A national survey of state-articulated student goals and outcomes led to the analysis of documents from 25 states (including the District of Columbia) for correspondence with the outcomes specified for age 6 in the conceptual model developed by the National Center on Educational Outcomes for Students with Disabilities (NCEO). Of the 36 survey respondents, 25 states submitted documents addressing learner goals, objectives, or standards for the age 6 level. Overall, the study found a fairly high correspondence at the NCEO domain level, high to moderate correspondence at the outcome level, and moderate to weak correspondence at the indicator level, though this may have been more due to the degree of specificity used by states than a lack of conceptual congruence with the NCEO model. Charts and graphs compare the congruence at the levels of domains, outcomes, and indicators for the following states: Arkansas, California, Colorado, Delaware, District of Columbia, Florida, Hawaii, Indiana, Kansas, Kentucky, Maryland, Michigan, Nebraska, New Hampshire, New Mexico, New York, North Carolina, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Utah, Washington, and West Virginia. Reports of the document analysis done for each of these states are provided. (DB)
Matching State Goals to a Model of Outcomes and Indicators for Age 6

National Center on Educational Outcomes

The College of Education and Human Development
UNIVERSITY OF MINNESOTA

in collaboration with

St. Cloud State University and
National Association of State Directors of Special Education
Matching State Goals
to a Model of Outcomes
and Indicators for Age 6

Prepared by:
Patricia Seppanen, Nicole R. Julian, and Rod Schaefer

National Center on Educational Outcomes

The College of Education and Human Development
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August, 1995
The National Center on Educational Outcomes (NCEO) was established in October, 1990 to work with state departments of education, national policymaking groups and others to facilitate and enrich the development and use of indicators of educational outcomes for students with disabilities. It is believed that responsible use of such indicators will enable students with disabilities to achieve better results from their educational experiences. The Center represents a collaborative effort of the University of Minnesota, the National Association of State Directors of Special Education and St. Cloud State University.

The Center is supported through a Cooperative Agreement (H159C00004) with the U.S. Department of Education, Office of Special Education programs. Opinions or points of view do not necessarily represent those of the U.S. Department of Education or offices within it.

NCEO Core Staff:

Robert H. Bruininks  
Judy L. Elliott  
Ron Erickson  
Patricia Grafstrom  
Kevin S. McGrew  
Dorene L. Scott  
Patricia Seppanen  
Martha L. Thurlow  
James E. Ysseldyke

Additional copies of this report can be obtained for $20.00. Please write:

Publications Office  
NCEO  
348 Elliott Hall  
University of Minnesota  
75 East River Road  
Minneapolis, MN  
55455
Overview

In 1990, the President and Governors of the United States agreed upon six national education goals. Their purpose was to help improve the quality of education by setting high standards and focusing on how well our society is able to achieve them. The original six goals (and two others) have become part of education reform law and at least ten different standards-setting groups have been working to set out guidelines of what U.S. students should know and be able to do. The passage of the Goals 2000: Educate America Act, along with other education reform initiatives such as the School to Work Opportunity Act and the Improving America's Schools Act (the former Elementary and Secondary Education Act) are designed to further stimulate standards-based assessment and reform in schools across the nation.

States have been following closely on the heels of these national reform initiatives. Within six months of announcing the national educational goals, 18 States had announced their own versions of the goals, and within one year 44 States had done so. Many States have gone on to articulate learner outcomes, objectives, performance standards, and benchmarks/indicators. And, building on the Goals 2000 work, most States are now using language that includes all students in their educational reforms, including students with disabilities.

At the same time that these reforms were initiated, the National Center on Educational Outcomes for Students with Disabilities (NCEO) began its work by identifying a conceptual model of outcomes and indicators appropriate for all students, including students with disabilities (Figure 1). Using a multi-attribute, consensus-building approach (Vanderwood & Ysseldyke, 1993), hundreds of stakeholders from a variety of perspectives (including national reformers, special educators, school administrators, teachers, parents, measurement experts, legislators, and representatives of advocacy groups) contributed to the articulation of eight major outcome domains.

The model articulates outcomes and indicators at key stages in a student's development: age 3, age 6, grade 4, grade 8, school-completion, and post-school. In Figure 2, the specific outcomes within each domain are provided for the age 6 level. Possible indicators of each outcome have also been identified. The overall design, from domain to outcomes to indicators, is shown in Figure 3.

One of NCEO's activities is to check the extent to which there is correspondence between State articulated student outcomes and the outcomes specified in the NCEO conceptual model. This matching activity also gives us the opportunity to present an inventory of the outcomes and indicators that have been articulated by each State at the Age 6 level. We believe this information will be useful to State and local level practitioners involved in the articulation of educational goals, performance standards, assessments, and curriculum frameworks at different age and grade levels.
Figure 1. NCEO Conceptual Model of Education Outcomes
Figure 2. NCEO Outcome Domains and Outcomes at the Age 6 Level

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<thead>
<tr>
<th>OUTCOME DOMAIN</th>
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<tr>
<td>A. Presence and Participation</td>
<td>A1. Is present in school</td>
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<td>A2. Participates in group activities</td>
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<td>B. Family Involvement/</td>
<td>B1. Demonstrates involvement and support for child's needs</td>
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<tr>
<td>Accommodation and Adaptation</td>
<td>B2. Has access to resources to support the child</td>
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<td>B3. Makes adaptations, accommodations, or compensations necessary to achieve outcomes in each of the major domains</td>
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<td>C. Physical Health</td>
<td>C1. Demonstrates normal physical development</td>
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<td>C2. Has access to basic health care</td>
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<td></td>
<td>C3. Is aware of basic safety and health care needs</td>
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<td></td>
<td>C4. Is physically fit</td>
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<td>D. Responsibility and Independence</td>
<td>D1. Demonstrates age-appropriate independence</td>
</tr>
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<td></td>
<td>D2. Gets about in the environment</td>
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<tr>
<td></td>
<td>D3. Is responsible for self</td>
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<tr>
<td>E. Contribution and Citizenship</td>
<td>E1. Complies with rules, limits, and routines</td>
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<td></td>
<td>E2. Accepts responsibility for age-appropriate tasks at home and school</td>
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<td>F. Academic and Functional Literacy</td>
<td>F1. Demonstrates competence in communication</td>
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<td>F2. Demonstrates competence in problem solving</td>
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<td>F3. Demonstrates competence in pre-academic and academic skills</td>
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<td>F4. Demonstrates competence in using technology</td>
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<td>G. Personal and Social Adjustment</td>
<td>G1. Copes effectively with personal challenges, frustrations, and stressors</td>
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<td>G2. Has good self image</td>
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<td>G3. Respects cultural and individual differences</td>
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<td>G4. Gets along with other people</td>
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<td>H. Satisfaction</td>
<td>H1. Parent/guardian satisfaction with the educational services that children receive</td>
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<td></td>
<td>H2. Community satisfaction with the educational services that children receive</td>
</tr>
<tr>
<td></td>
<td>H3. Child satisfaction with educational experience</td>
</tr>
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</table>
Figure 3. Design of Domains, Outcomes, and Indicators in Model
Method

The process of matching the educational goals, outcomes, and standards adopted by States to NCEO's list of outcomes and indicators included three distinct stages.

Stage 1: Obtaining State Documents

During the Spring of 1994, we mailed letters to all Commissioners of Education or State Superintendents requesting copies of their States' most recent student outcomes, standards, or goals document(s). In the Summer of 1994, we sent out a second letter to States from which we had not received responses. At this point, we asked nonrespondents to verify whether these documents (a) have not been published at the state-level, or (b) are under development. A total of 48 States (including the District of Columbia) responded, either submitting documentation or verifying that the documentation is not available or is currently under development and not available for review. Thirty-six States submitted some type of documentation. Of the States submitting documentation, 25 included information related to goals, outcomes, standards, or indicators that could be compared to the NCEO conceptual model for Age 6.

Stage 2: Selecting Documents to Match at the Age 6 Level

States have developed various documents related to State articulated education goals, outcomes, and standards. We selected the State documents that most specifically reflected learner goals, objectives or standards, and indicators, without delving into curriculum-level materials or state assessment test items.1 When States submitted multiple types of documents, we considered them for inclusion in the mapping activity in the following priority order:

1. Statements of learner goals, objectives, outcomes, performance standards, benchmarks, and/or indicators that typically were related to state assessment systems;
2. Statements of curriculum standards or frameworks that include specific statements of learner goals, objectives, performance standards, benchmarks, or indicators;
3. Statements of state education goals;
4. Statements of educational program standards or opportunity-to-learn standards.

Only a few States target educational goals toward specific ages or grades of students. A number of States have a single set of goals that cover kindergarten through grade 12; others have clusters of age or grade related goals (e.g., K-3, 5-8, and 9-12). In many States, the grades or ages included in the cluster vary by subject or domain area.

As a result, two NCEO staff independently reviewed the documents submitted by each State to (1) select the type of document that would be used in the matching activity, and (2) specify the age or grade-levels that would be matched to the Age 6 level of the NCEO model. Discrepancies between the reviewers were resolved by group consensus, and/or review by a third individual. The document used as part of the matching activity is listed and briefly described at the beginning of each State list of goals in Chart 4.

1 Some of the terms used by States include goals, objectives, outcomes, standards, indicators, or benchmarks. We refer to them generally as state goals.
Stage 3: The Matching Process

NCEO's model is presented in three levels that become increasingly more specific: Domains, Outcomes, and Indicators. Matching was done at each of these levels in Charts 1-3. In addition, we present a listing of each State's goals that we used in the matching process in Chart 4. More specifically, the following sequence was used to complete the matching process.

State Articulated Goals: States' goals were first listed using their format as much as possible (see Chart 4). We then matched the NCEO domains, outcomes, and indicators to these State goals. Matches were first established at the domain level. If the State goal fit within the NCEO domain, a "deeper" match at the outcome and indicators levels was sought. The deepest possible match to the NCEO model is recorded in a space next to the State goal.

The Indicator Level: Using the information from Chart 4, we then reversed the process and matched the State goals to the NCEO model at all three levels: Indicator, Outcome, and Outcome Domain. If possible, matches were made first at the indicator level. If this was not possible, we then looked to match a State goal with an outcome, and then a domain. Chart 3, which shows the results of this process, contains an "X" at the deepest level of match. Thus, when an "X" appears at the domain or outcome level, the match is generally less precise than if it was at the indicator level.

The Outcome Level: If the state has one or more goals that fit under one of the NCEO outcomes (at the indicator or outcome levels), we put an "X" in the outcome box and also in the broader domain box (see Chart 2).

The Domain Level: If the State has one or more goals that fit under a specific NCEO domain (at any level), an "X" was put in the box for that domain (see Chart 1).

As is often the case in content analyses, the concepts included in state articulated goals do not provide a 1-to-1 correspondence with the concepts included in NCEO's domains, outcomes, or indicators. Thus, several decisions had to made by the reviewers. The following decisions provide an illustration of the reasoning used in the matching process.

The degree of specificity in the States' goals and the NCEO model are not always the same. Since the intent of our review was to examine the overall correspondence between State goals and the NCEO model, we sometimes match specific goals listed in the State document to an NCEO domain. A match with an NCEO domain, therefore, does not necessarily indicate the State has embraced all the NCEO outcomes and indicators within that domain.

The State goals sometimes contained more than one concept and seemed to fall under more than one NCEO domain, outcome, or indicator. In these instances, we matched the State goal to as many domains, outcomes, or indicators as seemed appropriate. Thus, the State goal Students will participate in problem-solving activities so they can use concrete models to develop an understanding of concepts of addition, subtraction, multiplication, and division matches to three NCEO outcomes or indicators: (A2c) Percent of children actively engaged in classroom activities, (F2) Demonstrates competence in problem-solving, and (F3c) Percent of children who demonstrate basic mathematical concepts.

When matching to an age-specific conceptual model (as we are doing here as we match at the Age 6 level), some ambiguity occurs. State articulated goals that encompass kindergarten through grade 12 typically contain goals not attainable by age 6. In matching State goals to the NCEO model, we tried to determine whether the antecedents to meeting the State goal were likely to have been addressed at age 6. For example, the K-12 goal Students understand the processes and interactions of Earth's systems, and the structure and dynamics of Earth and other objects in
space relies on astronomical information likely to be introduced to six year old students; thus it matches to the NCEO outcome: (F3) Demonstrates competencies in academic and preacademic skills.

Finally, NCEO's outcome indicators are written in the form of finding a percent of the number of students that meet a particular indicator. An example of an indicator is Percent of students who are physically fit. Most state goals are not written using this language. Although the form of measurement for the State goal may not be the same, the two were matched if the same general concept was discussed in both.

**General Findings**

The following general findings emerged when State goals were matched to NCEO's model at the domain level (refer to Chart 1):

- The overwhelming majority of the States that have articulated goals for students at age 6 (23 of 25) include statements that correspond to the NCEO outcome domain, Academic and Functional Literacy.
- Slightly fewer States (20) have articulated goals that correspond to the NCEO outcome domain, Personal and Social Adjustment.
- Between one-half to three-quarters of the States we examined specify goals that correspond to the following NCEO outcomes domains: Presence and Participation, Physical Health, Responsibility and Independence, and Contribution and Citizenship.
- Nearly half of the States we examined have articulated one or more goals that correspond to six of the eight NCEO domains. The two NCEO outcome domains that have been addressed by only a few states are: (1) Family Involvement/Accommodation and Adaptation, and (2) Satisfaction.

We also matched State goals to the NCEO model at the outcome level (refer to Chart 2). This analysis takes us one level "deeper" (or more specific) into the NCEO model. We examined the general degree of match between the States' goals and the overall group of outcomes within each domain. The key question we asked is: To what extent do States identify student goals that correspond to the outcomes specified within each domain of the NCEO model? The relative degree of overall match is grouped into: more than 75% of the States, 51-75%, 25-50%, and less than 25%. General findings include:

- A high proportion (more than 75%) of States specify goals that correspond to most of the outcomes under the NCEO domain, Academic and Functional Literacy. For one of the NCEO outcomes under this domain (Demonstrates competence in using technology), however, slightly fewer States (68%) specify goals that could be matched.
- A more moderate proportion of States (51-76%) articulate goals that generally correspond to at least one outcome under the following four domains:
  - Presence and Participation (outcome: Participates in group activities)
  - Physical Health (outcome: Is aware of basic safety and health care needs)
  - Responsibility and Independence (outcome: Demonstrates age-appropriate independence)
  - Personal and Social Adjustment (outcomes: Has a good self-image; Respects cultural and individual differences; Gets along with people)
The other NCEO outcomes within each of the above domains, however, correspond less frequently with State articulated goals.

- Generally, there is less of a match (32%) between State goals and the two NCEO outcomes within the domain, Contribution and Citizenship.

- Given the limited correspondence at the domain level, it is not surprising that very few States (less than 25%) articulate goals that correspond to outcomes under the following NCEO domains:
  - Family Involvement/Accommodation and Adaptation
  - Satisfaction

The NCEO model includes a number of indicators for each outcome statement. We grouped States in terms of the degree of correspondence of goals with NCEO indicators. Strong matches represent more than 75% of the States. Moderate matches represent 51-75% of the States, while weaker matches represent less than 50% of the States. General findings include:

- While there was not a strong match between State goals and any NCEO indicators, there were a number of moderate matches among indicators within the domain of Academic and Functional Literacy:
  - Percent of children who comprehend and effectively use language that accomplishes the purpose of the communication
  - Percent of children who generate, test, and evaluate solutions to concrete problems
  - Percent of children who demonstrate early literacy skills
  - Percent of children who demonstrate basic mathematical concepts
  - Percent of children who demonstrate skills in listening and attending
  - Percent of children who participate in and enjoy the arts

- Only one indicator within the NCEO domain, Personal and Social Adjustment, showed a moderate match with State goals: Percent of children who demonstrate an appropriate range of affect/emotions.

- The remaining NCEO indicators were only weakly matched to State goals. This overall lack of correspondence, however, may be due more to the level of specificity being used by States to articulate goals than a lack of conceptual congruence. We found that few States include indicator-level statements as part of their specification of education goals, outcomes, and standards. In addition, States that are currently involved in revising their standards and curriculum frameworks are focusing on the core subject areas first; the other areas will be completed in the next few years.

Reference

## States Included in the Age 6 Matching

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### Chart 1. State Matching to NCEO Model Outcome Domains

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**KEY:**

- A. Presence and Participation
- B. Family Involvement/Accommodation and Adaptation
- C. Physical Health
- D. Responsibility and Independence
- E. Contribution and Citizenship
- F. Academic and Functional Literacy
- G. Personal and Social Adjustment
- H. Satisfaction
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<td>A. Presence and Participation</td>
<td></td>
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<tr>
<td>1. Is present in school</td>
<td>X</td>
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<tr>
<td>2. Participates in group activities</td>
<td></td>
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<tr>
<td>B. Family Involvement/Accommodation and Adaptation</td>
<td>X</td>
<td></td>
<td></td>
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<tr>
<td>1. Demonstrates involvement and support for child's needs</td>
<td>X</td>
<td></td>
<td></td>
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<tr>
<td>2. Has access to resources to support child</td>
<td>X</td>
<td></td>
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<tr>
<td>3. Makes adaptations, accommodations, or compensations necessary to achieve outcomes in each of the major domains</td>
<td>X</td>
<td></td>
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<tr>
<td>C. Physical Health</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>1. Demonstrates normal physical development</td>
<td>X</td>
<td></td>
<td></td>
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<tr>
<td>2. Has access to basic health care</td>
<td>X</td>
<td></td>
<td></td>
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<tr>
<td>3. Is aware of basic safety and health care needs</td>
<td></td>
<td>X</td>
<td></td>
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<td>4. Is physically fit</td>
<td></td>
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<td>X</td>
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<td>D. Responsibility and Independence</td>
<td>X</td>
<td></td>
<td></td>
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<tr>
<td>1. Demonstrates age-appropriate independence</td>
<td>X</td>
<td></td>
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<tr>
<td>2. Gets about in the environment</td>
<td>X</td>
<td></td>
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<tr>
<td>3. Is responsible for self</td>
<td>X</td>
<td></td>
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<td></td>
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<tr>
<td>E. Contribution and Citizenship</td>
<td></td>
<td></td>
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<tr>
<td>1. Complies with rules, limits, and routines</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2. Accepts responsibility for age-appropriate tasks at home and school</td>
<td>X</td>
<td></td>
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<td>F. Academic and Functional Literacy</td>
<td>X</td>
<td></td>
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<tr>
<td>1. Demonstrates competence in communication</td>
<td>X</td>
<td></td>
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<tr>
<td>2. Demonstrates competence in problem solving</td>
<td>X</td>
<td></td>
<td></td>
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<tr>
<td>3. Demonstrates competence in preacademic skills and academic skills</td>
<td>X</td>
<td></td>
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<td>4. Demonstrates competence in using technology</td>
<td>X</td>
<td></td>
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<td>G. Personal and Social Adjustment</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>1. Copes effectively with personal challenges, frustrations, and stressors</td>
<td>X</td>
<td></td>
<td></td>
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<tr>
<td>2. Has good self-image</td>
<td>X</td>
<td></td>
<td></td>
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<tr>
<td>3. Respects cultural and individual differences</td>
<td>X</td>
<td></td>
<td></td>
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<tr>
<td>4. Gets along with other people</td>
<td>X</td>
<td></td>
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<tr>
<td>H. Satisfaction</td>
<td>X</td>
<td></td>
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<tr>
<td>1. Parent/guardian satisfaction with the educational services that children receive</td>
<td>X</td>
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<tr>
<td>2. Community satisfaction with the educational services that children receive</td>
<td>X</td>
<td></td>
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<tr>
<td>3. Child satisfaction with educational experience</td>
<td>X</td>
<td></td>
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</table>
Chart 3. State Matching to NCEO Outcome Domains, Outcomes and Indicators

| NCEO DOMAINS, OUTCOMES AND INDICATORS | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V |
| A. Presence and Participation         |   |   | X | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 1. Is present in school               |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| a. Percent of children enrolled in    |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| education programs (differentiated   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| by type of program and enrollment of |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| children with and without disabilities)|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| b. Percent of children excluded or    |   |   |   |   |   |   |   |   |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |
| terminated from programs for          |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| typically developing children         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| c. Absenteeism rate from edu-         |   | X |   | X |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| cational programs (differentiated    | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| for reasons of medical/health, family-related moves, etc. | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 2. Participates in group activities   | X | X |   | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| a. Percent of children who par-        | X | X |   | X |   | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| ticipate in family activities         | X | X |   | X |   | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| b. Percent of children participating   | X | X |   | X |   | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| in community activities (differentiated by family activities and peer activities) | X | X |   | X |   | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| c. Percent of children actively        | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| engaged in classroom activities        | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| B. Family Involvement/                |   |   | X | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Accommodation and Adaptation          |   |   | X | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 1. Demonstrates involvement and       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| support for child's needs             |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| a. Percent of families with           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| appropriate support to meet their     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| child's needs                         |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| b. Percent of families providing      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| environments supportive of their      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| child's education and learning        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| c. Percent of family members who      |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| attend or participate in school/      | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| community-based programs in which     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| their child is enrolled               |   | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| d. Percent of children whose family   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| system positively support their       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| development                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 2. Has access to resources to support | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| child                                | X | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| a. Percent of families knowledgeable  | X |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| about community resources and programs needed by their child |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

