

- **2M-R2. Collect, organize and describe simple data**

- **2M-R3. Construct concrete displays of data; read and interpret elementary tables, graphs and charts**

WORKPLACE SKILLS STANDARDS
READINESS (KINDERGARTEN)

STANDARD 3

Students apply critical and creative thinking skills to make decisions and solve workplace problems.

- **3WP-R1. Share in the planning of classroom activities, specifying the goals and alternatives, and choosing the best course of action to take**

  PO 1. Participate in classroom activities
  PO 2. Select goals
  PO 3. Apply creative thinking skills to determine alternatives
  PO 4. Use critical and creative thinking skills to choose best course of action

- **3WP-R2 . Identify changing aspects of the school and community and describe the effects they have on personal decisions**

  PO 1. Describe what change is
  PO 2. Identify the characteristics of the various communities in which the child is a part (i.e., school, home, neighborhood, church, playground)
  PO 3. Compare various communities for change
  PO 4. Describe how changes in your communities affect you

STANDARD 4

Students work individually and collaboratively within team settings to accomplish objectives.

- **4WP-R1. Interact positively with other students and work cooperatively as a team member on class projects**

  PO 1. Demonstrate characteristics of positive behavior
  PO 2. Identify roles of team members
  PO 3. Interact collaboratively to obtain team results

- **4WP-R2. Demonstrate politeness and adaptability in their relations with other people**

  PO 1. Practice positive manners
  PO 2. Practice adaptability

WORKPLACE SKILLS STANDARDS
READINESS (KINDERGARTEN)

STANDARD 5

Students will demonstrate a set of marketable skills that enhance career options.

- **5WP-R1. Describe examples of where people work and what they do**

  PO 1. Describe examples of where people work and what they do

- **5WP-R2. Describe how work relates to obtaining food, clothing and shelter**

  PO 1. Describe how work relates to obtaining food, clothing and shelter

- **5WP-R3. Describe appropriate behavior for different settings (e.g., in a classroom, on a bus, in an audience)**

  PO 1. Compare behaviors for different settings

- **5WP-R4. Define the importance of the basic academic skills (reading, writing, listening, speaking and mathematics) in being successful at home and at school**

  PO 1. Describe how/when language arts skills are used within a student's various communities

STANDARD 6

Students illustrate how social, organizational and technological systems function.

  Definition: A system equals an organized framework made up of interrelated components acting together as a whole, in which a change in one component may affect the entire operation. Examples of systems are social (e.g., family, school) and technological (e.g., local area network, telephone).

- **6WP-R1. Understand the components of family and school systems in their daily life**

  PO 1. Identify systems in the community (e.g., family, school, social, technological…)

WORKPLACE SKILLS STANDARDS
READINESS (KINDERGARTEN)

STANDARD 7

Students demonstrate technological literacy for productivity in the workplace.

- **7WP-R1. Operate developmentally appropriate technologies (e.g., a telephone, VCR)**

  PO 1. Operate developmentally appropriate technologies

STANDARD 8

Students apply principles of resource management and develop skills that promote personal and professional well-being.

- **8WP-R1. Set short-term goals**

- **8WP-R2. Allocate the time, space and materials needed to accomplish classroom activities**