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| NCEO DOMAINS, OUTCOMES AND INDICATORS                                                                 | A | C | D | E | F | H | I | K | L | M | N | O | P | Q | R | S | T | U | V |
| b. Percent of families who are connected to appropriate service providers/agencies                   | X |    |   |    |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| c. Percent of families with adequate social and economic resources to appropriately parent children    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | X |    |    |    |    |    |
| d. Percent of families with appropriate parenting skills to anticipate and meet developmental needs of children | X |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| e. Percent of families living in safe environments (free of community and family violence, and substance abuse) |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 3. Makes adaptations, accommodations or compensations necessary to achieve outcomes in each of the major domains |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| a. Percent of children needing adaptive devices or skills who then use them to participate in activities in home, school, and community environments |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| C. Physical Health                                                                                     | X | X |    |    |    | X | X | X |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 1. Demonstrates normal physical development                                                             | X | X |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| a. Percent of children who are in expected range of growth and physical development                      | X |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| b. Percent of children with appropriate nutrition (e.g., not obese or undernourished)                   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| c. Percent of children who have been abused or neglected                                                 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| d. Percent of children who have had serious injuries that require medical attention                       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 2. Has access to basic health care                                                                      | X | X | X |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| a. Percent of children who are fully immunized                                                          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| b. Percent of children who receive care supervision including education, diagnosis, and treatment services |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| c. Percent of children who have had dental exams and appropriate treatment                              |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 3. Is aware of basic safety and health care needs                                                       | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| a. Percent of children who are aware of the dangers of abuse of drugs, alcohol, poisons, and medicine    | X | X |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| NCEO DOMAINS, OUTCOMES AND INDICATORS | A | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V |
|                                       | X | X |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| 4. Is physically fit                  |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| a. Percent of children who are in    |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| their expected range of physical     |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| fitness                              |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| b. Percent of children who actively  |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| engage in developmentally           |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| appropriate large motor play         |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| activities                           |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| D. Responsibility and Independence   |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| 1. Demonstrates age-appropriate       |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| independence                         |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| a. Percent of children who initiate   |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| and follow through on activities     |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| b. Percent of children who show      |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| concern for others, including        |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| family members                       |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| c. Percent of children who can       |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| decide when help is needed and       |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| obtain it in an emergency            |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| d. Percent of children who act in    |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| ways that reflect an understanding   |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| of the responsibilities of being     |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| part of a family or group            |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| 2. Gets about in the environment     |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| a. Percent of children who get to    |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| and from destinations within school   |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| (e.g., familiar locations)           |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| 3. Is responsible for self           |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| a. Percent of children who can feed  |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| themselves and participate           |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| appropriately in mealtime activities |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| b. Percent of children who can       |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| dress themselves                     |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| c. Percent of children who can       |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| attend to their own hygiene needs    |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| d. Percent of children who follow    |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| basic safety rules                   |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| e. Percent of children who take care |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| of their own belongings              |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| E. Contribution and Citizenship      |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| 1. Complies with rules, limits, and  |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| routines                             |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| a. Percent of children who           |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| participate in routines in            |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| familiar environments                |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| b. Percent of children who follow    |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| rules/limits                         |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| 2. Accepts responsibility for age-   |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| appropriate tasks at home and        |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
| school                               |   |   |   |   | X | X | X | X | X | X |   |   |   |   |   |   |   |   |   |   |   |   |
**NCEO DOMAINS, OUTCOMES AND INDICATORS**

<table>
<thead>
<tr>
<th>Domain</th>
<th>Outcome</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Percent of children who perform their assigned classroom duties at school</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>b. Percent of children who are considerate of others and engage in helping behaviors</td>
<td></td>
<td>X X X X X X X</td>
</tr>
<tr>
<td><strong>F. Academic and Functional Literacy</strong></td>
<td></td>
<td>X X X X X X X X X X X X X</td>
</tr>
<tr>
<td>1. Demonstrates competence in communication</td>
<td></td>
<td>X X X X X X X X X X X X X</td>
</tr>
<tr>
<td>a. Percent of children who comprehend and effectively use language that accomplishes the purpose of the communication</td>
<td></td>
<td>X X X X X X X X X X X X X</td>
</tr>
<tr>
<td>b. Percent of children who follow multi-step directions given to groups</td>
<td></td>
<td>X X X X X X X X X X X X X</td>
</tr>
<tr>
<td>2. Demonstrates competence in problem solving</td>
<td></td>
<td>X X X X X X X X X X X X X</td>
</tr>
<tr>
<td>a. Percent of children who generate, test, and evaluate solutions to concrete problems</td>
<td></td>
<td>X X X X X X X X X X X X X</td>
</tr>
<tr>
<td>b. Percent of children who demonstrate and understanding of cause and effect</td>
<td></td>
<td>X X X X X X X X X X X X X</td>
</tr>
<tr>
<td>3. Demonstrates competence in preacademic skills and academic skills</td>
<td></td>
<td>X X X X X X X X X X X X X</td>
</tr>
<tr>
<td>a. Percent of children who demonstrate early literacy skills (e.g., sequencing events, recognizing and naming letters)</td>
<td></td>
<td>X X X X X X X X X X X X X</td>
</tr>
<tr>
<td>b. Percent of children who demonstrate the ability to recognize that ideas and thoughts can be represented in oral and written language</td>
<td></td>
<td>X X X X X X X X X X X X X</td>
</tr>
<tr>
<td>c. Percent of children who demonstrate basic mathematical concepts</td>
<td></td>
<td>X X X X X X X X X X X X X</td>
</tr>
<tr>
<td>d. Percent of children who demonstrate skills in listening and attending</td>
<td></td>
<td>X X X X X X X X X X X X X</td>
</tr>
<tr>
<td>e. Percent of children who are motivated and actively involved in learning tasks</td>
<td></td>
<td>X X X X X X X X X X X X X</td>
</tr>
<tr>
<td>f. Percent of children who demonstrate knowledge of personal information (e.g., name, address, phone number)</td>
<td></td>
<td>X X X X X X X X X X X X X</td>
</tr>
<tr>
<td>g. Percent of children who participate in and enjoy the arts</td>
<td></td>
<td>X X X X X X X X X X X X X</td>
</tr>
<tr>
<td>4. Demonstrates competence in using technology</td>
<td></td>
<td>X X X X X X X X X X X X X</td>
</tr>
<tr>
<td>NCEO DOMAINS, OUTCOMES AND INDICATORS</td>
<td>A</td>
<td>C</td>
</tr>
<tr>
<td>------------------------------------------------------------</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>a. Percent of children who are able to use technology (e.g., tape recorders, computers)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>G. Personal and Social Adjustment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Copes effectively with personal challenges, frustrations, and stressors</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>a. Percent of children who deal appropriately with frustration and unfavorable events</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>b. Percent of children who express feelings and needs in socially acceptable ways</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>c. Percent of children whose behavior reflects an appropriate degree of self-control and responsibility</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2. Has good self-image</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>a. Percent of children who demonstrate or acknowledge their self-worth</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>b. Percent of children who perceive themselves as capable of learning</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>c. Percent of children who demonstrate an appropriate range of affect/emotions</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>3. Respects cultural and individual differences</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>a. Percent of children who recognize and respect similarities and differences in self and others</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>b. Percent of children who recognize and respond appropriately to how others feel and think</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>4. Gets along with other people</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>a. Percent of children who have friends and are part of a positive social network</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>b. Percent of children who interact appropriately with other children</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>c. Percent of children who interact appropriately (e.g., cooperate) with adults</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td><strong>H. Satisfaction</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Parent/guardian satisfaction with the educational services that children receive</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>a. Percent of parents/guardians who understand educational services and rate them as effective, efficient, coordinated, and responsive in meeting child needs</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>NCEO DOMAINS, OUTCOMES AND INDICATORS</td>
<td>A</td>
<td>C</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>b.</strong> Percent of parents/guardians who understand educational services and rate them as effective, efficient, coordinated, and responsive in meeting family needs</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>c.</strong> Percent of parents/guardians who are satisfied with their own level of involvement in educational decision making (differentiated by individual, local, and state)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2.</strong> Community satisfaction with the educational services that children receive</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>a.</strong> Percent of education staff who are informed of and know how to use educational support services and rate them as effective, efficient, coordinated, and responsive in meeting child needs</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>b.</strong> Percent of education staff who are informed of and know how to use educational support services and rate them as effective, efficient, coordinated, and responsive in meeting family needs</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>c.</strong> Percent of providers who are satisfied with their own level of involvement with service-related decision making and delivery of services</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>d.</strong> Percent of community (policy makers, members of the business community, general public) who understand educational services and rate them as effective, efficient, coordinated, and responsive in meeting child needs</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>e.</strong> Percent of community (policy makers, members of the business community, general public) who understand educational services and rate them as effective, efficient, coordinated, and responsive in meeting family needs</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3.</strong> Child satisfaction with educational experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>a.</strong> Percent of children who enjoy their participation in educational settings</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
Technical Report 14

Chart 4. NCEO Codes for Outcome Domains, Outcomes, and Indicators Matched to State Goals.

The following pages list the states’ goals as they appear in their own documents. For each of them, we have indentified the corresponding NCEO codes.
Documents Utilized

Draft of the Arkansas Foreign Language Curriculum Framework (September, 1993)
The Arkansas English Language Arts and Mathematics Curriculum Frameworks (1993 edition)
Draft of the Arkansas Reading Curriculum Framework (September, 1993)
Arkansas Science Curriculum Framework (1994)

Background

In 1991, the Arkansas General Assembly passed Act 236, which calls for schools to make curriculum changes that emphasize teaching students to think. In accordance to Act 236, the Arkansas Department of Education has developed curriculum frameworks that specify specific learner outcomes which are developed within particular subject areas. Frameworks describe student learning for K-4, 5-8, and 9-12. These curriculum frameworks are the basis for state-level assessments of schools.

Arkansas

FOREIGN LANGUAGE

Strand 1 LISTENING

Content Standard. Students will listen to a variety of materials for comprehension, response, evaluation, and enjoyment.

1.1 Student Learning Expectations
1. Distinguish sounds and sound patterns for meaning.
2. Recognize and respond to learned vocabulary.
3. Acquire a new vocabulary in context.
5. Listen to the language spoken by a variety of native speakers.
6. Understand predictable questions and commands in familiar topic areas.
7. Listen for a variety of purposes.

Strand 2 SPEAKING

Content Standard. Students will speak the language at appropriate levels of proficiency in a variety of situations.

2.1 Student Learning Expectations
1. Pronounce sounds, words, and phrases with correct intonation.
2. Use appropriate gestures to accompany speech.
3. Ask and answer questions.
4. Describe situations.
5. Use expressions needed for everyday situations.
6. Speak for a variety of purposes.
7. Exhibit confidence as a speaker through frequent and effective use of the language.

Strand 3 READING

Content Standard. Students will read a variety of materials for comprehension, response, evaluation, and enjoyment.
### Arkansas

<table>
<thead>
<tr>
<th>3.1 Student Learning Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Recognize and associate letters and sounds.</td>
</tr>
<tr>
<td>2 Identify cognates.</td>
</tr>
<tr>
<td>3 Identify isolated words and phrases in context.</td>
</tr>
<tr>
<td>4 Listen and respond to stories.</td>
</tr>
<tr>
<td>5 Expand vocabulary through reading.</td>
</tr>
<tr>
<td>6 Use prior knowledge to extend reading and comprehension.</td>
</tr>
<tr>
<td>7 Read individually and in groups.</td>
</tr>
<tr>
<td>8 Use reading to enhance writing.</td>
</tr>
<tr>
<td>9 Read original directed writings.</td>
</tr>
<tr>
<td>10 Read for pleasure.</td>
</tr>
</tbody>
</table>

#### Strand 4 WRITING

**Content Standard**. Students will write effectively in different modes of discourse using process writing.

<table>
<thead>
<tr>
<th>4.1 Student Learning Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Copy alphabet and familiar words.</td>
</tr>
<tr>
<td>2 List, identify, and label items.</td>
</tr>
<tr>
<td>3 Complete sentences.</td>
</tr>
<tr>
<td>4 Create questions, responses, and commands.</td>
</tr>
<tr>
<td>5 Create and dictate, individually and as a group, descriptive and narrative paragraphs.</td>
</tr>
<tr>
<td>6 Write basic descriptions and narrations.</td>
</tr>
</tbody>
</table>

**Content Standard 2**. Students will develop written products that are structurally correct.

<table>
<thead>
<tr>
<th>4.2 Student Learning Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Learn to capitalize.</td>
</tr>
<tr>
<td>2 Write sentences.</td>
</tr>
<tr>
<td>3 Copy corrected sentences.</td>
</tr>
<tr>
<td>4 Develop grammatically correct statements, questions, and commands.</td>
</tr>
</tbody>
</table>

#### Strand 5 CULTURE

**Content Standard 1**. Students will recognize, appreciate, and respond to the special characteristics, contributions, and traditions of the target culture.

<table>
<thead>
<tr>
<th>5.1 Student Learning Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Recognize that to be different is not necessarily to be better or worse.</td>
</tr>
<tr>
<td>2 Understand that social variables such as age, gender, and social class affect the way people speak and behave.</td>
</tr>
<tr>
<td>3 Recognize that there is a set of behaviors unique to a particular culture.</td>
</tr>
<tr>
<td>4 Recognize the effect of work and leisure on the culture.</td>
</tr>
<tr>
<td>5 Realize that gestures and body language are important components of communication, and that what is acceptable in one culture may be misunderstood in another.</td>
</tr>
<tr>
<td>6 Realize that the concepts of time and space vary from culture to culture.</td>
</tr>
</tbody>
</table>

**Content Standard 2**. Students will acquire a knowledge of and appreciation for the arts, history, geography, and social structure of other countries.

<table>
<thead>
<tr>
<th>5.2 Student Learning Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Listen to and respond to fairy tales and folk tales.</td>
</tr>
<tr>
<td>2 Participate in folk songs and folk dances.</td>
</tr>
<tr>
<td>3 Learn the traditions of holiday and festival celebrations.</td>
</tr>
<tr>
<td>4 Become familiar with various geographical regions where the target language is spoken.</td>
</tr>
</tbody>
</table>
Arkansas

READING

Strand 1 READING KNOWLEDGE

Content Standard. Students will use knowledge of the reading process as they construct meaning through the interaction of a variety of reader, text, and contextual conditions.

1.1 Student Learning Expectations

1. Know that the goal of reading is constructing meaning.
2. Know there are relationships between written and oral language.
3. Know that the reader's prior knowledge influences the meaning the reader gains from the text.
4. Know that reading is communication between the author and the reader.
5. Know reading strategies are tools for constructing meaning, thinking critically, and solving problems.
6. Know that features, structures, and types of text influence reading.
7. Know that different environments, tasks, and purposes influence reading.
8. Know that critical thinking broadens and deepens the understanding of what is read.
9. Know that different cultures, eras, and ideas influence reading.
10. Know that the reader, text, and context interact to influence reading.

Strand 2 READING BEHAVIOR

Content Standard. Students will use appropriate strategies to monitor and direct their reading. They will construct, examine, extend, and evaluate meaning from a variety of sources, for a variety of purposes and in a variety of contexts.

2.1 Student Learning Expectations

1. Demonstrate understanding of the relationship between written and oral language.
2. Demonstrate an understanding of the concepts of print (e.g., directionality, spacing, punctuation, etc.).
3. Use print to go about daily activities (e.g., following directions, using references, etc.).
4. Establish purposes for reading (e.g., enjoyment, learning, etc.).
5. Use major cueing systems to decode and construct meaning (e.g., phonetic, syntactic, and semantic).
6. Expand vocabulary through reading.
7. Develop fluency in both silent and oral reading.
8. Use prior knowledge to extend reading ability (e.g., word recognition and comprehension).
9. Use a variety of word recognition strategies as needed (e.g., reread sentence, read to end of a sentence, etc.).
10. Use a variety of strategies to aid comprehension, self-questioning, predicting, etc.
11. Demonstrate knowledge of different types of texts (e.g., expository and narrative).
12. Use critical thinking and problem solving strategies to integrate content from all subject matter areas.
13. Use strategies for visual organization of information (e.g., story maps, semantic mapping, charts, etc.).
14. Read independently and with others daily (e.g., sustained silent reading, shared reading, partner reading).
15. Select appropriate resource material from a variety of sources (e.g., library media centers, community and home).
16. Read and listen to a variety of literary genres from diverse cultures.
17. Respond to reading in a variety of ways (e.g., writing, retelling, art, drama, etc.).
 Arkansas

| Experiment with creative and playful language (e.g., text innovations, choral reading, etc.) | F3 |
| Use reading to enhance writing. | F3 |
| Use technological aids to support growth in reading. | F3, F4 |

### Strand 3 READING DISPOSITIONS

**Content Standard.** Students will demonstrate a willingness to use reading to continue to learn, to communicate, and to solve problems.

#### 3.1 Student Learning Expectations

1. Value reading. 
2. Develop a positive attitude toward reading and toward themselves as readers. 
3. Enjoy reading and listening to a variety of texts. 
4. Choose to read a variety of materials for a variety of purposes. 
5. Self-select reading materials from libraries and other sources. 
6. Experience a personal response to materials read. 
7. Initiate and participate in conversations about reading. 
8. Use reading to achieve goals outside the classroom. 
9. Choose reading to satisfy, extend, and expand personal interests. 
10. Choose reading as an information-gathering tool to develop informed opinions and make decisions.

### SCIENCE

#### Strand 1 SCIENTIFIC INQUIRY

**Content Standard.** Students will demonstrate an understanding of science as a process of inquiry.

#### 1.1 Student Learning Expectations

1. Follow written and oral instructions. 
2. Examine the techniques of scientific inquiry: problem solving, questioning, reasoning, creative decision making, etc. 
3. Learn about the natural world by observing, data collecting, using tools, describing and hypothesizing. 
4. Revise hypotheses by sharing and communicating observations. 
5. Understand that cultures, experiences, and prior knowledge alter logical thinking. 
6. Understand scientific investigations may produce different results under various conditions due to the discovery of new information. 
7. Communicate successfully with others about investigations and their explanations.

#### Strand 2 CONNECTIONS AND APPLICATIONS

**Content Standard.** Students will demonstrate an understanding of the connections and applications of science.

#### 2.1 Student Learning Expectations

1. Understand that science is interwoven into the structure of all disciplines. 
2. Understand that the results of problem solving by technology involve choices and risks. 
3. Recognize that mathematics is the basis of communication in science. 
4. Understand tools allow tasks to be done easier. 
5. Explore the world of work and science related careers.
Arkansas

Strand 3 PHYSICAL SYSTEMS

**Content Standard.** Students will explore, demonstrate, communicate, apply, and evaluate the knowledge of physical systems.

3.1 Student Learning Expectations

1. Recognize the differences and similarities in a between solids, liquids, and gases.
2. Understand physical properties of objects.
3. Explore measurement, data collection and reporting using appropriate tools.
4. Explore energy changes and transformations.
5. Explore tools and machines.
6. Classify simple machines and relate them to inventions and discoveries.
7. Explore the effects of applying various types of forces to an object.
8. Explore the relationships between mass/weight, force, and motion.
9. Explore types, properties, and uses of magnets.
10. Explore the relationship between magnets and electricity.
11. Recognize the importance of electricity in our society.
12. Experiment with static and current electricity.
13. Explore the relationship between vibration and sound.
14. Explore the properties of light.

Strand 4 LIFE SCIENCE SYSTEMS

**Content Standard.** Students will explore, demonstrate, communicate, apply and evaluate the knowledge of life systems.

4.1 Student Learning Expectations

1. Explore cells in organisms.
2. Explore body systems of organisms.
3. Recognize patterns and characteristics of organisms.
4. Explore the life cycles of organisms.
5. Understand that offspring are similar to their parents.
6. Understand that plants and animals have features that help them live in different environments.
7. Identify and describe the relationships of familiar organisms in a food chain or food web.
8. Explore common patterns of interdependence and interrelationships of organisms.
9. Describe use and misuse of the environment by humans.

Strand 5 EARTH/SPACE SYSTEMS

**Content Standard.** Students will explore, demonstrate, communicate, apply and evaluate knowledge of the properties of earth and space systems.

5.1 Student Learning Expectations

1. Recognize and classify different types of earth materials.
2. Describe major features of the earth's surface and how it is affected by natural changes.
3. Identify the physiographic regions of Arkansas.
4. Explore seasonal changes in weather and factors which affect weather conditions.
5. Trace the path that water follows after it falls.
6. Describe the water cycle.
7. Understand and appreciate the uses of water.
8. Explore land forms in the ocean and how they change.
9. Explore and model the features and motions of the sun, moon, earth, and other celestial bodies.
10. Describe uses and conservation of materials taken from the earth.
Arkansas

LANGUAGE ARTS

ENGLISH FRAMEWORKS

Strand 1 WRITING

Content Standard 1. Students will use writing as a means of exploring thought and as a process involving prewriting activities, drafting, receiving, feedback, revising, editing, and post-writing activities, including evaluating, publishing, and displaying.

1.1 Student Learning Expectations
1. Move from visual and spoken experiences to written language through positive modeling.
2. Understand the relationship between letters and words, words and sentences, sentences and paragraphs, and paragraphs and whole pieces.
3. Follow patterns from predictable books, poems, stories.
4. Use individual and collective strategies for finding and developing ideas about which to write.
5. Write from experiences, thoughts, and feelings.
6. Write in one or more subject areas daily.
7. Write independently on self-selected topics.
8. Write for uninterrupted periods of time.
9. Write with others.
10. Appreciate and express cultural diversity in writing.
11. Respect the points of view and writing of others.
12. Use the responses of others to review writing for clarity, style, and content.
14. Use computers and other available technology to write and revise texts.
15. Publish writing in a variety of ways such as class anthologies, public readings, newsletters, newspapers, bulletin boards, sharing with others, books.

Content Standard 2. Students with appropriate instruction will write in different modes of discourse for a variety of audiences and purposes.

1.2 Student Learning Expectations
1. Write a variety of modes such as notes, stories, poems, letters, interview, journals.
2. Write for a variety of audiences such as peers, parents, teachers, community.
3. Write for a variety of purposes such as to persuade, enjoy, entertain, learn, inform, record, respond to reading, solve problems.

Content Standard 3. Students will develop final written products which conform to conventional standards.

1.3 Student Learning Expectations
1. Accept responsibility for completing writing tasks.
2. Edit writing for developmentally appropriate spelling, usage, mechanics, grammar, vocabulary, and handwriting.
3. Develop a collection of writings.

Strand 2 READING

Content Standard 1. All students will read to comprehend, respond to, evaluate, and appreciate works of literature and other kinds of writing which reflect their own cultures and viewpoints as well as those of others.

2.1 Student Learning Expectations
1. Listen and respond to whole texts in a variety of literary genres from diverse cultures.
2. Understand and use print concepts such as directionality, spacing, and configuration in developmentally appropriate ways.
## Arkansas

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Establish purposes for reading such as enjoying, learning, modeling, sharing, performing, investigating, and solving problems.</td>
</tr>
<tr>
<td>4</td>
<td>Recognize and associate letters and sounds.</td>
</tr>
<tr>
<td>5</td>
<td>Use knowledge of letter and sound correspondences to decode words.</td>
</tr>
<tr>
<td>6</td>
<td>Use relationships between words and sentences, sentences and paragraphs, and paragraphs and whole pieces to understand texts.</td>
</tr>
<tr>
<td>7</td>
<td>Use phonetic, syntactic, and contextual clues to construct meaning.</td>
</tr>
<tr>
<td>8</td>
<td>Use prior knowledge to extend reading ability and comprehension.</td>
</tr>
<tr>
<td>9</td>
<td>Use specific strategies such as making comparisons, predicting outcomes, drawing conclusions, identifying the main ideas, understanding cause and effect to comprehend a variety of literary genres from diverse cultures and time periods.</td>
</tr>
<tr>
<td>10</td>
<td>Understand that texts have different purposes such as persuading, informing, entertaining, and instructing.</td>
</tr>
<tr>
<td>11</td>
<td>Read for uninterrupted periods of time daily.</td>
</tr>
<tr>
<td>12</td>
<td>Read with others.</td>
</tr>
<tr>
<td>13</td>
<td>Expand vocabulary through reading.</td>
</tr>
<tr>
<td>14</td>
<td>Use reading to enhance writing.</td>
</tr>
<tr>
<td>15</td>
<td>Select appropriate reading material from library media centers.</td>
</tr>
<tr>
<td>16</td>
<td>Read more than one work by a single author.</td>
</tr>
<tr>
<td>17</td>
<td>Use strategies such as keeping reading logs, conferences with teacher, discussions with other readers, for monitoring progress in reading.</td>
</tr>
</tbody>
</table>

### Content Standard 2. Students will read independently for a wide range of goals and purposes.

#### Student Learning Expectations

1. Read for personal reasons such as pleasure, to model, for information, to arrive at specific answers to self-generated questions.
2. Select their own reading materials such as newspapers, magazines, and reference materials from libraries and other sources.
3. Initiate and participate in conversations about reading.
4. Re-read to revise understanding of written texts.
5. Use reading to achieve goals outside the classroom.
6. Use reading skills to understand other media such as television and film.

### Strand 3 SPEAKING

#### Content Standard 1. Students will develop communication skills through a variety of formal and informal speaking opportunities which are integrated into the language arts curriculum.

#### Student Learning Expectations

1. Share ideas in discussion, conversation, and presentation.
2. Respond to the thoughts and feelings of others in culturally appreciative ways.
3. Contribute to class and small group discussions.
4. Express thoughts and feelings in complete sentences.
5. Tell and retell stories from writing, reading, and pictures.
6. Participate in collaborative speaking activities such as choral reading, plays, reciting poems.
7. Read orally with meaning and expression.
9. Make and respond to introductions.
10. Summarize and paraphrase ideas of others.
11. Talk with others to solve and resolve problems.
12. Use available technology to enhance and evaluate oral performances and presentations.
13. Participate in discussions by alternating the roles of speaker and listener.
Arkansas

14 Present work completed in subject areas to large and small groups in and out of the classroom for appreciation and discussions.
15 Talk about current events.

**Content Standard Number 2.** Students will develop organizational strategies and oral usage appropriate to a variety of situations.

3.2 Student Learning Expectations
1 Speak to a variety of audiences in a variety of places for a variety of reasons.
2 Recognize when audiences do not understand the message and adapt speaking to clarify.
3 Use grammatical forms appropriate to particular audiences.
4 Use clear, concise, organized language in speaking situations.
5 Give immediate, respectful, detailed feedback to a variety of speakers.
6 Receive and use constructive feedback to improve speaking abilities.

**Strand 4 LISTENING**

**Content Standard.** Students will learn in meaningful contexts the listening skills they need to succeed academically, socially, and professionally.

4.1 Student Learning Expectations
1 Listen for a variety of purposes such as enjoyment, information, and details.
2 Listen to discriminate sounds.
3 Listen courteously to a variety of speakers.
4 Listen selectively and attentively.
5 Listen to reinforce and extend learning through the use of technology.
6 Listen to improve reading, oral, and written performance.
7 Develop strategies such as asking relevant questions, taking notes, and making predictions for understanding what is heard.
8 Listen to follow directions sequentially.
9 Appreciate and respond to artistic performances, both verbal and musical.

**MATHEMATICS**

**Strand 1 NUMBER SENSE, PROPERTIES, AND OPERATIONS**

**Content Standard 1.** The student will understand properties of numbers and operations.

1.1 Student Learning Expectations
1 Construct number meanings through real-world experiences using manipulatives.
2 Develop meaning for the operations by modeling and discussing a variety of problem situations.
3 Apply and master counting, grouping, and place value.
4 Relate the mathematical language and symbolism of operations to problem situations and to informal language.
5 Develop competency with whole number computation with and without technology.
6 Explore rational numbers.

**Content Standard 2.** The students will demonstrate an understanding of numbers and numerical relationships and their application to real-world situations.

1.2 Student Learning Expectations
1 Represent numbers and operations in a variety of equivalent forms using manipulatives, diagrams, and symbols.
2 Demonstrate an understanding of elementary number theory.
3 Apply computation and estimation to real-world problems.
### Strand 2  GEOMETRY

**Content Standard 1.** Students will explore, demonstrate, communicate, and apply knowledge of the properties of geometric shapes.

<table>
<thead>
<tr>
<th>2.1 Student Learning Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Explore and construct geometric shapes using a variety of manipulative materials.</td>
</tr>
<tr>
<td>2. Visualize, describe, model, draw, compare, and classify shapes in one, two, and three dimensions.</td>
</tr>
</tbody>
</table>

**Content Standard 2.** Students will demonstrate an understanding of geometric relationships allowing them to use geometry to connect mathematics to their world.

<table>
<thead>
<tr>
<th>2.2 Student Learning Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Classify figures in terms of geometric relationships.</td>
</tr>
<tr>
<td>2. Explore the relationship between a figure and its image under a transformation.</td>
</tr>
<tr>
<td>3. Explore and predict the results of combining, subdividing, and changing shapes.</td>
</tr>
<tr>
<td>4. Demonstrate spatial awareness (size, direction, and position in space).</td>
</tr>
<tr>
<td>5. Explore geometric concepts using manipulatives and technology.</td>
</tr>
</tbody>
</table>

**Content Standard 3.** Students will be able to solve problems that involve geometry and its application to other topics in mathematics or to other fields.

<table>
<thead>
<tr>
<th>2.3 Student Learning Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Relate geometry to number and measurement.</td>
</tr>
<tr>
<td>2. Use logic to establish and explain relationships involving geometric patterns and concepts.</td>
</tr>
<tr>
<td>3. Use manipulatives and technology in problem solving.</td>
</tr>
<tr>
<td>4. Communicate using the language of geometry.</td>
</tr>
</tbody>
</table>

### Strand 3  MEASUREMENT

**Content Standard 1.** The student will use measurement attributes (length, capacity, weight, mass, area, volume, time, money, temperature, scale, and angle) to describe and compare mathematical and real-world objects.

<table>
<thead>
<tr>
<th>3.1 Student Learning Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Explore and demonstrate an understanding of the concept of comparison.</td>
</tr>
<tr>
<td>2. Compare objects with respect to given attributes.</td>
</tr>
<tr>
<td>3. Select and use appropriate units of measure.</td>
</tr>
<tr>
<td>4. Convert from one measurement to another within the same system (customary or metric).</td>
</tr>
</tbody>
</table>

**Content Standard 2.** The student will demonstrate the appropriate use of measuring instruments.

<table>
<thead>
<tr>
<th>3.2 Student Learning Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Select and use appropriate standard and nonstandard measurement instruments.</td>
</tr>
</tbody>
</table>

**Content Standard 3.** The student will apply measurement concepts to solve problems.

<table>
<thead>
<tr>
<th>3.3 Student Learning Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Make and use measurements in problem situations.</td>
</tr>
<tr>
<td>2. Use manipulatives and technology.</td>
</tr>
<tr>
<td>3. Make and use estimates of measurement.</td>
</tr>
</tbody>
</table>
Strand 4 DATA ANALYSIS, STATISTICS, AND PROBABILITY

**Content Standard 1.** The student will be actively involved in each of the steps that comprise data analysis from gathering information to communicating results.

<table>
<thead>
<tr>
<th>Student Learning Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Recognize the need to collect data.</td>
</tr>
<tr>
<td>2. Collect and organize data.</td>
</tr>
<tr>
<td>3. Display data using appropriate tables and graphs.</td>
</tr>
<tr>
<td>4. Use the language of statistics to read and communicate data.</td>
</tr>
<tr>
<td>5. Make predictions and convincing arguments that are based on data analysis.</td>
</tr>
</tbody>
</table>

**Content Standard 2.** The student will explore probability models through experiments and simulations.

<table>
<thead>
<tr>
<th>Student Learning Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Use manipulatives to explore the concepts of chance and record the results.</td>
</tr>
<tr>
<td>2. Use technology.</td>
</tr>
</tbody>
</table>

**Content Standard 3.** The student will use probability and statistical concepts in problem solving and decision making situations.

<table>
<thead>
<tr>
<th>Student Learning Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Generalize and interpret experimental results and use data to make inferences, predictions, and/or decisions in the real world.</td>
</tr>
<tr>
<td>2. Use informal measures of central tendency and dispersion to interpret data.</td>
</tr>
<tr>
<td>3. Use technology.</td>
</tr>
</tbody>
</table>

Strand 5 ALGEBRAIC FUNCTIONS

**Content Standard 1.** The student will use the language of algebra as a representational tool.

<table>
<thead>
<tr>
<th>Student Learning Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sort and classify a wide variety of materials.</td>
</tr>
<tr>
<td>2. Recognize, describe, extend, and create a wide variety of patterns.</td>
</tr>
<tr>
<td>3. Transform patterns from models to symbolic representations.</td>
</tr>
<tr>
<td>4. Demonstrate knowledge of equality and inequality using manipulatives and symbols.</td>
</tr>
<tr>
<td>5. Explore the language of variables using manipulatives and express as open sentences.</td>
</tr>
<tr>
<td>6. Use graphic representations to express mathematical relationships in one and two dimensions.</td>
</tr>
<tr>
<td>7. Use technology to create patterns.</td>
</tr>
</tbody>
</table>

**Content Standard 2.** The student will use algebraic concepts to model, solve, and test solutions to mathematical and real-world problems.

<table>
<thead>
<tr>
<th>Student Learning Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Use manipulatives to recognize, extend, and create a wide variety of patterns.</td>
</tr>
<tr>
<td>2. Extend patterns and record symbolically.</td>
</tr>
<tr>
<td>3. Explore and demonstrate knowledge of the concepts of variables using manipulatives.</td>
</tr>
</tbody>
</table>
California

Documents Utilized

Foreign Language Framework for California Public Schools Kindergarten through Grade Twelve (1989)
Mathematics Framework for California Public Schools Kindergarten through Grade Twelve (1992)
Health Framework for California Public Schools Kindergarten through Grade Twelve (1992)
English - Language Arts Framework for California Public Schools Kindergarten through Grade Twelve (1987)
History - Social Science Framework for California Public Schools Kindergarten through Grade Twelve (1987)
Physical Education Framework for California Public Schools Kindergarten through Grade Twelve (1994)
Science Framework for California Public Schools Kindergarten through Grade Twelve (1990)

Note: California also has a Visual and Performing Arts Framework; however, we had not received a copy at the date of publication and were unable to match to this subject area.

Background

Reform efforts during the late 1980s and early 1990s in California focused on upgrading the curriculum and strengthening graduation requirements. The curriculum frameworks, published by the California State Board of Education, were developed in a separate process for each subject area and are in the process of being updated. All of the frameworks describe student learning at specific grade levels, typically K-4, 5-8, and 9-12. The frameworks are voluntary; but they are tied to the statewide assessment system, textbook adoption, and professional development. They were developed by leading educators throughout the state and are to be used by local schools as guidelines.

California

HEALTH

GRADES K-3

Unifying Idea: Acceptance of personal responsibility for lifelong health.

Expectations:
Students will demonstrate ways in which they can enhance and maintain their health and well-being.
Students will demonstrate behaviors that prevent disease and speed recovery from illness.
Students will practice behaviors that reduce the risk of becoming involved in potentially dangerous situations in ways that help to protect their health.

Unifying Idea: Respect for and promotion of the health of others.

Expectations:
Students will play a positive, active role in promoting the health of their families.
Students will promote positive health practices within the school and community, including developing positive relationships with their peers.

Unifying Idea: An understanding of the process of growth and development.

Expectations:
Students will understand the variety of physical, mental, emotional, and social changes that occur throughout life.
Students will understand and accept individual differences in growth and development.

MATHEMATICS

NCTM STANDARDS FOR THE ELEMENTARY GRADES

Standard 1: Mathematics and Problem Solving
In kindergarten through grade four, the study of mathematics should emphasize problem solving so that students can:
Use problem-solving approaches to investigate and understand mathematical content.
Formulate problems from everyday and mathematical situations.
Develop and apply strategies to solve a wide variety of problems.
Verify and interpret results with respect to the original problem.
Acquire confidence in using mathematics meaningfully.

Standard 2: Mathematics as Communication
In kindergarten through grade four, the study of mathematics should include numerous opportunities for communication so that students can:
Relate physical materials, pictures, and diagrams to mathematical ideas.
Reflect on and clarify their thinking about mathematical ideas and situations.
Relate their everyday language to mathematical language and symbols.
Realize that representing, discussing, reading, writing, and listening to mathematics are a vital part of learning and using mathematics.

Standard 3: Mathematics as Reasoning
In kindergarten through grade four, the study of mathematics should emphasize reasoning so that students can:
Draw logical conclusions about mathematics.
Use models, known facts, properties, and relationships to explain their thinking.
Justify their answers and solution processes.
Use patterns and relationships to analyze.

Standard 4: Mathematical Connections
In kindergarten through grade four, the study of mathematics should include opportunities to make connections so that students can:
Link conceptual and procedural knowledge.
Relate various representations of concepts or procedures to one another.
Recognize relationships among different topics in mathematics.
Use mathematics in other curricular areas.
Use mathematics in their daily lives.

Standard 5: Estimation
In kindergarten through grade four, the mathematics curriculum should include estimation so students can:
<table>
<thead>
<tr>
<th>Standard 6: Number Sense and Numeration</th>
<th>NCCEOLCODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>In kindergarten through grade four, the mathematics curriculum should include whole number concepts and skills so that students can:</td>
<td>F3c</td>
</tr>
<tr>
<td>Construct number meanings through real-world experiences and the use of physical materials.</td>
<td>F3c</td>
</tr>
<tr>
<td>Understand the numeration system by relating counting, grouping, and place-value concepts.</td>
<td>F3c</td>
</tr>
<tr>
<td>Develop number sense.</td>
<td>F3c</td>
</tr>
<tr>
<td>Interpret the multiple uses of numbers encountered in the real world.</td>
<td>F3c</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Standard 7: Concepts of Whole Number Operations</th>
<th>NCCEOLCODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>In kindergarten through grade four, the mathematics curriculum should include concepts of addition, subtraction, multiplication, and division of whole numbers so that students can:</td>
<td>F3c</td>
</tr>
<tr>
<td>Develop meaning for the operations by modeling and discussing a rich variety of problem situations.</td>
<td>F3c</td>
</tr>
<tr>
<td>Relate the mathematical language and symbolism of operations to problems of informal language.</td>
<td>F3c</td>
</tr>
<tr>
<td>Recognize that a wide variety of problem structures can be represented by a single operation.</td>
<td>F3c</td>
</tr>
<tr>
<td>Develop operation sense.</td>
<td>F3c</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Standard 8: Whole Number Computation</th>
<th>NCCEOLCODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>In kindergarten through grade four, the mathematics curriculum should develop whole number computation so that students can:</td>
<td>F3c</td>
</tr>
<tr>
<td>Model, explain, and develop reasonable proficiency with basic facts and algorithms.</td>
<td>F3c</td>
</tr>
<tr>
<td>Use a variety of mental computation and estimation techniques.</td>
<td>F3c, F4a</td>
</tr>
<tr>
<td>Use calculators in appropriate computation situations.</td>
<td>F3c</td>
</tr>
<tr>
<td>Select and use computation techniques appropriate to specific problems and determine whether the results are reasonable.</td>
<td>F3c</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Standard 9: Geometry and Spatial Sense</th>
<th>NCCEOLCODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>In kindergarten through grade four, the mathematics curriculum should include two-dimensional and three-dimensional geometry so that students can:</td>
<td>F3c</td>
</tr>
<tr>
<td>Describe, model, draw, and classify shapes.</td>
<td>F3c</td>
</tr>
<tr>
<td>Investigate and predict the results of combining, subdividing, and changing shapes.</td>
<td>F3c</td>
</tr>
<tr>
<td>Develop spatial sense.</td>
<td>F3c</td>
</tr>
<tr>
<td>Relate geometric ideas to number and measurement ideas.</td>
<td>F3c</td>
</tr>
<tr>
<td>Recognize and appreciate geometry in their world.</td>
<td>F3c</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Standard 10: Measurement</th>
<th>NCCEOLCODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>In kindergarten through grade four, the mathematics curriculum should include measurement so that students can:</td>
<td>F3c</td>
</tr>
<tr>
<td>Understand the attributes of length, capacity, weight, area, volume, time, temperature, and angle.</td>
<td>F3c</td>
</tr>
<tr>
<td>Develop the process of measuring and concepts related to units of measurement.</td>
<td>F3c</td>
</tr>
<tr>
<td>Make and use estimates of measurement.</td>
<td>F3c</td>
</tr>
<tr>
<td>Make and use measurements in problem and everyday situations.</td>
<td>F3c</td>
</tr>
</tbody>
</table>
**California**

**Standard 11: Statistics and Probability**
In kindergarten through grade four, the mathematics curriculum should include experiences with data analysis and probability so that students can:
- Collect, organize, and describe data.
- Construct, read, and interpret displays of data.
- Formulate and solve problems that involve collecting and analyzing data.
- Explore concepts of chance.

**Standard 12: Fractions and Decimals**
In kindergarten through grade four, the mathematics curriculum should include fractions and decimals so that students can:
- Develop concepts of fractions, mixed numbers, and decimals.
- Develop number sense for fractions and decimals.
- Use models to relate fractions to decimals and to find equivalent fractions.
- Use models to explore operations on fractions and decimals.
- Apply fractions and decimals to problem situations.

**Standard 13: Patterns and Relationships**
In kindergarten through grade four, the mathematics curriculum should include the study of patterns and relationships so that the student can:
- Recognize, describe, extend, and create a wide variety of patterns.
- Represent and describe mathematical relationships.
- Explore the use of variables and open sentences to express relationships.

**FOREIGN LANGUAGE**

**INSTRUCTION IN ENGLISH AS A SECOND LANGUAGE**

**Goals of Instructional Programs**

Students who successfully complete instruction in English as a second language should be able to:
- Function well enough in English to be successful in programs designed for native speakers of English.
- Function successfully in the general school curriculum as appropriate for age, ability, and experience.
- Demonstrate continuous progress without special instruction in English.
- Demonstrate improved self-confidence and self-esteem in both an English-speaking environment and in their native-language environment.

**COMPETENCY LEVELS**

**Listening**
- **Novice**: Understands learned material at an elementary level.
- **Intermediate**: Understands routine speech and conversations.
- **Advanced**: Understands main ideas and details of many kinds of presentations.
- **Superior**: Understands all standard speech, including idioms and subtleties.
- **Distinguished**: Understands all forms and styles of speech.

**Reading**
- **Novice**: Recognizes alphabet and understands learned and written material.
- **Intermediate**: Understands main ideas, facts, and narratives in textbooks dealing with everyday matters.
Advanced: Understands simple stories, news, letters, and technical textbooks of a general nature.
Superior: Reads prose, literature, and so forth on a great variety of topics at a normal speed.
Distinguished: Reads any written material and understands content, intent, cultural references, and so forth.

Conversation
Novice: Communicates learned material at an elementary level.
Intermediate: Participates in basic communication tasks; combines and recombines basic speech elements.
Advanced: Maintains extended conversations; satisfies work and school needs; handles unforeseen problems.
Superior: Communicates in most formal and informal situations, including abstract matters; can hypothesize and so forth.
Distinguished: Communicates on a professional level; can tailor speech to audience, can negotiate, persuade, interpret, and so forth.

Writing
Novice: Can copy, transcribe, and write learned material.
Intermediate: Writes short messages and simple letters; takes notes, writes simple summaries.
Advanced: Writes narratives, descriptions, business correspondence, résumés, and summaries.
Superior: Expresses self in formal and informal writing; does research papers; writes on professional topics.
Distinguished: Writes with precision; can represent a point of view; tailors writing to audience.

Culture
Novice: Aware of stereotypes; handles cultural dimensions of everyday activities.
Intermediate: Perceives cultural differences and recognizes points of misunderstanding; handles aspects of more complex situations.
Advanced: Demonstrates important cultural behaviors; knows how misunderstandings arise; handles personal relationships and historical references.
Superior: Handles most native customs, values, and attitudes in most social and professional situations.
Distinguished: Near-native proficiency in sensitivity to values, beliefs, geographical differences, and historical conditioning.

Content/Vocabulary
Novice: Understands 800 to 1,600 words; uses 300 to 600 words; frequently encounters basic everyday topics.
Intermediate: Understands 1,000 to 3,000 words; uses 600 to 1,000 words; frequently encounters general topics.
Advanced: Understands 2,400 to 4,500 words; uses 1,200 to 2,000 words; expands topics to business, politics, and social arrangements.
Superior: Understands 3,500 to 6,000 words; uses 2,000 to 3,000 words; expands topics to more abstract areas of feeling, emotions, personality, and so forth.
Distinguished: Near-native ability in topics and vocabulary handled.
California

Accuracy
Accuracy constitutes the degree of control students have over such aspects as grammar, word choice, cultural appropriateness, graphics, comprehension, and so forth. Accuracy becomes most crucial at any level when errors result in miscommunication. Specific accuracy concerns for each stage of competency development can be found in other publications.

Competency
Competency is the degree of skill in using all components as integrated acts of communication.

SCIENCE

PHYSICAL SCIENCES

Section A: Matter
1. What is matter, and what are its properties? F3
2. What are the basic units of matter, and where did matter come from? F3
3. What principles govern the interactions of matter? How does chemical structure determine the physical properties of matter? F3

Section B: Reactions and Interactions
1. What happens when substances change? F3
2. What controls how substances change? F3

Section C: Force and Motion
1. What is motion? What are some basic kinds of motion? How is motion described? F3
2. What is force? What are the characteristics of forces? What is the relationship of force to motion? F3
3. What are machines, and what do they do? What principles govern their action? F3

Section D: Energy: Sources and Transformations
1. What is energy? What are its characteristics? F3
2. What do we do with energy? What changes occur as we use it? F3

Section E: Energy: Heat
1. What is heat energy? Where does it come from, and what are its properties? F3
2. How do we use heat energy? F3

Section F: Energy: Electricity and Magnetism
1. What are electricity and magnetism? What are they like, and what are their basic properties? How do they interact? F3
2. How do we use electricity and magnetism? F3

Section G: Energy: Light
1. How does light enable us to see? What are the sources of light? What is light? F3
2. What are the properties of light? F3
3. How do we use light? F3

Section H: Energy: Sound
1. Where does sound come from? What are its sources? How can sound be described? F3
## California

| 2. How does sound enable us to hear? How do we produce sounds? | F3 |
| 3. How do we use sound? | F3 |

### EARTH SCIENCES

#### Section A: Astronomy
1. What kinds of objects does the universe contain, and how do these objects relate to one another?
2. How has the universe evolved?
3. How do we learn about the contents and structure of the universe?

#### Section B: Geology and Natural Resources
1. How has plate tectonics shaped the evolution of the earth?
2. How are rocks and minerals formed, how are they distinguished, and how are they classified?
3. What is the history of the earth, and how have geomorphic processes shaped the earth’s present features?
4. What are the responsibilities of humans toward natural resources?

#### Section C: Oceanography
1. What is the water cycle? How does water the cycle affect the climate, weather, and life of the earth? How does water affect surface features of the land and the ocean floor?
2. What are the oceans? What are the environments and topography of the ocean bottoms? How do the oceans support life, and how have the oceans and their marine life changed through time?
3. How do waters circulate in the ocean, and how does this circulation affect weather and climate?
4. How do humans interact with the oceans? What may be some long-term effects of human interactions with the oceanic environments?

### LIFE SCIENCES

#### Section A: Living Things
1. What are the characteristics of living things?
2. How do the structures of living things perform their functions, interact with each other, and contribute to the maintenance and growth of the organism?
3. What are the relationships of living organisms, and how are living things classified?
4. How do humans interact with other living things?

#### Section B: Cells, Genetics, and Evolution
[Note: In this section, the term *cells* includes the general areas of cellular and molecular biology, as well as biochemical topics covered in high school biology. Cells also includes general histological and structural features of tissue and organ systems, as well as cellular parts and components in one-celled and multi-celled organisms. *Genetics* includes genetic structure and developmental processes. *Evolution* includes population genetics, evolutionary biology, and paleontology.]

1. What are cells? What are their component structures and their functions? How do they grow? What is the biochemical basis of life and of metabolism?
2. How are the characteristics of living things passed on through generations? How does heredity determine the development of individual organisms?
3. How has life changed and diversified through time? What processes and patterns characterize the evolution of life?
Section C: Ecosystems
1. What are ecosystems, and how do organisms interact in ecosystems?
2. How does energy flow within an ecosystem?
3. How do ecosystems change?
4. What are the responsibilities of humans toward ecosystems?

PHYSICAL EDUCATION

Goal: Movement Skills and Movement Knowledge
Disciplines:
- Motor learning
- Biomechanics
- Exercise physiology and health-related physical fitness

Goal: Self-Image and Personal Development
Disciplines:
- Human growth and development
- Psychology
- Aesthetics

Goal: Social Development
Disciplines:
- Sociology
- Historical perspectives

LANGUAGE ARTS

The overarching goals of the English-Language Arts curriculum are:
- To prepare all students to function as informed and effective citizens in our democratic society.
- To prepare all students to function effectively in the world of work.
- To prepare all students to realize personal fulfillment.

HISTORY AND SOCIAL SCIENCE

GOAL OF KNOWLEDGE AND CULTURAL UNDERSTANDING

Historical Literacy
- Develop a keen sense of historical empathy.
- Understand the meaning of time and chronology.
- Analyze cause and effect.
- Understand the reasons for continuity and change.
- Recognize history as common memory with political implications.
- Understand the importance of religion, philosophy, and other major belief systems in history.

Ethical Literacy
- Recognize the sanctity of life and the dignity of the individual.
- Understand the ways in which different societies have tried to resolve ethical issues.
- Understand that the ideas people profess affect their behavior.
- Realize that concern for ethics and human rights is universal and represents the aspirations of men and women in every time and place.
<table>
<thead>
<tr>
<th><strong>California</strong></th>
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<tbody>
<tr>
<td><strong>Cultural Literacy</strong></td>
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</tr>
<tr>
<td>Understand the rich, complex nature of a given culture—its history, geography, politics, literature, art, drama, music, dance, law, religion, philosophy, architecture, technology, science, education, education, sports, social structure, and economy.</td>
<td>F3, G3</td>
</tr>
<tr>
<td>Recognize the relationships among the various parts of a nation’s cultural life.</td>
<td>F3</td>
</tr>
<tr>
<td>Learn about the mythology, legends, values, and beliefs of a people.</td>
<td>G3</td>
</tr>
<tr>
<td>Recognize that literature and art reflect the inner life of a people.</td>
<td>F3</td>
</tr>
<tr>
<td>Develop a multicultural perspective that respects the dignity and worth of all people.</td>
<td>G3</td>
</tr>
<tr>
<td><strong>Geographic Literacy</strong></td>
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</tr>
<tr>
<td>Develop an awareness of place.</td>
<td>F3</td>
</tr>
<tr>
<td>Develop location skills and understanding.</td>
<td>F3</td>
</tr>
<tr>
<td>Understand human and environmental interaction.</td>
<td>F3</td>
</tr>
<tr>
<td>Understand human movement.</td>
<td>F3</td>
</tr>
<tr>
<td>Understand world relationships and their historical, cultural, economic, and political characteristics.</td>
<td>F3</td>
</tr>
<tr>
<td><strong>Economic Literacy</strong></td>
<td></td>
</tr>
<tr>
<td>Understand the basic economic problems confronting all societies.</td>
<td>F3</td>
</tr>
<tr>
<td>Understand comparative economic systems.</td>
<td>F3</td>
</tr>
<tr>
<td>Understand the basic economic goals, performance, and problems of our society.</td>
<td>F3</td>
</tr>
<tr>
<td>Understand the international economic system.</td>
<td>F3</td>
</tr>
<tr>
<td>Understand the close relationship between social and political systems.</td>
<td>F3</td>
</tr>
<tr>
<td>Understand the close relationship between society and the law.</td>
<td>F3</td>
</tr>
<tr>
<td>Understand comparative political systems.</td>
<td>F3</td>
</tr>
<tr>
<td><strong>GOAL OF DEMOCRATIC UNDERSTANDING AND CIVIC VALUES</strong></td>
<td></td>
</tr>
<tr>
<td><strong>National Identity</strong></td>
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<tr>
<td>Recognize that American society is now and always has been pluralistic and multicultural.</td>
<td>F3</td>
</tr>
<tr>
<td>Understand the American creed as an ideology extolling equality and freedom.</td>
<td>F3</td>
</tr>
<tr>
<td>Recognize the status of minorities and women in different times in American history.</td>
<td>F3</td>
</tr>
<tr>
<td>Understand the unique experiences of immigrants from Asia, the Pacific islands, and Latin America.</td>
<td>F3</td>
</tr>
<tr>
<td>Understand the special role of the United States in world history as a nation of immigrants.</td>
<td>F3</td>
</tr>
<tr>
<td>Realize that true patriotism celebrates the moral force of the American idea as a nation that unites as one people the descendants of many cultures, races, religions, and ethnic groups.</td>
<td>F3</td>
</tr>
<tr>
<td><strong>Constitutional Heritage</strong></td>
<td></td>
</tr>
<tr>
<td>Understand the basic principles of democracy.</td>
<td>E, F3</td>
</tr>
<tr>
<td>Understand the historical origins of basic constitutional concepts such as representative government, separation of powers, and trial by jury.</td>
<td>F3</td>
</tr>
<tr>
<td><strong>Civic Values, Rights, and Responsibilities</strong></td>
<td></td>
</tr>
<tr>
<td>Understand what is required of citizens in a democracy.</td>
<td>E, F3</td>
</tr>
<tr>
<td>Understand individual responsibility for the democratic system.</td>
<td>E, F3</td>
</tr>
<tr>
<td><strong>GOAL OF SKILLS ATTAINMENT AND SOCIAL PARTICIPATION</strong></td>
<td></td>
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<tr>
<td><strong>Participation Skills</strong></td>
<td></td>
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<tr>
<td>Develop personal skills.</td>
<td>G</td>
</tr>
</tbody>
</table>
Technical Report 14

California

Develop group interaction skills.
Develop social and political participation skills.

Critical Thinking Skills
Define and clarify problems.
Judge information related to a problem.
Solve problems and draw conclusions.

Basic Study Skills
The basic skills of history-social science include the ability to:

1. Acquire information by listening, observing, using community resources, and reading various forms of literature and primary and secondary source materials.
2. Locate, select, and organize information from written sources such as books, periodicals, government documents, encyclopedias, and bibliographies.
3. Retrieve and analyze information by using computers, microfilm, and other electronic media.
4. Read and interpret maps, globes, models, diagrams, graphs, charts, tables, pictures, and political cartoons.
5. Understand the specialized language used in historical research and social science disciplines.
6. Organize and express ideas clearly in writing and in speaking.

Note: Material contained in this chart was adapted from Statement on Competencies in Languages Other Than English Expected of Entering Freshmen: Phase I—French, German, Spanish. Sacramento: The Academic Senates of the California Community Colleges, The California State University, and the University of California, 1986.
Colorado

Documents Utilized

Draft Model K-12 Reading and Writing Standards (no date)
Draft Model K-12 Mathematics Standards (no date)
Draft Model K-12 Science Standards (no date)
Draft Model K-12 History Standards (no date)
Draft Model K-12 Geography Standards (no date)

Background

Colorado vests the authority to grant diplomas, set graduation requirements, determine course offerings, and establish curriculum in its local school boards. Each district can either adopt the model state content standards or develop its own standards that meet or exceed the state standards. A new student assessment program is scheduled to begin during the 1996-97 school years that will measure Colorado's progress in achieving the model content standards. These state assessment results will be used to corroborate district assessment results.

**Colorado**

### Reading and Writing Standards

1. Students use the correct forms of grammar/usage, mechanics/punctuation, and spelling in their writing.

2. Students write for a variety of purposes and audiences.

   **Students:**
   - Write for purposes such as telling stories, conveying technical information, and persuading.
   - Write for a wide range of audiences such as peers, teachers, and the community.
   - Plan, draft, revise, edit, and proofread their writing.
   - Use a variety of approaches such as figurative language, symbolism, dialect, and precise vocabulary to convey meaning.
   - Organize their writing using strategies such as listing, cause and effect, comparison and contrast, problem and solution, and narration to convey their purpose for writing.
   - Write to demonstrate critical thinking skills such as analysis, synthesis, and evaluation.
   - Distinguish when it is appropriate to use dialect, based on their purpose and audience for writing.
   - Use handwriting, keyboarding, and/or word processing to produce writing that is readable.

   **A Student Can:**
   - Think of and develop ideas for a variety of writing purposes such as telling a story, publishing a class newsletter, writing a letter to an adult, writing a book report, creating and producing a play, introducing a speaker or an event, or narrating a presentation.
   - Generate writing topics, develop ideas, and use organizational tools for planning his or her writing.
   - Use vocabulary and figures of speech, such as similes, to communicate his or her message clearly and precisely.
   - Adapt word choice to various audiences.
   - Give and receive feedback as an aid to revising and editing writing for a larger audience.

3. Students read and understand a variety of materials.
**Colorado**

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<tbody>
<tr>
<td>4.</td>
<td>Students use reading and writing to enhance thinking and understanding.</td>
</tr>
<tr>
<td>5.</td>
<td>Students evaluate the quality of their reading and writing and work toward improvement.</td>
</tr>
<tr>
<td>6.</td>
<td>Students read to locate, select, and make use of information from a variety of print, media, and technological sources.</td>
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<tr>
<td>7.</td>
<td>Students read and recognize literature as an expression of human experience.</td>
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**MATHEMATICS**

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<tr>
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<tbody>
<tr>
<td>1.</td>
<td>Students develop number sense and use numbers and number relationships in problem-solving situations and communicate the reasoning used in solving these problems.</td>
</tr>
<tr>
<td>2.</td>
<td>Students use algebraic methods to explore, model, and describe patterns and functions involving numbers, shapes, data, and graphs.</td>
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<tr>
<td>3.</td>
<td>Students use data collection and analysis, statistics, and probability in problem-solving situations and communicate the reasoning and processes used in solving these problems.</td>
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<tr>
<td>4.</td>
<td>Students use geometric concepts, their properties and relationships in one, two, and three dimensions to model and solve real-world problems.</td>
</tr>
<tr>
<td>5.</td>
<td>Students use a variety of tools and techniques to make and use measurements in both everyday circumstances and problems situations.</td>
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</tbody>
</table>

**Students:**

Understand and apply the attributes of length, capacity, mass, time, temperature, perimeter, area, volume, and angle measurement.

Make and use measurements to describe and compare real-world phenomena.

Describe and use rates of change (e.g., temperature as it changes throughout the day, or speed as the rate of change of distance over time) and other derived and indirect measurements.

Select appropriate units (including metric and U.S. customary) and tools (e.g., rulers, protractors, compasses, and thermometers) to measure to the degree of accuracy required to solve a given problem.

**A Student Can:**

Estimate, use, and describe measures of length, perimeter, capacity, weight, time, and temperature.

Compare and order objects according to some measurable attribute.

Without using measuring tools, know the approximate measures of familiar objects (e.g., the width of your finger, the temperature of a room, and the weight of a hammer).

Select and use appropriate units of measurements in problem-solving situations.

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<tr>
<td>6.</td>
<td>Students understand, develop, and use computational skills and techniques, including estimation, mental math, paper-and-pencil, calculators, and computers, in problem-solving situations.</td>
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**SCIENCE**

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<tbody>
<tr>
<td>1.</td>
<td>Students are able to design, conduct, communicate about, and evaluate a scientific investigation.</td>
</tr>
<tr>
<td>2.</td>
<td>Students know about and understand common properties, forms, and interactions of matter and energy.</td>
</tr>
<tr>
<td>3.</td>
<td>Students know the characteristics and structure of living things, the processes of life, and how living things interact with their environment.</td>
</tr>
<tr>
<td>4.</td>
<td>Students understand the processes and interactions of Earth's systems and the structure and dynamics of Earth and other objects in space.</td>
</tr>
</tbody>
</table>
**Colorado**

**Students:**
Know the composition of the earth, its history and the natural processes that shape it.
Know the general characteristics of the atmosphere and the fundamental processes of weather.

**A Student Can:**
Recognize that the sun is a major source of earth’s heat and light.
Observe and describe local weather conditions, such as sunny, windy, and cloudy.
Recognize how our activities are affected by weather, such as the types of clothing we wear, travel plans, and the kinds of recreation in which we engage.
Collect and record weather data such as temperature and amount of cloud cover.
Students know the major sources of water, its uses and importance, and its cyclic patterns of movement through the environment.
Students know the structure of the solar system, the dynamics of the universe, and how space is explored.

5. Students know ways that science, technology, and human activity have impact on the world and its resources.

6. Students know about and understand connections among the science disciplines, and the relationship of science to other areas of human activity.

**HISTORY**

1. Students know the chronological organization of history and how to group people and events into major eras to identify and explain historical relationships.

2. Students know how to use the processes of historical inquiry. “Historical inquiry” refers to the process of studying history to find out what, who, why, when, etc., in a logical, problem-solving manner.

3. Students know how societies have developed and changed throughout history.

4. Students know the history of how technology and economic systems have developed and changed.

5. Students know the history of the development of political theories and institutions. Students know how democracy has developed and been maintained in the United States.

**A Student Knows:**

- Historical figures in the United States who have advanced the rights of individuals and promoted the common good.
- How national holidays, symbols, and celebrations exemplify fundamental ideas and principles of democracy in the United States.
- The need for rules and personal responsibility in a school neighborhood, community, state or region.
- Students know the historical development and characteristics of various systems of government.
- Students know how political power has been acquired and used throughout history.
- Students know the history of relationships among different political powers and the development of international relations.

6. Students know the history of religions and philosophical ideas.

**GEOGRAPHY**

1. Students know how to use maps, globes, and other tools to locate and derive information about people, places, and environments.
Students know how to use maps, globes, and other graphic tools.
Students develop knowledge of Earth to locate people places, and environments.

### A Student Can:
- Draw a simple map of continents and oceans.
- Locate earth’s major physical and human features (including major cities, countries, bodies of water, etc.).
- Locate places within his/her own and nearby communities in Colorado.
- Locate major physical and human features in the Rocky Mountain region and the United States.
- Students know to analyze the spatial organization of Earth’s surface.

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<tr>
<td>2.</td>
<td>Students know the physical and human characteristics of places and study regions for the purpose of interpreting patterns of change.</td>
</tr>
<tr>
<td>3.</td>
<td>Students understand how the processes of nature interact to shape Earth’s surface patterns and systems.</td>
</tr>
<tr>
<td>4.</td>
<td>Students understand how economic, political, cultural, and social processes interact to shape patterns of human populations, interdependence, conflict, and cooperation.</td>
</tr>
<tr>
<td>5.</td>
<td>Students understand the effects of interactions between human and physical systems and recognize how interpretations of these effects can change.</td>
</tr>
<tr>
<td>6.</td>
<td>Students apply knowledge of people, places, and environments to interpret the past and present and to plan for the future.</td>
</tr>
</tbody>
</table>
Delaware

Documents Utilized

Science Curriculum Frameworks--Draft (May, 1994)
History/Geography/Social Studies Curriculum Framework Commission: Content Standards--Draft (May, 1994)
The English Language Arts Curriculum Framework Document--First Draft (May, 1994)

Background

The Delaware Department of Public Instruction is currently engaged in a multi-year educational reform effort initiated in 1992. This reform effort will set standards for what children should know at grades 3, 5, 8, and 10. Four curriculum frameworks are being developed by Curriculum Framework Commissions which are comprised of about 45 volunteers, community leaders, administrators, parents, students, and members of the business community. It is hoped that the curriculum frameworks will be ready for implementation during the 1995-96 school year.

Delaware

MATHEMATICS CONTENT STANDARDS

MATHEMATICAL THINKING PROCESSES

1. Students will engage in PROBLEM SOLVING as the core of the entire mathematics program. Problem solving provides the context in which concepts and skills are introduced and learned, requires the application of a variety of strategies; develops persistence, self-reliance and confidence; integrates mathematical reasoning, communication and connections; and emphasizes the process that could lead to a reasonable solution.

2. Students will develop their ability to COMMUNICATE MATHEMATICALLY by solving problems in which there is a need to obtain information from the real world through reading, listening and observing; to translate this information into mathematical language and symbols; to process this information mathematically; and to present results in written, oral and visual formats.

3. Students will develop their ability to REASON MATHEMATICALLY by solving problems in which there is need to investigate significant mathematical ideas in all content areas; to justify their thinking; to questions to extend their thinking; and to construct their own learning.

4. Students will develop their ability to make MATHEMATICAL CONNECTIONS by solving problems in which there is a need to view mathematics as an integrated whole and to integrate mathematics with other disciplines, while allowing the flexibility to approach problems, from within and outside mathematics, in a variety of ways.

UNIFYING THEMES

5. Students will develop an understanding of ESTIMATION, MEASUREMENT and COMPUTATION by solving problems in which there is a need to measure to a required degree of accuracy by selecting appropriate tools and units; to develop computing strategies and select appropriate methods of calculation from among mental math, paper and pencil, calculators or computers; to use estimating skills to approximate an answer and to determine the reasonableness of results.

6. Students will develop NUMBER SENSE by solving problems in which there is a need to represent and model real numbers verbally, physically and symbolically; to use operations with understanding; to explain relationships between numbers; to apply the concept of a unit; and to determine the relative magnitude of real numbers.
7. Students will develop an understanding of ALGEBRA by solving problems in which there is a need to progress from the concrete to the abstract using physical models, equations and graphs; to generalize number patterns; and to describe; represent and analyze relationships among variable quantities.

8. Students will develop SPATIAL SENSE and an understanding of GEOMETRY by solving problems in which there is a need to recognize, construct, transform, analyze properties of, and discover relationships between, geometric figures.

9. Students will develop an understanding of STATISTICS and PROBABILITY by solving problems in which there is a need to collect, appropriately represent, and interpret data; to make inferences or predictions; to present convincing arguments; and to model mathematical situations to determine the probability of events.

10. Students will develop an understanding of PATTERNS, RELATIONSHIPS and FUNCTIONS by solving problems in which there is a need to recognize and extend a variety of patterns; and to analyze, represent, model and describe real-world functional relationships.

Standard 1 Students will engage in PROBLEM SOLVING as the core of the entire mathematics program. Problems solving provides the context in which concepts and skills are introduced and learned; requires the application of a variety of strategies; develops persistence, self-reliance and confidence; integrates mathematical reasoning, communication and connections; and emphasizes the process that could lead to reasonable solution. 

PERFORMANCE INDICATORS
Through the investigation of meaningful problems, individually or in cooperative groups while using appropriate technology, all students in grades K-10 should be able to:

1.01 read and understand the problem;
1.02 develop a plan for solving the problem;
1.03 reflect on their answer with respect to the original problem;
1.05 generalize strategies and solutions to new problem situations.

Standard 2 Students will develop their ability to COMMUNICATE MATHEMATICALLY by solving problems in which there is a need to obtain information from the real world through reading, listening and observing; to translate this information into mathematical language and symbols; to process this information mathematically; and to present results in written, oral and visual formats.

PERFORMANCE INDICATORS
Through the investigation of meaningful problems, individually or in cooperative groups while using appropriate technology, all students in grades K-10 should be able to:

2.01 model real-world situations using oral, written, concrete, pictorial, graphical and algebraic methods;
2.02 use reading, listening, viewing, speaking and writing to explain and develop mathematical ideas;
2.03 use mathematical notation and language to describe and discuss real-world situations;
2.04 read mathematics with understanding;
2.05 develop common understanding of mathematical ideas and use generalizations discovered through investigation to formulate definitions;
2.06 ask questions to clarify the situation.
**Delaware**

**Standard 3** Students will develop their ability to **REASON MATHEMATICALLY** by solving problems in which there is a need to investigate significant mathematical ideas in all content areas; to justify their thinking; to reinforce and extend their logical reasoning abilities; to reflect on and clarify their own thinking; to ask questions to extend their thinking; and to construct their own learning.

**PERFORMANCE INDICATORS**
Through the investigation of meaningful problems, individually or in cooperative groups while using appropriate technology, all students in grades K-10 should be able to use inductive and deductive reasoning to:

- 3.01 formulate and test conjectures;
- 3.02 draw and then justify conclusions;
- 3.03 construct and follow logical arguments;
- 3.04 use properties, models, known facts and relationships to explain and defend their thinking.

**Standard 4** Students will develop their ability to make **MATHEMATICAL CONNECTIONS** by solving problems in which there is a need to view mathematics as an integrated whole and to integrate mathematics with other disciplines, while allowing the flexibility to approach problems, from within and outside mathematics, in a variety of ways.

**PERFORMANCE INDICATORS**
Through the investigation of meaningful problems, individually or in cooperative groups while using appropriate technology, all students in grades K-10 should be able to:

- 4.01 make connections linking conceptual and procedural knowledge;
- 4.02 solve problems involving other disciplines;
- 4.03 use connections among mathematical topics;
- 4.04 use various representations of the same concept;
- 4.05 make the connections from manipulative solutions algorithmic solutions to technological solutions;
- 4.06 determine the reasonableness of a mathematical solution as it applies in a real-world situation.

**Standard 5** Students will develop an understanding of **ESTIMATION, MEASUREMENT, and COMPUTATION** by solving problems in which there is a need to measure to a required degree of accuracy by selecting appropriate tools and units; to develop computing strategies and select appropriate methods of calculation form among mental math, paper and pencil, calculators or computers; to use estimating skills to approximate an answer and to determine the reasonableness of results.

**PERFORMANCE INDICATORS**
Through the investigation of meaningful problems, individually or in cooperative groups while using appropriate technology, all students in grades K-3 should be able to:

- 5.01 estimate then measure length, perimeter, time temperature, and weight/mass to the nearest unit using standard and nonstandard units;
- 5.02 determine the value of a given set of coins;
- 5.03 measure and compute the perimeter of rectangles;
- 5.04 use multiple computational procedures with whole numbers;
- 5.05 add and subtract single-digit and multi-digit whole numbers;
- 5.06 multiply whole numbers where at least one factor is single-digit;
- 5.07 divide whole numbers using single-digit divisors;
- 5.08 make estimates before measuring, counting and computing;
- 5.09 round whole numbers as an estimations strategy;
5.10 select appropriate attributes to compare objects;
5.11 compare objects through measurable attributes.

**Standard 6**  Students will develop **NUMBER SENSE** by solving problems in which there is a need to represent and model real numbers verbally, physically and symbolically; to use operations with understanding; to explain the relationships between numbers; to apply the concept of a unit, and to determine the relative magnitude of real numbers.

**PERFORMANCE INDICATORS**
Through the investigation of meaningful problems, individually or in cooperative groups while using appropriate technology, all students in grades K-3 should be able to:

6.01 connect different representations of a whole number: physical, verbal and symbolic;
6.02 decompose and recompose numbers;
6.03 show whole/part relationship;
6.04 build whole numbers using the concept of place value using base ten;
6.05 demonstrate an understanding of order relations for whole numbers;
6.06 examine the relative effect of operations on whole numbers;
6.07 recognize the arbitrary size of a unit;
6.08 connect repeated addition with multiplication and repeated subtraction with division;
6.09 recognize inverse operations: subtraction/addition and division/multiplication;
6.10 count sets of objects and units of measure;
6.11 count on, count back, and count by multiples.

**Standard 7**  Students will develop an understanding of **ALGEBRA** by solving problems in which there is a need to progress from the concrete to the abstract using physical models, equations and graphs; to generalize number patterns; and to describe, represent and analyze relationships among variable quantities.

**PERFORMANCE INDICATORS**
Through the investigation of meaningful problems, individually or in cooperative groups while using appropriate technology, all students in grades K-3 should be able to:

7.01 represent operations with symbols
7.02 use symbols as representations of variables such as missing addends or factors;
7.03 generate and write number sentences vertically and horizontally;
7.04 solve open sentences vertically and horizontally;

**Standard 8**  Students will develop **SPATIAL SENSE** and an understanding of **GEOMETRY** by solving problems in which there is a need to recognize, construct, transform, analyze properties of, and discover relationships between, geometric figures.

**PERFORMANCE INDICATORS**
Through the investigation of meaningful problems, individually or in cooperative groups while using appropriate technology, all students in grade K-3 should be able to:

8.01 sort solid and plane figures by common attributes;
8.02 recognize congruence of geometric figures in the real world;
8.03 identify and create symmetrical shapes (line symmetry);
8.04 draw an example of a flip, slide, or turn given a model;
8.05 draw a square, rectangle, and triangle on grid paper;
8.06 describe the effect of combining two or more shapes.
Delaware

**Standard 9** Students will develop an understanding of STATISTICS and PROBABILITY by solving problems in which there is a need to collect, appropriately represent, and interpret data; to make inference or predictions; to present convincing arguments; and to model mathematical situations to determine the probability.

**PERFORMANCE INDICATORS**

Through the investigation of meaningful problems, individually or in cooperative groups while using appropriate technology, all students in grade K-3 should be able to:

- **9.01** collect data by observing, measuring, surveying and counting;
- **9.02** demonstrate a variety of techniques for representing and organizing data such as using physical objects, tallies, pictographs, and bar graphs;
- **9.03** interpret data by: looking for patterns and relationships, considering cause and effect, drawing conclusions, answering the "question";
- **9.04** determine the likelihood of a simple chance event.

**Standard 10** Students will develop an understanding of PATTERNS, RELATIONSHIPS AND FUNCTIONS by solving problems in which there is a need to recognize and extend a variety of patterns; and to analyze, represent, model and describe real-world functional relationships.

**PERFORMANCE INDICATORS**

Through the investigation of meaningful problems, individually or in cooperative groups while using appropriate technology, all students in grades K-3 should be able to:

- **10.01** recognize, analyze, create and extend visual, symbolic, oral and physical patterns;
- **10.02** sort numbers into different classes such as evens, odds, multiples and factors.

**HISTORY**

**Standard 1** Students should be able to employ basic chronological concepts to locate events in time.

**Standard 2** Students should be able to examine artifacts and documents, and conceptualize them as links from the past to the present.

**Standard 3** Students should be able to compare their cultural and historical backgrounds to that of others.

**Standard 4** Students should be able to demonstrate an awareness of major events in American history.

**GEOGRAPHY**

**Standard 1** Students should be able to understand the nature and uses of maps and globes.

**Standard 2** Students should be able to distinguish different general types of climate and land forms, where they are found in the world, and suggest reasons why such differences occur.

**Standard 3** Students should be able to identify different types of settlement, and deduce that the number and distribution of such settlements is related to their size and the volume of goods, people, and ideas they exchange.

**Standard 4** Students should be able to employ the concepts of place and region to explain patterns of connections between a given place and other places across the country and the world.
### Delaware

#### ECONOMICS

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<thead>
<tr>
<th>Standard</th>
<th>Description</th>
<th>Code</th>
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<tbody>
<tr>
<td>1</td>
<td>Students should be able to identify the basic needs and wants of individuals and families, and the types of activities undertaken in order to satisfy them.</td>
<td>F3</td>
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<tr>
<td>2</td>
<td>Students should be able to explain and demonstrate the use of money, barter and other media of exchange within markets.</td>
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<tr>
<td>3</td>
<td>Students should be able to explain how prices in a market economy result from the interrelationship between supply and demand and competition.</td>
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#### CIVICS

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<th>Standard</th>
<th>Description</th>
<th>Code</th>
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<tbody>
<tr>
<td>1</td>
<td>Students should be able to understand that respect for others, their opinions, and their property is a foundation of civil society in the United States.</td>
<td>F3</td>
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<tr>
<td>2</td>
<td>Students should be able to define the roles and responsibilities of group members and leader in the democratic process, and apply this knowledge in a practical context.</td>
<td>F3</td>
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<tr>
<td>3</td>
<td>Students should be able to explain classroom and school rules and basic laws, including the consequences of violation, and the right to due process within our society.</td>
<td>E</td>
</tr>
<tr>
<td>4</td>
<td>Students should be able to describe, both locally and within other countries, roles and responsibilities within families, and the relationship of families to the community.</td>
<td>F3</td>
</tr>
</tbody>
</table>

#### SCIENCE

**Standard 1 MATERIALS AND THEIR PROPERTIES, GRADES K-4**

| A. | Perform measurements on and develop descriptions of the physical properties of common objects, and construct classification systems to sort and group these objects. | F3 |
| A. | Explore and describe how the properties of a material change as that material changes from one state to another. | F3 |
| A. | Observe, discuss, and demonstrate with a variety of materials the changes in properties that occur when those materials interact with their environment (dissolving, weathering and shrinkage of fabric, melting, rusting, etc.) | F3 |
| B. | The Particulate Model  
  a. Inspect a variety of objects in various states, and discuss and describe the increased level of detail that can be observed with magnification. | F3 |
| C. | Mixtures and Solutions  
  a. Select commonly found physical mixtures or prepare a variety of physical mixtures. Predict and demonstrate methods to separate these mixtures into their component parts based on difference in the physical properties of each component. | F3 |
| D. | Reactions of Materials and the Conservation of Matter  
  a. Construct objects out of smaller parts, take them apart, rearrange them, and demonstrate that the weight of the whole object is equal to the sum of the weight of the parts. | F3 |
**Delaware**

<table>
<thead>
<tr>
<th>E. Technology and Application</th>
<th>F3</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Investigate the properties of materials that make them useful for a given purpose in the real world and use this knowledge to design a common object or solve a problem.</td>
<td>F2b, F4</td>
</tr>
<tr>
<td>a. Identify specific examples of how technology impacts humans and the environment and investigate how new material inventions can sometimes solve one problem but, at the same time, create new problems.</td>
<td></td>
</tr>
</tbody>
</table>

**Standard 3 EARTH'S DYNAMIC SYSTEMS, GRADES K-4**

<table>
<thead>
<tr>
<th>A. Properties and Composition of Rocks and Soil</th>
<th>F3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a. Sort and classify samples of natural materials (soils, rocks, minerals) according to their physical properties and characteristics.</td>
<td>F2a, F3</td>
</tr>
<tr>
<td>2a. Conduct simple investigations to determine how different types of soil affect plant growth and development (sand, clay, organic).</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Forces That Shape Earth</th>
<th>F3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a. Use globes, maps, and posters to identify major land forms and geological features.</td>
<td></td>
</tr>
<tr>
<td>1b. Explore changes occurring in local surroundings that are brought about by natural forces (erosion, wind, ice, sunlight) and by the activity of plants, animals, sea life, and humans.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C. Atmospheric Dynamics</th>
<th>F3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a. Keep daily records of temperature and weather conditions and use them to identify patterns over short and long period of time.</td>
<td></td>
</tr>
<tr>
<td>2a. Describe weather conditions (sunny, foggy, rain, etc.) and discuss and identify those conditions that are destructive or dangerous.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D. Hydrologic Dynamics</th>
<th>F3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a. Use of state of matter classification system (solid, liquid, gas) to explore and demonstrate parts of the water cycle.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E. Geologic Times</th>
<th>F3</th>
</tr>
</thead>
<tbody>
<tr>
<td>No content Statements at this Grade Cluster.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>F. Stewardship of Earth's Resources</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a. Survey family and friends to determine how water is used. Compare findings with classmates and classify essential uses of water (cooking, cleaning, bathing, farming).</td>
<td></td>
</tr>
<tr>
<td>2a. Identify Earth materials found in the school building or community. Discuss the processes used to obtain these materials, the methods used to dispose of them, and the environmental implications of both.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>G. Technology and Applications</th>
<th>F4a</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a. Use thermometers, barometer, wind vanes and rain gauges, and clocks to predict changes in the weather and explain how weather affects their lives.</td>
<td></td>
</tr>
</tbody>
</table>

**Standard 5 LIFE PROCESSES, GRADES K-4**

<table>
<thead>
<tr>
<th>A. Structure/Function Relationship</th>
<th>F3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a. Use magnifiers to examine a variety of common organisms. Describe, compare, and contrast their physical properties and behavior characteristics.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Matter and Energy Transformations</th>
<th>F3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a. Compare a human's energy and material needs for growth and good health to the same needs for plants and other animals.</td>
<td></td>
</tr>
<tr>
<td>1b. Explore a simple, natural system (classroom aquarium and an outdoor habitat) and generate questions about the transfer of energy and use of nutrients.</td>
<td></td>
</tr>
</tbody>
</table>
Technical Report 14

Delaware

C. Internal Balance
1a Observe and record the behavior of plants under a variety of conditions (changes in food, light, water, composition of soil, and use of fertilizer) and relate these observations to the plant’s requirements for survival.
1b Investigate and describe the habitats of local plants and animals and identify parts and behaviors of the organisms that enable them to survive in their environment.

D. Life Cycles of Living Organism
1a Construct charts to record data on the rate of growth of several common organism. Use these data to identify the life cycle stages.

E. Health and Well-Being
1a Collect, record, and chart information relating to personal health using simple device such as a watch, thermometer, stethoscope, scale, and measuring tape. Use this information to discuss individual, group, or class trends and patterns.

F. Technology and Applications
1a Investigate, discuss, and raise questions about the contributions of science and technology to good health (personal hygiene, sanitation, antibiotics, tools for diagnosis, and the repair and replacement of body parts).

THE ENGLISH LANGUAGE ARTS

Standard 1 Students will use written and oral English appropriate for various purposes and audiences.

1. WRITTEN COMMUNICATION
Writing is a flexible and recursive process which encompasses identifying purposes and audiences, prewriting, drafting, revising, editing, and publishing. The writer will produce texts which exhibit the formal conventions and qualities defined for effective writing appropriate for each developmental level.

A. The student writes argumentative and persuasive texts exhibiting the following qualities:
1. The writer takes a clear-cut stand on the selected issue
2. The writer says concisely what is meant.
3. The writer exhibits knowledge of the audience through
   a. selecting a language appropriate to the audience,
   b. building a relevant similarity with audience, and
   c. predicting audience response and building a case accordingly.
4. The writer selects a structure (or organizational pattern) for the argument and maintains it throughout the piece.
5. The writer establishes knowledge of the purpose for the piece.
6. The writer establishes credibility and exhibits knowledge of the topic.
7. The writer supports arguments with relevant sources ranging from personal opinions and example, to quotations and other opinions, to statistics and data.
8. The writer exhibits cogent reasoning.

B. The student writes narrative texts, both fiction and nonfiction, exhibiting the following qualities:
1. The writer carefully selects events, descriptive and explanatory details, and dialogue to bring the narrative to life for the reader.
2. The writer follows a structure that exhibits
Delaware

a. a definite beginning to arouse the reader's interest and to provide the information necessary to understand the rest of the narrative,
b. a middle that sustains interest by depicting a series of events with accompanying details, and
c. an ending that satisfies the interest by revealing the final outcome and perhaps some reflection by the author on the meaning and significance of the experience.

3. The writer exhibits a strong sense of organization by selecting a sequence of events so that one event moves smoothly into another.

4. The writer selects every event, detail, and line of dialogue with the purpose of telling the story. The writer does not try to communicate everything that happened—only what gives meaning to the story.

5. The writer may use dialogue to
   a. add realism,
   b. move the action forward, and
   c. reveal character

6. The writer selects and sustains the following:
   a. a language natural to the narrative,
   b. a point of view appropriate to the narrative, and
   c. verb tense (or tenses) consistent with the flow of the narrative.

C. The student writes expository text, both technical (that which is used in the workplace) and academic (that which is used in institutions of higher learning), exhibiting the following qualities:

1. The writer presents relevant information accurately, clearly, concisely, and objectively.

2. The writer adjusts his material according to the readers' capabilities and interests.

3. The writer selects an appropriate method of analysis: i.e. definition, cause/effect, comparison/contrast, process analysis.

4. The writer uses and documents primary and secondary sources.

5. In addition to demonstrating the above qualities, the writer of academic text
   a. finds and focuses on a subject,
   b. gathers and record information,
   c. develops the composition through the use of careful selected reasons/examples, incidents/anecdotes, facts and statistics, and/or sensory details,
   d. follows a structure that includes introduction with a clear thesis, body, and conclusion, and
   e. uses appropriate transitions to assure cohesion.

6. In addition to demonstrating the above qualities, #1-#4, the writer of a technical text
   a. presents factual information to answer a request or supply needed data,
   b. collects and organizes technical data,
   c. organizes data into technical formats: i.e. memos, letters, proposals, visuals, reports, messages, resumes, applications, etc. and
   d. selects words, sentence structure, and layout to facilitate reader comprehension.

2. Oral Communication
   The speaker draws upon the language of his or her home, community, culture, and the public language of the larger culture to construct oral texts. The speaker will demonstrate oral language proficiency in speech situations, such as conversations, interviews, collaborative group work, oral presentations, and formal speeches.
In addition to the qualities defined for effective writing, the oral presentation will exhibit the following characteristics:

A. The speaker creates a strong impression of being secure, comfortable, and in command of the situation.

B. The speaker controls volume, tone, speed, and enunciation to achieve an intended effect.

C. The speaker indicates attentiveness to others contributions or feedback through oral feedback, facial expression, eye contact, and gestures.

D. The speaker’s word choices effectively support what he/she is saying.

E. The speaker verbalizes and responds indicating interest, involvement and enthusiasm.

F. The speaker engages in effective group dynamics and makes an obvious positive contribution to the intended outcome.

G. The speaker constructs oral texts, using criteria specified for written discourse, to communicate effectively with a range of audiences for a variety of purposes.

H. The speaker incorporates a range of technological devices, when appropriate, for the presentation.

Standard 2 Students will construct, examine, and extend the meaning of literary, informative, and technical texts through listening, reading, and viewing.

A. The student applies efficient, effective decoding strategies to process printed texts.
   1. The student silently reads grade-appropriate text
      a. with accuracy
      b. at an acceptable rate.
   2. The student orally reads grade appropriate text
      a. with expressiveness,
      b. with accuracy,
      c. at an acceptable rate.

B. The student self-monitors comprehension.
   1. The student generates a purpose for reading, listening, or viewing.
   2. The student assimilates information to revise predictions and make inferences.
   3. The student review for clarification.
   4. The student adjusts rate.

C. The student demonstrates an overall understanding of oral and printed texts.
   1. The student can, through speaking and/or writing, retell a story or restate and informative text.
   2. The student organizes the important points of the text via summaries, outlines, and/or graphic organizer.
   3. The student gives written reaction to text.

D. The student critically analyzes and evaluates information and messages presented through print and speech sources.
   1. The student synthesizes information.
   2. The student formulates and expresses opinions about text and media presentations.
   3. The student responds to questions requiring critical thinking.
   4. The student draws conclusions.
   5. The student evaluates persuasive texts and media presentations for bias and misinformation.
   6. The student evaluates expository and technical texts for their completeness, accuracy, and clarity of communication.
   7. The student evaluates the literary merit of various texts and media presentations.
### Delaware

**E.** The student develops an informed and critical understanding of the nature of mass media, the techniques used by them, and the impact of these techniques.

1. The student evaluates how the content, technique, and form of electronic messages affect him/her.
2. The student recognizes a variety of persuasive and propagandistic techniques and how they are used in a variety of forms including advertising, political campaigns, documentaries, and news formats.

**F.** The student integrates from several sources and applies information.

1. The student makes decisions.
2. The student solves problems.
3. The student completes tasks.
4. The student creates products.

<table>
<thead>
<tr>
<th>Standard 3</th>
<th>Students will access, organize, and evaluate information gained by listening, reading, and viewing.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>The student identifies, locates, and selects sources of information relevant to a defined need.</td>
</tr>
<tr>
<td></td>
<td>1. The student uses a variety of sources for information and ideas.</td>
</tr>
<tr>
<td></td>
<td>2. The student extracts information relevant to the purpose.</td>
</tr>
<tr>
<td></td>
<td>3. The student gather information and ideas using technology.</td>
</tr>
<tr>
<td>B.</td>
<td>The student organizes, manipulates, and expresses the information and ideas relevant to a defined need.</td>
</tr>
<tr>
<td></td>
<td>1. The student develops and efficient process for research completion.</td>
</tr>
<tr>
<td></td>
<td>2. The student applies higher-order thinking skills in selecting and organizing information.</td>
</tr>
<tr>
<td></td>
<td>3. The student uses technology to synthesize information into a meaningful format.</td>
</tr>
<tr>
<td></td>
<td>4. The student presents information which is sufficient in quantity and depth to suit the purpose.</td>
</tr>
<tr>
<td></td>
<td>5. The student represents information, ideas, and experiences using text, drawings, graphs, diagrams, photographs, videos, and graphics.</td>
</tr>
<tr>
<td>C.</td>
<td>The student effectively evaluates both sources and information.</td>
</tr>
<tr>
<td></td>
<td>1. The student selects sources which are acknowledged and authoritative.</td>
</tr>
<tr>
<td></td>
<td>2. The student analyzes sources and information for accuracy, bias, stereotypes, and validity.</td>
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<tr>
<td></td>
<td>3. The student acknowledges and addresses any bias and/or discrepancies which may be present in source materials.</td>
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<td></td>
<td>4. The student interprets the information, as appropriate to the purpose.</td>
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<tr>
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<td>5. The student formulates logical conclusions to complete the task.</td>
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</tbody>
</table>

**Standard 4** Students will use literary knowledge to connect self to society and culture. Literature is central and integrative element of culture and develops and understanding and appreciation of humanity.

| A.        | The student responds to literature using personal experience.                                     |
|           | 1. The student identifies with or sympathizes with characters of varying ages, genders, nationalities, races, cultures, and religions. |
|           | 2. The student questions, challenges, or rejects characters based on a clear understanding of motivation and situations. |
|           | 3. The student relates incidents in the text to life.                                              |
### Delaware

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<tbody>
<tr>
<td>4.</td>
<td>The student reacts to how narrative point of view affects the reader, the author, and the text.</td>
<td><strong>F3</strong></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>The student relates principal ideas of literary text to personal experiences.</td>
<td><strong>F3</strong></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>The student explores and experiments with other literary texts as a result of the emotional response.</td>
<td><strong>F3</strong></td>
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</table>

**B.** The student responds to literature using interpretive, critical, and evaluative processes.

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<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>The student makes inference about content, events, characters, setting, author's purpose.</td>
<td><strong>F3</strong></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>The student interprets the use of literary devices (e.g. figurative language, allusion, diction, dialogue, description, etc.), tone, mood.</td>
<td><strong>F3</strong></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>The student evaluates literary qualities such as use of language, content and literary elements.</td>
<td><strong>F3</strong></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>The student evaluates the suitability of characters actions in a particular event, the emotional appeal of the text, and/or the author's method (adequacy or validity of the genre and the relevancy of the approach).</td>
<td><strong>F3</strong></td>
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</tbody>
</table>

**C.** The student responds appreciatively to a broad range of culturally significant literary texts written by historical and modern authors.

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<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>The student values literary texts representing the rich diversity of American cultural heritage inclusive of ages, genders, nationalities, races, and religions.</td>
<td><strong>F3</strong></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>The student values literary texts representative of various historical periods ranging from the ancient world to the present.</td>
<td><strong>F3</strong></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>The student gains esteem from world literature.</td>
<td><strong>G2</strong></td>
<td></td>
</tr>
</tbody>
</table>

**D.** The student uses literature as a basis for understanding self and society.

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<tr>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>The student perceives literary themes as means to develop a sense of self and connectedness to others, and to develop an awareness of major social and political issues.</td>
<td><strong>F3</strong></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>The student appreciates the interrelationship between literature and the arts as communication systems expressed through of variety of media.</td>
<td><strong>F3</strong></td>
<td></td>
</tr>
</tbody>
</table>
Background

The Baseline Indicators: A Framework for Accountability is a product from the ongoing efforts of the Interagency Standards Committee, and should be considered as a draft. This committee was one of four that were formed following the January 23, 1993 "Education Summit," where a commitment was made to improve the DC Public Schools by providing "enhanced educational standards and student achievement, through inter-agency cooperation and communication." The indicators were identified by surveying various indicator systems and other resources. They were intended to become the foundation for annual reports on the progress of schools in the school system. DC Public Schools are also involved in the process of setting performance standards based upon the baseline indicators.

Note: For the comparison to NCEO's age six model, the following Washington, D.C. educational goals did not apply and were not matched: Increased graduation rates; improved academic achievement, quality teachers, postsecondary opportunities, safe and caring environment, cultural arts, and parental involvement.

District of Columbia

GOAL 1 READINESS TO LEARN

1. Data collected to assess readiness for kindergarten (Yes or No)
2. Percent entering kindergarten with a pre-kindergarten experience
3. Percent of entering 1st graders with: full day of kindergarten, half day of kindergarten, no prior schooling, undetermined.
4. Number of pre-kindergarten pupils per teacher
5. Number of kindergarten pupils per teacher
6. State requires early childhood staff credential
7. Percent of pre-kindergarten staff with early childhood credential
8. Percent of kindergarten staff credentialed as elementary school teachers
9. Number and percent of pre-kindergarten and kindergarten class with Instructional Aides
10. Schools with child care for infants of teen mothers
11. Schools with parenting programs for adults
12. Schools with parenting programs for teens
13. Schools with programs for latchkey students (before/after care regardless of source of funding)

GOAL 7 CULTURAL ARTS

Art
1. Percent of elementary schools offering art instruction
2. Percent junior high students offering art instruction
3. Percent of senior high schools offering art instruction
4. Number of art teachers (resident or itinerant, by level)
5. Total number of art teachers
### District of Columbia

<table>
<thead>
<tr>
<th>Music</th>
<th>NCEO Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Percent of elementary schools offering both vocal and instrumental music</td>
<td>no match</td>
</tr>
<tr>
<td>7. Percent of junior high schools offering both vocal and instrumental music</td>
<td>no match</td>
</tr>
<tr>
<td>8. Percent of senior high schools offering both vocal and instrumental music</td>
<td>no match</td>
</tr>
<tr>
<td>9. Number of vocal music teachers (resident or itinerant, by level)</td>
<td>no match</td>
</tr>
<tr>
<td>10. Number of instrumental music teachers (resident or itinerant, by level)</td>
<td>no match</td>
</tr>
<tr>
<td>11. Total number of music teachers</td>
<td>no match</td>
</tr>
</tbody>
</table>
Florida

Documents Utilized

Blueprint 2000: A System of School Improvement and Accountability (June 1993)

Background

Since 1985, Florida has had curriculum guides that identify the course content and intended outcomes for all courses in grades 6-12. Districts must adopt student-performance standards for each course based on these guidelines. In 1991, the legislature established a commission on student-performance standards, which identified 10 performance standards based on the competencies identified by the U.S. Department of Labor, Secretary's Commission on Achieving Necessary Skills (SCANS). The content and performance standards describe student learning at different grade levels (e.g., K-3, 4-5, 6-8, and 9-10). In 1993, the state began developing pre-K-12 curriculum frameworks that will identify the essential content in each subject and give sample benchmark outcomes. They will not include state-mandated performance standards.

Note: The following goals did not apply to and were not matched to the NCEO model for age 6: Graduation Rate and Readiness for Postsecondary Education and Employment, Teachers and Staff, and Adult Literacy.

### GOAL 1: READINESS TO START SCHOOL

Communities and schools collaborate to prepare children and families for children's success in school.

**Standard**

Before entrance to Florida public schools, children have received appropriate health and social services so the optimum learning can occur for each child.

**Outcomes**

An agreement exists among the school, school board, HRS, and, when appropriate, other organizations, agencies, and medical practitioners in the community, which:

1. Provides all children and their families access to comprehensive health services, including physical and dental examinations; developmental, occupational, speech, hearing, visual, and mental health screenings; and further evaluation for any potentially handicapping condition.

2. Provides all children and their families access to therapeutic services indicated as a result of any abnormalities or deficiencies determined in the screening of children and families; and community service available in each school district to help children and families in need (as required by 229.594, Florida Statutes).

**Standard**

At entrance to Florida public schools, children will be at a developmental level of physical, social and intellectual readiness necessary to ensure success as a learner.

**Outcomes**

An agreement exists among the school, school board, HRS, and, when appropriate, other organizations and government agencies, which:

1. Provides all families access to comprehensive family support programs full-service schools; information and referral networks; parenting resource support programs such as First Start and Healthy Start;

---

**NCEO CODE**

- no match
- B2, C2
- C2b, C2c
- B2, C1
- no match
- B2b
- B2
- no match
- B2a
- B2
Florida support programs for children with special needs and their families; parent programs in the workplace; and public information opportunities (via the media) related to child development.

2. Provides all families access to appropriate early education and child care programs that provide for the inclusion of children with disabilities in the least restrictive environment; are available during appropriate hours to meet the needs of working parents; coordinate with schools to ensure an effective transition from preschool to school-age programs; and provide training to ensure high quality early childhood personnel.

3. Provides all students, including pregnant and parenting teens, access to programs that help develop appropriate family planning and parenting skills, including the nurturing of good family relationships and healthy children; self-sufficiency; and understanding of the importance of completing educational goals; and knowledge of appropriate community resources.

Key Data Elements

1. Schools shall report the number and percent of free and reduced lunch eligible kindergarten students in the school who participated in a preschool program (e.g. Pre-K Early Intervention, Head Start, subsidized child care, Pre-K disabilities, migrant Pre-K, nonsubsidized child care).

3. Schools shall report the number and percent of all kindergarten students who pass screening for vision and hearing problems.

4. Schools shall report the number and percent of students in kindergarten through third grade through enrolled in each exceptional student education program.

8. If a program exists in a district, schools and districts will report the number of children served through First Start and/or Even Start, compared to the estimated prevalence in the district.

10. Schools shall report the number and percent of kindergarten students failing vision and hearing screening, who have been treated, or are under treatment as a result of the screening.

11. Schools and districts shall report the number and types of agreements with appropriate agencies, such as H.R.S., other governmental agencies, community-based service providers, public libraries, or medical practitioners, to provide children and their families with medical, psychological, and social services. The agreements may be negotiated at the school level or at the district level on behalf of the schools. The agreements shall be approved by the school board and shall address all the components of Standard 1 and 2 (see "School Board Responsibilities for Development of Agency Agreements," page 6). Schools are encouraged to develop additional assessments which address any of the outcomes in these two standards.

GOAL 3: STUDENT PERFORMANCE

Students successfully compete at the highest levels nationally and internationally and are prepared to make well-reasoned, thoughtful, and healthy lifelong decisions.

Standard Florida students locate, comprehend, interpret, evaluate, maintain, and apply information, concepts, and ideas found in literature, the arts, symbols, recordings, video and other graphic displays, and computer files, in order to perform tasks and/or for enjoyment.

Outcomes
While performing individual and group tasks, students:
Florida

1. locate data and determine the main idea or essential message;  
2. identify relevant details and facts;  
3. evaluate accuracy, appropriateness, style, relevance, and plausibility;  
4. analyze information, concepts, and ideas relative to their own value system;  
5. use ideas, concepts, and informational resources for aesthetic and recreational purposes;  
6. independently complete a task which requires the use or application of information, concepts, or ideas; and  
7. evaluate and make valid inferences from new, incomplete, or nonverbal information.

Standard Florida students communicate in English and other languages using information, concepts, prose, symbols, reports, audio and video recording, speeches, graphic displays, and computer-based programs.

Outcomes
While performing individual and group task, students:
1. completely and accurately record information in writing and other media, and communicate that information, in turn, through a variety of media;  
2. compose and create, through a variety of oral, visual, and written media, communications such as letters, reports, directions, manuals, and proposals;  
3. in all communications using English and other languages, accurately use language, graphic representations, styles, organizations, and format appropriate to the language, information, concept, or idea and the subject matter, purpose, and audience;  
4. prepare communications through a variety of media, which include supporting documentation and detail; and  
5. check, edit, and revise communications to ensure appropriate form, emphasis, grammar, spelling, and punctuation.

Standard Florida students use numeric operations and concepts to describe, analyze, disaggregate, communicate, and synthesize numeric data, and to identify and solve problems.

Outcomes
While performing individual and group tasks, students:
1. accurately identify and perform appropriate numeric procedure with problems found in numeric, symbolic, or word form;  
2. estimate approximate numeric solutions to problems without use of calculating devices; and  
3. accurately analyze, synthesize, and evaluate numeric ideas, concepts, and information through appropriate formulae, symbols, theorems, equations, tables, graphs, diagrams, and charts.

Standard Florida students use creative thinking skill to generate new ideas, make the best decision, recognize and solve problems through reasoning, interpret symbolic data, and develop efficient techniques for lifelong learning.

Outcomes
While performing individual and group tasks, students:
1. use imagination, combine ideas or information in new ways, and make connections between seemingly unrelated ideas by discovering a rule or principle underlying the relationship between two or more objects and use the rule or principle to solve a problem;  
2. clarify goals and recognize constraints to their attainment, and evaluate and choose the best alternative;
## Florida

3. recognize that a problem exists, define the problem, investigate possible causes of the problem, identify possible solutions, analyze, evaluate, and select the best solution(s), and implement the solutions;
4. organize and intellectually process symbols, pictures, objects, and information in a way which permits the mind to generate the reality of what is being represented; and
5. develop and use individually effective and efficient learning techniques that permit them to apply new knowledge and skills in different ways.

### Standard
Florida students display responsibility, self-esteem, sociability, self management, integrity, and honesty.

#### Outcomes
While performing individual and group tasks, students:
1. exert a high level of effort and perseverance toward goal attainment;
2. exhibit diligence in reaching high task accomplishment and performance by setting high standards, paying needed attention to detail, displaying high standard of attendance and punctuality, adapting to variable environments, and approaching and completing tasks with enthusiasm, vitality, and optimism;
3. demonstrate a realistic and positive view of themselves as unique individuals;
4. demonstrate friendliness, assertiveness, leadership, adaptability, empathy, and politeness in familiar and unfamiliar groups;
5. exhibit interest in what others say and do;
6. deal with persons and situations with integrity, reliability, and honesty;
7. exhibit civic, personal, and social responsibility;
8. demonstrate behaviors that support physical wellness and personal well being; and
9. assume a positive role in the family, work place, and community.

### Standard
Florida students will appropriately allocate time, money, materials, and other resources.

#### Outcomes
While performing individual and group tasks, students:
1. identify and prioritize activities in an appropriate sequence and develop, implement, and adjust an effective schedule in order to accomplish a goal;
2. prepare a budget appropriate to the activities required for goal attainment, maintain accurate records of actual costs and revenues, and revise the budget plan as needed;
3. identify and acquire the materials and supplies needed for completion of the activity and anticipate how those materials can be best stored and distributed to complete the activity with the least cost and greatest efficiency; and
4. identify the human skills, knowledge, and values necessary to successfully complete the activity; describe how to make successful matches between the persons best capable of completing the activity and the activity itself; and provide meaningful feedback on task completion to those involved.

### Standard
Florida students integrate their knowledge and understanding of how social, organizational, informational, and technological systems work with their abilities to analyze trends, design and improve systems, and use and maintain appropriate technology.

#### Outcomes
While performing individual and group tasks, students:
1. identify the need for information, select possible information and evaluate its appropriateness, and then obtain the information from existing sources, or create it;
2. organize, process, and maintain in a systematic fashion, print and other forms of technologically stored information and transform the information into appropriate formats to enhance the accomplishment of a goal;

3. analyze trends and the performance of systems to predict the impact of these trends and performances on goal attainment;

4. make suggestions to modify existing systems in order to enhance goal attainment;

5. select the procedures or technology that will best facilitate goal attainment by visualizing the necessary methods and applicable technology, choosing, installing, and monitoring the device or system which will produce the best results; and

6. demonstrate competence in solving problems in the use of technology, including generating workable solutions and identifying the appropriate person or place form which to obtain the needed assistance.

Standard Florida students work cooperatively to successfully complete a project or activity.

Outcomes

While performing individual and group tasks, students:

1. contribute ideas and make suggestions to a group effort to solve a problem or complete an activity in support of attainment of a goal;

2. assist a group to be successful by doing their own share of the tasks necessary to complete a task and encourage other group members by listening and responding appropriately to their contributions, identifying and building upon the strengths of individual members of the group, helping to resolve differences within the group which impede goal attainment, taking personal responsibility for accomplishing goals, and where useful, challenging existing procedures, policies, or authorities that appear to impede goal attainment; and

3. help others learn by helping them to identify and apply related concepts and theories to the activity, identify needed skills, knowledge, and values which will facilitate goal attainment, and providing meaningful feedback, including reinforcement of others' successful performance.

Standard Florida students establish credibility with their colleagues through competence and integrity, and help their peers achieve their goals by communicating their feelings and ideas to justify or successfully negotiate a position which advances goal attainment.

Outcomes

While performing individual and group tasks, students:

1. effectively communicate thoughts, ideas, and values to influence others toward action which will facilitate goal attainment;

2. justify positions logically while taking meaningful viewpoints of others into consideration and making positive use of the rules and values followed by others; and

3. work toward an agreement with others that will further goal attainment by resolving divergent interests and points of view, clarifying points of view and adjusting quickly to new facts or ideas, and making reasonable compromises that promote goal attainment.

Standard Florida students appreciate their own culture and the cultures of others, understand the concerns and perspectives of members of other ethnic and gender groups, reject the stereotyping of themselves and others, and seek out and utilize the views of persons from diverse ethnic, social, and educational backgrounds while completing individual and group projects.

Outcomes

While performing individual and group tasks, students:
Florida

1. demonstrate appreciation of their own culture and the cultures of others;
2. cooperate with persons of different gender or ethnic or socioeconomic backgrounds to
   successful accomplish tasks; and
3. recognize bias and stereotyping in media, literature, and visual and performing arts.

Assessment

Assessment for school improvement and accountability should minimize state level
intervention, empower local school communities, hold schools accountable, and
improve and inform instruction. There is a legitimate state interest to report on the
progress of education, but this interest should be constrained to minimum amount
of information necessary for state level reporting and should not place undue
burdens on the school improvement process.

Goal 3 requires and assessment system that can be partially implemented immediately
and that will allow for a transition to the Blueprint 2000 Student Assessment
System. In moving through the transition:

Assessment methods must be developed and implemented for those performance
standard and outcomes that cannot be assessed using existing methods.

A new version of the High School Competency Test will be developed to begin to
reflect the Blueprint 2000 performance standards.

The Florida Writing Assessment will continue to be developed and implemented.

Norm-referenced test (NRT) requirements in grades 4, 8, and 10, including the Grade
Ten Assessment Test (GTAT), will be continued, at least until the Blueprint 2000
Assessment System is fully implemented.

Key Data Elements

1. Schools shall report the number and percent of students passing the High School
   Competency Test (HSCT) on their first attempt.

2. Schools shall report the number and percent of students scoring at each level on the
   Florida Writing Assessment.

3. Schools shall report the number and percent of students scoring in each quartile of the
   Grade Ten Assessment Test.

4. Schools shall report results on district norm-referenced test(s).

5. Schools shall report the number and percent of students passing upper level courses
   and advanced programs, and the number and percent still enrolled. In the Fall of
   1995, schools will report the number and percent of students moving from Level 1 to
   Level 2 to Level 3.

6. Schools shall report the number and percent of students passing the HSCT by the end
   of their senior year.

Goal 4: LEARNING ENVIRONMENT

School boards provide a learning environment conducive to teaching and learning.

Schools provide a learning environment that enables students, teachers, and staff to
successfully meet the standards and outcomes identified by this Commission.

Outcomes

1. Students, teachers, and staff exhibit a positive self-concept and demonstrate high
   expectations for behavior and achievement.

2. Students, teachers, and staff demonstrate that they view their accomplishments as
   appropriately recognized and celebrated.

3. Students, parents, teachers, staff, and other stakeholders demonstrate that they feel
   welcome, secure, and positive about the student’s school environment and
   experiences.
Florida

4. Students, teachers, and staff view their participation as important, as evidence by their average daily attendance and participation.

5. Schools receive adequate resources and flexibility and demonstrate that their pupil/teacher ratio will ensure high quality teaching and learning and is appropriate to their school improvement plan.

6. Schools receive adequate resources and maximum flexibility and demonstrate that they provide and maintain facilities, materials, equipment, technology, and programs that will ensure high quality teaching and learning and are appropriate to their school improvement plan.

7. Schools exhibit that parents and other stakeholders are involved in classroom activities and participate in school programs.

Key Data Elements

1. Schools shall report the average daily attendance percentage of K-12 students in membership. (Note: a review will be conducted of how other states define student attendance to determine the equity of the Florida definition.)

2. Schools will report the number of students under 16 years of age who have been absent from school 0-10 days, 11-20 days, and 21+ days.

3. Schools will report the results of a locally administered school climate survey. Schools or districts will select or develop instruments to measure the learning environment and these surveys will be conducted in a manner which will yield valid and reliable data. Survey that will be used for school improvement purposes at school and district levels and will not be aggregated at the state level. The School Improvement Resource Notebook contains a list of climate inventories. For those schools that desire to develop their own climate inventories, a set of approval criteria for development will be provided. Local school boards will ensure that schools follow the set of approved criteria and that all locally developed instruments are valid and reliable.

4. Schools shall report per pupil expenditures in the major program areas.

5. Schools shall report their average class size for basic programs for grades K-3, 4-5, and for mathematics, science, social studies and language arts classes in grades 6-8 and 9-12.

6. Schools shall report their student mobility transfers in and out of school compared to students in school at a date certain early in the year.

7. Schools shall report the average daily attendance of staff and teachers (A committee will review the implementation of this key data element.)

GOAL 5: SCHOOL SAFETY AND ENVIRONMENT

Communities provide and environment that is drug-free and protects students' health, safety, and civil rights.

Standard Schools provide an environment for students and staff that promotes good health and is free of violence, weapons, hazard, vandalism, and substance abuse.

Outcomes

1. A collaborative agreement exists among the school district and other stakeholders to keep the school campus free of disruptive influences, create a mechanism to enhance the environment in the community at large, and establish specific responsibility for maintaining a safe, healthy and drug-free school environment.

2. Schools collaborate with law enforcement and other stakeholders to ensure a safe school environment that is free of violence, weapons, vandalism, hazard, and substance abuse.

3. Schools collaborate with social service agencies and other appropriate stakeholders to ensure all students participate in comprehensive health education programs.
## Florida

4. Schools collaborate with environmental agencies and other appropriate stakeholders to ensure a safe school environment in all classrooms and laboratories.

### Standard 2

Local, state, and federal laws, rules and regulations related to health, safety, and civil rights are enforced. Schools ensure that students and staff are protected from and are not subjected to any and all forms of discrimination and harassment. All programs, activities, and services are inclusive and free of bias.

### Outcomes

1. All appropriate stakeholders ensure the civil rights and safety of all members of the school.
2. Schools ensure equal opportunity for all staff and students to participate in all programs, activities, and services.
3. Schools utilize bias-free assessment measures and instruments for appropriate student placement decisions.
4. Schools develop and implement comprehensive written policies addressing any and all forms of harassment.
5. Schools incorporate standard safety and health practices into the school and school bus environments.

### Standard 3

All students demonstrate personal responsibility for contributing to a school and school bus environment that is safe and free of tobacco, alcohol and other drugs.

#### Outcome

1. Students and other appropriate stakeholders collaborate to develop the Code of Student Conduct to ensure that their schools and school buses are safe and free of tobacco, alcohol, and other drugs.

#### Key Data Elements

1. Schools shall report the number and percent of incidents of violence, weap-ons, vandalism, substance abuse, and harassment. This information will be collected by the Department of Education in collaboration with other governmental agencies to address the incidence of violence in the schools.
2. Schools shall report the number and percent of the student population enrolled in selected program areas, (i.e. gifted, other exceptional education students, vocational education, dropout prevention, early childhood programs, ESOL programs, dual enrollment, advanced placement, and upper level math and science courses) by race, gender, and special population.
3. Schools shall report the number and percent of suspensions (in-school and out-of-school) and expulsions.
4. Schools and districts shall report the number and type of agreements with appropriate community agencies, such as law enforcement, health/social services, public libraries, or environmental protection, that will help establish and maintain an environment that is safe, free from health hazards, and free from drugs. The agreements may be negotiated at the school level or at the district level on behalf of the schools, and shall be approved by the school board (see "School Board Responsibilities for Development of Agency Agreements," page 6).
5. Schools shall report information on hazardous conditions in and around school property.
Background

Since 1971, Hawaii has had eight Foundation Program Objectives; since 1978 they have had Student Performance Expectations for grades 3, 6, 8, 10, and 12 that relate to the Foundation Program Objectives, which are benchmarks to identify students' progress; since 1978, Hawaii has also had 15 Essential Competencies. In 1991, three more Foundation Program Objectives were added. In 1992, the Performance expectations for the new Objectives were added, and at the same time, the other Foundation Program Objectives were updated. These outcome statements provide a framework within which each school can set related instructional planning.

Note: Hawaii's Student Performance Expectations for grades K and 1 have only been developed for the first Foundation Program Objective (develop basic skills for learning and effective communication with others); thus, of the 11 Foundation Program Objectives, we have chosen to match only the first objective with the NCEO Age 6 Model.

### Hawaii

<table>
<thead>
<tr>
<th>FOUNDATION PROGRAM OBJECTIVE 1: DEVELOP BASIC SKILLS FOR LEARNING AND EFFECTIVE COMMUNICATION WITH OTHERS:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GRADE 1</strong></td>
</tr>
<tr>
<td><strong>CLUSTER A</strong> Enjoys being read to, reading alone and with others.</td>
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<tr>
<td>- Views self as a reader.</td>
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<tr>
<td>- Constructs meaning using prior knowledge and own language to make predications about print (experiences cues).</td>
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<td>- Uses word order, language patterns, sound/symbol relationships, and punctuation to make predictions about print and create meaning with text (language cues).</td>
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<td>- Makes attempts at unfamiliar language.</td>
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<td>- Shows instant recognition of words using knowledge of sight words, structural analysis and phonics while reading.</td>
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<td>- Relates personal experiences to text and talks about ideas encountered in print.</td>
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<td>- Retells stories after being read to or reading independently.</td>
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<td>- Compares similarities and differences as a result of reading.</td>
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<td>F3</td>
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<tr>
<td><strong>CLUSTER B</strong> Expresses self through writing.</td>
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<tr>
<td>- Writes on a variety of topics.</td>
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<td>- Expresses ideas fluently with print as well as pictures.</td>
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<td>- Develops awareness of a writing process.</td>
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<td>- Revises to clarify ideas.</td>
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<td>- Invents language forms (words, spelling, format, etc.)</td>
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<tr>
<td>- Talks about writing with others.</td>
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<tr>
<td>- Feels free to write and chooses to write.</td>
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<tr>
<td>- Writes spontaneously for real-life, functional purposes.</td>
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<tr>
<td>- Expresses ideas using many forms (letters, lists, journals, narratives, etc.)</td>
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</table>
### Hawaii

| CLUSTER C | Uses talk to obtain information and get things done.  
|           | Talks freely and openly.  
|           | Uses reactions from others to adjust conversation.  
|           | Asks questions to clarify understanding.  
|           | Uses language that communicates the intended idea.  
|           | Presents ideas in a sequence that is easy to follow.  
|           | Adapts language to situation and audience (school, home, play, etc.).  
|           | Contributes personal opinion in a discussion.  
|           | Expresses self through conversation and listens to the ideas of others.  
|           | Engages in storytelling, choral reading, and forms of role playing.  |

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<td>F1a, F3a</td>
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| CLUSTER D | Describes numbers as quantities, amounts and magnitudes using drawings, models or symbols.  
|           | Uses cardinal and ordinal numbers.  
|           | Represents fractions as parts of a whole and/or a set.  
|           | Describes quantities and amounts using more, less, same, greatest, least.  
|           | Identifies, creates and extends simple patterns.  
|           | Orders whole number quantities from least to greatest and greatest to least.  |

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| CLUSTER E | Identifies addition as combining sets.  
|           | Demonstrates subtraction as take-away or missing addend model.  
|           | Demonstrates division as sharing model.  
|           | Describes what happens to a number/set when another number/set is added to it or taken away from it.  
|           | Uses basic addition and subtraction facts to compute mentally.  
|           | Represents addition and subtraction to solve problems.  
|           | Describes the relationship between addition and subtraction.  
|           | Creates story problems that use addition, subtraction and division.  |

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| CLUSTER F | Identifies attributes of length, weight, capacity, temperature and time.  
|           | Identifies appropriate tools to measure length.  
|           | Identifies the value of money such as pennies, nickels, dimes and quarters.  
|           | Chooses a non-standard unit, compares that unit to the object, and reports the number of units.  
|           | Uses standard and non-standard units to measure length.  
|           | Solves problems using money.  
|           | Recognizes that the size of the units affects the number of units it take to measure an object.  |

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| CLUSTER G | Identifies two- and three-dimensional shapes.  
|           | Describes attributes of simple shapes such as squares, rectangles, triangles and circles.  
|           | Constructs two-dimensional shapes.  
|           | Sorts shapes according to their attributes.  |

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| CLUSTER H | Identifies possible ways to display data.  
|           | Compares data.  
|           | Sorts and counts data.  
|           | Displays data in charts and graphs.  
|           | Interprets data from charts and other pictorial representations.  |

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66
Background

In July 1993, the State Board of Education adopted Essential Skills Content Standards in mathematics and language arts for grades 3, 4, 8, 10, and 12. These standards represent what students are expected to know, and they form the basis of statewide assessments. The Essential Skills Content Standards were developed by thousands of educators in Indiana. The 1990 Special Education Improvement Manual specified Indiana's Effectiveness Indicators for Special Education, a list of indicators for program success that relates to 10 areas of programming.

**PROGRAM AND STUDENT OUTCOMES**

An effective educational program ensures the development of academic, vocational and social competencies commensurate with each student's potential, and fosters a high sense of satisfaction in the individuals who are major stakeholders in the process (students, parents, teachers, administrators, district staff, school board, and community). Students with handicaps need to be satisfied with the educational services they have received and feel that the total program has met their needs by preparing them to function as productive citizens in their community. Other stakeholders need to be confident that school programs will lead to successful achievement and positive benefits for all students. (Note: Priority indicators are marked with an asterisk).

**PROGRAM HEADINGS AND PERFORMANCE INDICATORS.**

10.1 STUDENT PERFORMANCE

10.1.1 Attendance, graduation, dropout, and suspension rates of students with handicaps compare favorably with rates of regular education students.

10.1.3 Non- and limited-English-proficient students with handicaps progress at a satisfactory rate in their special education and regular education programs.

10.1.4 Students with handicaps develop academic competencies* commensurate with their abilities, they develop competencies in appropriate academic curriculum areas such as reading, language arts, mathematics, science, social studies, cultural arts, and technology and that achieve or go beyond their individualized educational program (IEP) goals and objectives in academic areas.

10.1.5 Students with handicaps develop vocational competencies commensurate with abilities and interests.*

10.1.5.1 The acquire job preparation and vocational skills.

10.1.5.2 They demonstrate pre-employment competencies such as:

10.1.5.2.1 ability to identify career or vocational interests,

10.1.5.2.2 knowledge of selected career and requisite skills and attributes.
10.1.5.2.3 ability to identify training and employment options and opportunities, and ability to seek employment or further education or training.

10.1.5.3 As appropriate, students develop job-specific skills, including knowledge and skills normally required to carry out entry-level tasks of a specific occupation or cluster of occupations; and,

10.1.5.4 Students develop work maturity skills, including those skills needed to obtain and retain a job.*

10.1.6 Students with handicaps develop positive behaviors and attitudes including:
10.1.6.1 positive self-concepts,*
10.1.6.2 positive attitudes toward others,*
10.1.6.3 productive work and study habits, and*
10.1.6.4 effective social skills.*

10.1.7 Students with handicaps develop and express creative interests and talents.

10.1.8 Students with handicaps develop self-help and independent living skills in such areas as*
10.1.8.1 applying problem-solving and decision-making skills,*
10.1.8.2 communicating needs and feelings effectively,
10.1.8.3 knowing about essential aids and equipment and how to acquire them,
10.1.8.4 knowing about benefit programs and financial assistance opportunities, and how to acquire them,
10.1.8.5 understanding affirmative action, fair employment, and other anti-discrimination guarantees that affect them,
10.1.8.6 advocating for legal, personal, or consumer rights,
10.1.8.7 negotiating confidently with agencies or individuals to acquire essential benefits and services,
10.1.8.8 understanding how earned and unearned income affects benefits eligibility,
10.1.8.9 knowing about and understanding how to acquire personal care assistance to live independently,*
10.1.8.10 knowing about housing options and understanding how to acquire them,
10.1.8.11 applying the principles of accessibility to homes,
10.1.8.12 knowing about transportation options and how to acquire/use them, and
10.1.8.13 being comfortable in social situations and using leisure time productively.

10.2 STAKEHOLDERS SATISFACTION

10.2.1 Student Satisfaction
10.2.1.1 Students with handicaps are satisfied with the educational services they have received and feel that the special education, regular education, and vocational education programs have met their needs.*

10.2.1.2 Students with handicaps are satisfied with their progress in school.

10.2.1.3 Students with handicaps are satisfied with the way they have been treated in school by faculty, staff, and other students and with their level of integration with non-handicapped peers.

10.2.2 Parents
10.2.2.1 Parents of children with handicaps are satisfied with:* 
10.2.2.1.1 the special education program, procedures, and services provided for their children, and with their children's progress,
10.2.2.1.2 their level of participation and involvement,
10.2.2.1.3 the way their child is treated at school by faculty, staff and other students and...
**Indiana**

<table>
<thead>
<tr>
<th>10.2.2.1.4</th>
<th>their child's integration with non-handicapped students.</th>
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<tbody>
<tr>
<td>10.2.3</td>
<td><strong>School Staff Satisfaction</strong></td>
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<tr>
<td>10.2.3.1</td>
<td>Staff members express a sense of challenge and satisfaction in their professional roles and feel they make a difference, as a result of involvement in decision-making.</td>
<td>H2a</td>
</tr>
<tr>
<td>10.2.3.2</td>
<td>Staff are satisfied with the inclusion of students with handicaps within the regular education program, and have positive attitudes toward special education.</td>
<td>H2a</td>
</tr>
<tr>
<td>10.2.3.3</td>
<td>Staff are satisfied with the special education program and services in such areas as: policies and procedure, instructional delivery and results, and in-service training.</td>
<td>H2a</td>
</tr>
<tr>
<td>10.2.4</td>
<td><strong>Employers Satisfaction</strong></td>
<td></td>
</tr>
<tr>
<td>10.2.4.1</td>
<td>Employers express willingness to employ students/graduates with handicaps, and are satisfied with the performance of these students and graduates.*</td>
<td>no match</td>
</tr>
<tr>
<td>10.2.5</td>
<td><strong>School Board and Community</strong></td>
<td></td>
</tr>
<tr>
<td>10.2.5.1</td>
<td>The school board indicates support for the special education program through the allocation of necessary resources.</td>
<td>no match</td>
</tr>
<tr>
<td>10.2.5.2</td>
<td>Students with handicaps are viewed positively and treated well in the community.*</td>
<td>no match</td>
</tr>
<tr>
<td>10.2.5.3</td>
<td>Parent and non-parent taxpayers indicate satisfaction with, and demonstrate support for, the special education program.</td>
<td>H2d</td>
</tr>
<tr>
<td>10.2.5.4</td>
<td>Community leaders and business persons indicate support for the special education program through donations or contributions, employment of graduates, and support of special activities.</td>
<td>no match</td>
</tr>
</tbody>
</table>
Background

In 1991, the legislature mandated state assessments based on what students should know and be able to do. The first draft of the math standards was completed in 1990 and has been revised several times since then; standards in other subjects were completed initially in 1993 and are now being revised. Each subject has a different age grouping. For example, the math standards describe student learning for grades K-4, 5-8, and 9-12. Districts are not required to adopt the curriculum standards; however, the standards form the basis for the state's testing system.

<table>
<thead>
<tr>
<th>Kansas Curricular Standards for Science (March, 1993; reprinted, February, 1994)</th>
</tr>
</thead>
</table>

### Kansas

#### CURRICULAR STANDARDS FOR SCIENCE

**Student Outcome 1**

All students will demonstrate in academic and applied situations a high level of mastery of essential skills as evidenced by the following standards:

A. Read and comprehend a variety of resources.

B. Communicate clearly, both orally and in writing, for a variety of purposes and audiences.

C. Use mathematics and mathematical principles.

D. Access and use information.

**Student Outcome 2**

All students will demonstrate effective communication skills as evidenced by the following standards:

A. Analyze, summarize, and comprehend what is read in all subject areas.

B. Write and orally communicate for:

1. clear articulation,
2. analysis,
3. conceptualization,
4. synthesis, and
5. summarization of information.

**Student Outcome 3**

All students will demonstrate complex thinking skills in academic and applied situations as evidenced by the following standards:

A. Apply problem-solving skills.

B. Find information; process, analyze, and synthesize it; and apply it to new situations.

C. Use creative, imaginative, and divergent thinking to formulate and solve problems, and to communicate the results.

**Student Outcome 4**

All students will demonstrate the necessary characteristics to work effectively both independently and in groups as evidenced by the following standards:

A. Work collaboratively in teams.
B. Work together without prejudice, bias, or discrimination, using techniques to separate people from problems, focusing on interests not positions, inventing options for mutual gain, and using objective criteria.

Student Outcome 5
All students will demonstrate physical and emotional well-being as evidenced by the following standard:
A. Have the knowledge, skills, and behaviors essential to live a healthy and productive life.

CURRICULAR STANDARDS FOR COMMUNICATIONS

COMMUNICATIONS DEVELOPMENT PROGRAM ESSENTIAL OUTCOMES AND BENCHMARKS

1. Learners will speak and write for a variety of audiences and purposes and listen and read for a variety of purposes.

To communicate effectively, students must have clear purpose, the strategies and skills to accomplish that purpose, and they must know with whom they are communicating.

ESSENTIAL COMMUNICATION BENCHMARKS: ELEMENTARY SCHOOL
The Learner Will:
A. Describe their attitudes toward what they are reading and writing and the effect these attitudes have on their purpose.
B. Demonstrate control over such features of writing as ideas that are well developed, clear, and interesting; an authentic and appropriate voice; organization that helps the reader; effective word choice; clear and fluent sentences; conventions (spelling, capitalization, punctuation, usage), and clear handwriting and appropriate pronunciation.
C. Demonstrate control over such features of speaking as audience analysis, message construction (for example, the features in item C above), and delivery.
D. Discover and demonstrate their own best reading and writing processes as they generate, arrange, select, evaluate, and revise their ideas.
E. Identify the purpose and the message intended by the writer or speaker.
F. Demonstrate basic literacy strategies and their understanding that reading is not a set of steps, but rather a process that varies with material to be read, the reader's purpose, and other factors unique to the individual reader.

2. The learners will use language to construct meaning of their own and to understand the meaning of other people.

Students use language to make connections among school subjects and between school subjects and their own experiences. Through this process, students see a larger picture and arrive at increased clarity, order, and subtlety of understanding.

ESSENTIAL COMMUNICATION BENCHMARKS: ELEMENTARY SCHOOL
The Learners Will:
A. Interpret past experience and recognize prior knowledge to understand what they hear, read, and see.
B. Recognize advertising techniques that attempt to persuade them.
C. Distinguish between fact and opinion in written and oral communication.
D. Use logical reasoning in their reading, writing, listening, and speaking.
E. Develop and demonstrate their understanding that meaning is derived from experience, and is influenced by culture, race, gender, and socio-economic status.
F. Use reading, writing and oral language as tools for learning throughout the curriculum.
3. Learners will demonstrate an understanding of the development nature of language. Some basic theoretical knowledge should help students understand why communication succeeds and fails and how to ensure frequent success.

**ESSENTIAL COMMUNICATION: ELEMENTARY SCHOOL**

The Learners Will:

A. Demonstrate an understanding of the importance to children's language development of reading and talking to young children in order to fulfill the learners' responsibilities as role models.

B. Demonstrate how numbers and words make up systems that are used in reading and writing.

C. Demonstrate an understanding of how languages change.

D. Demonstrate understanding of the communication process by interpreting, analyzing, and improving faulty communication.

4. Learners will recognize that in a multicultural society there will be numerous languages and dialects, and they will accord each language and dialect equal status as a social expression of human experience.

No language or dialect is linguistically superior to another, just as no culture is inherently superior to another culture. Unfortunately, many people are restricted from favored social status or improved economic advantages because their language or dialect is considered inferior.

American students need to honor diversity in language as part of honoring diverse cultures; especially compelling is the need to honor the dialects and cultures that are within our own borders. At the same time, students must recognize the importance of appropriate levels of usage. In practice, such recognition involves the selection of the speaker's or writer's social dialect most appropriate to audience and purpose. In this sense, "standard" English represents a dialect that should be common to all rather than a label of favored social status. Nonstandard dialects, including attempts by foreigners to speak English, are not corruptions of standard English but rather communication which uses rule systems not shared by standard English.

**ESSENTIAL COMMUNICATION BENCHMARKS: SECONDARY, MIDDLE AND ELEMENTARY SCHOOL**

A. Demonstrate control of standard American English.

B. Demonstrate in their speaking and writing that they value their own language and dialect.

C. Demonstrate and understanding that no language or dialect is superior to another.

D. Demonstrate an understanding of why some languages and dialects are misjudged as superior to others.

E. Demonstrate an understanding that to meet their purpose, writers and speakers will choose from among dialects they speak, and they will choose a degree of formality or informality.

F. Demonstrate a familiarity with the literature of diverse cultures and with the work of both men and women speakers and writers.

S. Learners will enhance their creative and critical thinking by developing and describing their own standards for aesthetic and critical evaluation.

In addition to developing technical proficiency in the receptive and productive aspects of oral and written language, students need to develop their own unique standards for appreciating and critiquing human expression. The development of personal standards extends the resources of the entire language community.
Kansas

ESSENTIAL COMMUNICATION BENCHMARKS: ELEMENTARY SCHOOL
The Learners Will:
A. Create their own criteria for assessing written and oral expression responsive to author purpose and audience need.
B. Demonstrate an understanding that personal and varied interpretation is part of the richness of any art.
C. Interpret and evaluate literary and dramatic activities and works with open-mindedness, curiosity, and willingness to ask questions.

6. Learners will use a variety of print, non-print, and technological resources to find information for critical and creative thinking.

Creative and critical thinking require access to information.

ESSENTIAL COMMUNICATION BENCHMARKS: SECONDARY, MIDDLE AND ELEMENTARY SCHOOL
The Learners Will:
A. Create written and spoken work with information from a variety of technologies in schools, libraries and communities.
B. Select the technologies appropriate for the ways they learn best.
C. Demonstrate that they can create work of their own with the help of information from others.

7. Learners will demonstrate the interpersonal and group communication skills necessary to work with others.

Though we frequently think of ourselves as a nation of individuals, cooperation and teamwork have always been important to us and will continue to be important.

ESSENTIAL COMMUNICATION BENCHMARKS: ELEMENTARY SCHOOL
The Learners Will:
A. Function effectively in a variety of roles within formal and informal groups.
B. Develop and describe their understanding of the right of free speech.
C. Demonstrate a systematic approach to solving problems in a variety of situations.
D. Resolve conflict through negotiation and compromise.
E. Demonstrate a respect for differences in attitude, behavior, values and beliefs.
F. Identify, reflect upon, and adjust appropriately that means they use to communicate strong feelings.
G. Accept criticism, disagreement, disappointment and compliments appropriately.
H. Allow others to speak and listen without interrupting or creating noise.
I. Demonstrate sensitivity to those with physiological communication difficulties, such as difficulties with hearing, articulation, vision, and language.
Kentucky

Document Utilized

*Kentucky's Learning Goals and Learner Outcomes* (no date).

**Background**

In 1989, the governor created a 12-member Council on School Performance Standards to determine what Kentucky students should know and be able to do and how learning should be assessed. As part of the Kentucky Education Reform Act, passed in 1990, the state adopted six broad learning goals. The legislation authorized that the goals be framed in measurable terms. The resulting 75 learner outcomes are tied to the states broad goals for all students. For each outcome, benchmarks are provided to indicate student progress toward the outcome (elementary, middle, and high school).

### LEARNING GOALS AND LEARNER OUTCOMES

<table>
<thead>
<tr>
<th>LEARNING GOAL</th>
<th>OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Students are able to use basic communication and mathematics skills for purposes and situations they will encounter throughout their lives.</td>
<td>F3</td>
</tr>
<tr>
<td>1.1 Students use research tools to locate sources of information and ideas relevant to a specific need or problem.</td>
<td>F3</td>
</tr>
<tr>
<td>1.2 Students construct meaning from a variety of print materials for a variety of purposes through reading.</td>
<td>F3</td>
</tr>
<tr>
<td>1.3 Students construct meaning from messages communicated in a variety of ways for a variety of purposes through observing.</td>
<td>F3, F3d</td>
</tr>
<tr>
<td>1.4 Students construct meaning from messages communicated in a variety of ways for a variety of purposes through listening.</td>
<td>F1, F3c</td>
</tr>
<tr>
<td>1.5 Students communicate ideas by quantifying with whole, rational, real, and/or complex numbers.</td>
<td>F3c</td>
</tr>
<tr>
<td>1.6 Students manipulate information and communicate ideas with a variety of computational algorithms.</td>
<td>F3c</td>
</tr>
<tr>
<td>1.7 Students organize information and communicated ideas by visualizing space configurations and movements.</td>
<td>F3</td>
</tr>
<tr>
<td>1.8 Students gather information and communicate ideas by measuring.</td>
<td>F3c</td>
</tr>
<tr>
<td>1.9 Students organize information and communicate ideas by algebraic and geometric reasoning such as relations, patterns, variables, unknown quantities, deductive, and inductive processes.</td>
<td>F3</td>
</tr>
<tr>
<td>1.10 Students organize information through development and use of classification rules and classification systems.</td>
<td>F3</td>
</tr>
<tr>
<td>1.11 Students organize information through development and use of audiences for a variety of purposes in a variety of modes through writing.</td>
<td>F3</td>
</tr>
<tr>
<td>1.12 Students communicate ideas and information to a variety of audiences for a variety of purposes in a variety of modes through speaking.</td>
<td>F1</td>
</tr>
<tr>
<td>1.13 Students construct meaning and/or communicate ideas and emotions through the visual arts.</td>
<td>F3g</td>
</tr>
<tr>
<td>1.14 Students construct meaning and/or communicate ideas and emotions through music.</td>
<td>F3g</td>
</tr>
<tr>
<td>1.15 Students construct meaning from and/or communicate ideas and emotions through movement.</td>
<td>F3g</td>
</tr>
<tr>
<td>1.16 Students use computers and other electronic technology to gather, organize, manipulate and express information and ideas.</td>
<td>F3</td>
</tr>
</tbody>
</table>
2. Students shall develop their abilities to apply core concepts and principles from mathematics, the sciences, the arts, the humanities, social studies, practical living studies, and vocational studies to what they will encounter throughout their lives.

**SCIENCE**

2.1 Students use appropriate and relevant scientific skills to solve specific problems in real-life situations.
2.2 Students identify, compare, and contrast patterns and use patterns to understand and interprets past and present events and predict future events.
2.3 Students identify and describe systems, subsystems, and components and their interactions by completing tasks and/or creating products.
2.4 Students use models and scale to explain or predict the organization, function, and behavior of objects, materials, and living things in their environment.
2.5 Students understand the tendency of nature to remain constant or move toward a steady state in closed systems.
2.6 Students complete tasks and/or develop products which identify, describe, and direct evolutionary change which has occurred or is occurring around them.

**MATHEMATICS**

2.7 Students demonstrate understanding of number concepts.
2.8 Students demonstrate understanding of concepts related to mathematical procedures.
2.9 Students demonstrate understanding of concepts related to space and dimensionality.
2.10 Students demonstrate understanding of measurement concepts.
2.11 Students demonstrate understanding of change concepts on patterns and functions.
2.12 Students demonstrate understanding of concepts related to mathematical structure.
2.13 Students demonstrate understanding of data concepts related to both certain and uncertain events.

**SOCIAL STUDIES**

2.14 Students recognize issues of justice, equality, responsibility, choice, and freedom and apply these democratic principles to real-life situations.
2.15 Students recognize varying forms of government and address issues of importance to citizens in democracy, including authority, power, civic action, and rights and responsibilities.
2.16 Students recognize varying social groupings and institutions and address issues of importance to members of them, including beliefs, customs, norms, roles, equity, order and change.
2.17 Students interact effectively and work cooperatively with the diverse ethnic and cultural groups of our nation and world.
2.18 Students make economic decisions regarding production and consumption of goods and services related to real-life situations.
2.19 Students recognize the geographic interaction between people and their surroundings in order to make decisions and take actions that reflect responsibility for the environment.
2.20 Students recognize continuity and change in historical events, conditions, trends, and issues in order to make decisions for a better future.
2.21 Students observe, analyze, and interpret human behaviors to acquire a better understanding of self, others, and human relationships.
Kentucky

**ARTS AND HUMANITIES**

| 2.22 | Students create products and make presentations that convey concepts feelings. | F3g |
| 2.23 | Students analyze their own and others artistic products and performances. | F3g |
| 2.24 | Students appreciate creativity and values of the arts and the humanities. | F3g |
| 2.25 | Through their productions and performance or interpretation, students show an understanding of the influence of time, place, personality, and society on the arts and humanities. | F3g, G3 |
| 2.26 | Students recognize differences and commonalities in the human experience through their productions, performances, or interpretations. | F |
| 2.27 | Students complete tasks, make presentations, and create models that demonstrate awareness of the diversity of forms, structures, and concepts across languages and how they may interrelate. | F |
| 2.28 | Students understand and communicate in a second language. | F |

**PRACTICAL LIVING**

| 2.29 | Students demonstrate effective individual and family life skills. | A2a, D, D1b, D1d |
| 2.30 | Students demonstrate effective decision-making and evaluative consumer skills | F |
| 2.31 | Students demonstrate skills and self-responsibility in understanding, achieving, and maintaining physical wellness. | C3 |
| 2.32 | Students demonstrate positive strategies for achieving and maintaining mental and emotional wellness. | G |
| 2.33 | Students demonstrate the ability to access and access health services and resource available in their community which maintain and promote healthy living for its citizens. | C2 |
| 2.34 | Students perform psychomotor skills effectively and efficiently in a variety of settings. | C4 |
| 2.35 | Students demonstrate knowledge, skills, and values that have lifetime implications for involvement's in physical activity. | C4 |

**VOCATIONAL STUDIES**

| 2.36 | Students demonstrate strategies for selecting career path options. | F |
| 2.37 | Students produce and/or make presentations that communicate school-to-work/post-secondary transition skills. | F |
| 2.38 | Students demonstrate the ability to complete a post-secondary opportunities search. | F |

3. Students shall develop their abilities to become self-sufficient individuals.

| 3.1 | Students demonstrate positive growth in self-concept through appropriate tasks or projects. | G2a |
| 3.2 | Students demonstrate the ability to maintain a healthy lifestyle. | C3, C4 |
| 3.3 | Students demonstrate the ability to be adaptable and flexible through appropriate tasks or projects. | no match |
| 3.4 | Students demonstrate the ability to be resourceful and creative. | no match |
| 3.5 | Students demonstrate self-control and self discipline. | G |
| 3.6 | Students demonstrate the ability to make decisions based on ethical values. | no match |
| 3.7 | Students demonstrate the ability to learn on one's own. | D1 |

4. Students shall develop their abilities to become responsible members of a family, work group, or community, including demonstrating effectiveness in community service.
<table>
<thead>
<tr>
<th>Kentucky</th>
<th>NEEDCODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 Students effectively use interpersonal skills.</td>
<td>G4</td>
</tr>
<tr>
<td>4.2 Students use productive team membership skills.</td>
<td>D1d, G4</td>
</tr>
<tr>
<td>4.3 Students individually demonstrate consistent, responsive, and caring behavior.</td>
<td>E2b</td>
</tr>
<tr>
<td>4.4 Students demonstrate the ability to accept the rights and responsibilities for self and others.</td>
<td>D3, G3</td>
</tr>
<tr>
<td>4.5 Students demonstrate an understanding of, appreciation for, and sensitivity to multicultural and world view.</td>
<td>G3</td>
</tr>
<tr>
<td>4.6 Students demonstrate an open mind to alternative perspectives.</td>
<td>G3</td>
</tr>
<tr>
<td>5. Students shall develop their abilities to think and solve problems in school situations and in a variety of situations they will encounter in life.</td>
<td>F2, F3</td>
</tr>
<tr>
<td>5.1 Students use critical thinking skills in a variety of situations that will be encountered in life.</td>
<td>F3</td>
</tr>
<tr>
<td>5.2 Students use creative thinking skills to develop or invent novel, constructive ideas or products.</td>
<td>F2</td>
</tr>
<tr>
<td>5.3 Students create and modify their understanding of a concept through organizing information.</td>
<td>F</td>
</tr>
<tr>
<td>5.4 Students use a decision-making process to make informed decisions among options.</td>
<td>F2a</td>
</tr>
<tr>
<td>5.5 Students use problem-solving processes to develop solutions to relatively complex problems.</td>
<td></td>
</tr>
<tr>
<td>6. Students shall develop their abilities to connect and integrate experiences and new knowledge from all subject matter fields with what they have previously learned and build on past learning experiences to acquire new information through various media sources.</td>
<td>F3</td>
</tr>
<tr>
<td>6.1 Students address situations (e.g. topics, problems, decisions, products) from multiple perspectives and produce presentations or products that demonstrate a broad understanding. Examples of perspective include: economic, social, cultural, political, historic, physical, technical, aesthetic, environmental, and personal.</td>
<td>F3</td>
</tr>
<tr>
<td>6.2 Students use what they already know to acquire new knowledge, develop new skills or interpret new experiences.</td>
<td>F3</td>
</tr>
<tr>
<td>6.3 Students expand their understanding of existing knowledge (e.g. topic, problem, situation, product), by making connections with new and unfamiliar knowledge skills and experiences.</td>
<td>F3</td>
</tr>
</tbody>
</table>
Maryland

Document Utilized


Background

In December 1989, the Maryland State Board of Education established the Maryland School Performance Program, a systematic outcome-based approach for promoting student achievement and school performance. One component of this program features the development of new criterion-referenced assessment batteries in key subject areas for students in grades 3, 5, 8, and 11. The learning outcomes are broad in scope and will guide test contractors in their work with Maryland teachers and curriculum supervisors in the development of the assessments. The learning outcomes are mandatory. They are tied to the state assessments, which are part of a statewide accountability system for schools and school districts.

### SOCIAL STUDIES OUTCOMES

#### MATRIX OF INDICATORS

**POLITICAL SYSTEMS**

Students will demonstrate an understanding of the historical development and current status of principles, institutions, and processes of political systems in Maryland and the United States.

**GRADES K-3/POLITICAL SYSTEMS**

- Read and interpret principles of American government expressed in stories, symbols, and songs
- Read and interpret fiction and non-fiction passages about people, places, and events in the early history of the American political system
- Compare the rights and responsibilities of people living today with those of people living in other times or places.
- Describe the processes people use for making and changing rules within the family, school, and community.
- Describe ways in which individuals and groups bring about civic improvement.

**SKILLS AND PROCESSES**

Students will demonstrate an ability--individually and as part of a group--to gather information, think critically, and solve problems as needed to facilitate responsible decision-making, to understand complex ideas, and to generate new ideas.

**GRADES K-3/SKILLS AND PROCESSES**

- Obtain and use relevant information by reading, asking questions, observing, and listening.
- Obtain and use print and non-print sources of information such as pictures, graphics, maps, globes and artifacts.
- Read and interpret problems from social studies.
- Identify occasions and processes for making decisions.
- Interact with others in groups to achieve common goals.
### Maryland

#### VALUING SELF AND OTHERS
Students will demonstrate attainment of a positive self-concept and empathy toward others in order to improve interaction among individuals and groups in our democratic society.

**GRADES K-3/VALUING SELF AND OTHERS**
- Demonstrate a positive self-concept by behaving appropriately in a variety of situations.
- Recognize that people everywhere have similar social needs, motivations, and desires but may express them differently.
- Provide examples of social institutions and the media that have an impact on individuals.

#### UNDERSTANDING ATTITUDES
Students will demonstrate attainment of understanding and attitudes needed to secure a reasoned commitment to human dignity, justice, and democratic processes.

**GRADES K-3/UNDERSTANDING AND ATTITUDES**
- Propose rules that promote order and fairness in various situations.
- Read and interpret examples of fiction and non-fiction that illustrate conflicts between conscience and respect for authority.
- Read and interpret examples of fiction and non-fiction in which individuals demonstrate respect and support for their rights and dignity of all peoples.
- Distinguish between the concepts of majority rule and rights of the individual.

#### PEOPLES OF THE NATION AND WORLD
Students will demonstrate an understanding of the history, diversity, and commonalty of the peoples of the nation and world, the reality of human interdependence, the need for global cooperation, and a multicultural perspective.

**GRADES K-3/PEOPLES OF THE NATION AND WORLD**
- Summarize the main points of current event.

#### GEOGRAPHY
Students will demonstrate an understanding of geographic concepts and processes as needed to examine the role of culture, technology, and the environment in the location and distribution of human activities.

**GRADES K-3/GEOGRAPHY**
- Locate features of the school and community by interpreting and constructing maps using simple grid systems, cardinal directions, relative distances and sizes, and symbols explained in a legend (key).
- Examine environmental concerns.
- Explain the relationship between the physical setting of a community and its ability to satisfy the wants and needs of its people.
- Explain the factors influencing the size, location, and population of communities.
- Describe how transportation and communication networks link communities.
- Examine personal environmental choices and their effects on the quality of life in the community.

#### ECONOMICS
Students will demonstrate an understanding of the historical development and current status of economic principles, institutions, and processes needed to be effective citizens, consumers, and workers in American society.

**GRADES K-3/ECONOMICS**
- Describe the relationship between economic wants and needs.
- Describe the impact of economic specialization on the growth of communities.
Make decisions about available goods and services and understand the consequences of those decisions.
Examine the services financed through taxation.
Identify economic resources located within a community.

SUGGESTED SCIENCE OUTCOMES

Students will demonstrate their acquisition and integration of major concepts and unifying themes from the life, physical, and earth/science sciences.
Students will demonstrate the ability to interpret and explain information generated by their exploration of scientific phenomena.
Students will demonstrate positive attitudes toward science and its relevance to the individual, society, and the environment and demonstrate confidence in their ability to practice science.
Student will demonstrate the ability to employ the language, instruments, methods, and materials of science for collecting, organizing, interpreting, and communicating information.
Students will demonstrate the ability to apply science in solving problems and making personal decisions about issues affecting the individual, society, and the environment.

SCIENCE OUTCOMES MODEL GRADES 3, 5, 8, 11: STUDENTS WILL DEMONSTRATE THEIR ACQUISITION AND INTEGRATION OF MAJOR CONCEPTS AND UNIFYING THEMES FROM THE LIFE SCIENCES.

CURRICULUM FOCUS OF STATES SCIENCE ASSESSMENT

GRADES K-3
The life science program (K-3) includes an emphasis on observation and exploration of characteristics of living things and their environments.

NATURE OF SCIENCE (not grade level specific)
Students will demonstrate the ability to interpret and explain information generated by their exploration of scientific phenomena.

HABITS OF MIND (not grade level specific)
Students will demonstrate ways of thinking and acting inherent to the practice of science.

ATTITUDES (not grade level specific)
Students will demonstrate positive attitudes toward science and its relevance to the individual, society, and the environment and demonstrate confidence in their ability to practice science.

SCIENCE PROCESSES (not grade level specific)
Students will demonstrate the ability to employ the language, instruments, methods, and materials of science for collecting, organizing, interpreting and communicating information.

APPLICATION (not grade level specific)
Students will demonstrate the ability to apply science in solving problems and making personal decisions about issues affecting the individual, society and the environment.
## Maryland

STUDENTS WILL DEMONSTRATE THEIR ACQUISITION AND INTEGRATION OF MAJOR CONCEPTS AND UNIFYING THEMES FROM THE EARTH/SPACE SCIENCES.

### GRADES K-3

The earth/space science program (K-3) includes emphasis on observation and exploration of local features of the earth, water, air and sky.

**NATURE OF SCIENCE** (not grade level specific)

Students will demonstrate the ability to interpret and explain information generated by their exploration of scientific phenomena.

**HABITS OF MIND** (not grade level specific)

Students will demonstrate ways of thinking and acting inherent to the practice of science.

**ATTITUDES** (not grade level specific)

Students will demonstrate positive attitudes toward science and its relevance to the individual, society, and the environment and demonstrate confidence in their ability to practice science.

**SCIENCE PROCESSES** (not grade level specific)

Students will demonstrate the ability to employ the language, instruments, methods, and materials of science for collecting, organizing, interpreting and communicating information.

**APPLICATION** (not grade level specific)

Students will demonstrate the ability to apply science in solving problems and making personal decisions about issues affecting the individual, society and the environment.

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STUDENTS WILL DEMONSTRATE THEIR ACQUISITION AND INTEGRATION OF MAJOR CONCEPTS AND UNIFYING THEMES FROM THE PHYSICAL SCIENCES.

### GRADES K-3

The physical science program (K-3) includes emphasis on observation and exploration of properties of the physical world with which students interact.

**NATURE OF SCIENCE** (not grade level specific)

Students will demonstrate the ability to interpret and explain information generated by their exploration of scientific phenomena.

**HABITS OF MIND** (not grade level specific)

Students will demonstrate ways of thinking and acting inherent to the practice of science.

**SCIENCE PROCESSES** (not grade level specific)

Students will demonstrate the ability to employ the language, instruments, methods, and materials of science for collecting, organizing, interpreting and communicating information.

**APPLICATION** (not grade level specific)

Students will demonstrate the ability to apply science in solving problems and making personal decisions about issues affecting the individual, society and the environment.
Documents Utilized

*Michigan Essential Goals and Objectives for Science Education (K-12)* (August, 1991)
*Michigan Essential Goals and Objective for Writing* (October, 1985)
*Essential Goals and Objectives for Reading Education* (no date)
*Michigan Essential Goals and Objectives for Speaking and Listening* (September, 1991)
*Essential Goals and Objectives for Social Studies in Education in Michigan* (August, 1992)
*Essential Goals and Objectives for Computer Education* (Spring, 1987)
*Michigan Essential Goals and Objectives for Arts Education (K-12)* (1989)
*Michigan Essential Goals and Objectives for Foreign Language Education (K-12)* (1991)
*Michigan Essential Goals and Objectives for Mathematics Education* (October, 1990)

Background

Public Act 25 of 1990 states that Michigan’s core curriculum outcomes must be based upon the state’s goals and objectives. Essential goals and objectives have been published for major subject areas. These publications are used by local school districts (1) as part of a core curriculum; (2) for the development of local curriculum materials, and (3) for the development of accountability measures. In December 1993, the legislature passed a law that required standards to be developed in four core subjects (English/language arts, mathematics, science, and social studies). These content standards will include benchmarks that specify what students should know and be able to do at the end of elementary, middle, and high school.

Note: Two projects, Michigan’s Special Education Program Outcomes and the Outcomes Training Project, are providing educators across the State with a source for educational outcomes that are specific to the unique needs of learners with disabilities and training in their use and assessment. Student outcomes that have been specified by disability area are not included here.

### Michigan

<table>
<thead>
<tr>
<th>ESSENTIAL GOALS AND OBJECTIVES FOR SPEAKING AND LISTENING</th>
</tr>
</thead>
<tbody>
<tr>
<td>LISTENING</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>A. PERCEIVING AND DISCRIMINATING</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>At the High School, Middle/Junior High, and Elementary</td>
</tr>
<tr>
<td>levels, students will:</td>
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<tr>
<td></td>
</tr>
<tr>
<td>OUTCOME 1. Distinguish between verbal and nonverbal</td>
</tr>
<tr>
<td>communication.</td>
</tr>
<tr>
<td>Objective 1. Identify patterns (e.g., repetition, rhythm,</td>
</tr>
<tr>
<td>rhyming) in communication.</td>
</tr>
<tr>
<td>2. Discriminate between sounds (e.g., environmental,</td>
</tr>
<tr>
<td>extraneous, warning) and language.</td>
</tr>
<tr>
<td>3. Identify cultural differences in verbal and nonverbal</td>
</tr>
<tr>
<td>communication.</td>
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<tr>
<td></td>
</tr>
<tr>
<td>OUTCOME 2. Develop an appreciation of the contribution</td>
</tr>
<tr>
<td>of the listener to the communication process.</td>
</tr>
<tr>
<td>Objective 1. Recognize the implications of a commitment</td>
</tr>
<tr>
<td>to be an effective listener.</td>
</tr>
<tr>
<td>2. Recognize distinctions between the physical process</td>
</tr>
<tr>
<td>of hearing and the mental process of Listening.</td>
</tr>
<tr>
<td>3. Recognize the diverse roles of the listener in the</td>
</tr>
<tr>
<td>communication process.</td>
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<td></td>
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<tr>
<td>NC30 CODE</td>
</tr>
</tbody>
</table>

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### Michigan

<table>
<thead>
<tr>
<th>OUTCOME 3.</th>
<th>Perceive emotional dimensions and aesthetic meanings through paralinguistic and nonverbal cues.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective 1.</strong></td>
<td>Distinguish between intentional and unintentional facial expression.</td>
</tr>
<tr>
<td>2.</td>
<td>Distinguish between intentional and unintentional bodily movement--kinesthetic cues.</td>
</tr>
<tr>
<td>3.</td>
<td>Distinguish between intentional and unintentional vocal expression--paralinguistic cues.</td>
</tr>
<tr>
<td>4.</td>
<td>Distinguish between intentional and unintentional eye messages--eye contact and proxemic cues.</td>
</tr>
</tbody>
</table>

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>F1a</td>
<td>F1a, F3d</td>
<td>F1a, F3d</td>
</tr>
</tbody>
</table>

### B. ATTENDING

At the High School, Middle/Junior High, and Elementary levels, students will:

<table>
<thead>
<tr>
<th>OUTCOME 1.</th>
<th>Exhibit good attentive listening behavior.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective 1.</strong></td>
<td>Recognize situations which require listening.</td>
</tr>
<tr>
<td>2.</td>
<td>Give full attention to the message (e.g., use monitoring cues to aid turn-taking).</td>
</tr>
<tr>
<td>3.</td>
<td>Focus on a significant, single stimulus.</td>
</tr>
<tr>
<td>4.</td>
<td>Identify internal (e.g., daydreaming) and external (e.g., faking attention) distractions.</td>
</tr>
<tr>
<td>5.</td>
<td>Attend to visual as well as auditory cues.</td>
</tr>
</tbody>
</table>

| | |
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| F1a, F3d | F3d |

<table>
<thead>
<tr>
<th>OUTCOME 2.</th>
<th>Apply the different functions of listening.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective 1.</strong></td>
<td>Listen to imagine.</td>
</tr>
<tr>
<td>2.</td>
<td>Listen for information.</td>
</tr>
<tr>
<td>3.</td>
<td>Listen to assess and evaluate.</td>
</tr>
<tr>
<td>4.</td>
<td>Listen for pleasure.</td>
</tr>
<tr>
<td>5.</td>
<td>Listen to discover affective messages.</td>
</tr>
</tbody>
</table>

| | |
| --- | |
| F3d | F3d |

<table>
<thead>
<tr>
<th>OUTCOME 3.</th>
<th>Recognize the different purposes of listening.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective 1.</strong></td>
<td>Recognize the discriminative purpose.</td>
</tr>
<tr>
<td>2.</td>
<td>Recognize the comprehensive purpose.</td>
</tr>
<tr>
<td>3.</td>
<td>Recognize the therapeutic purpose.</td>
</tr>
<tr>
<td>4.</td>
<td>Recognize the critical purpose.</td>
</tr>
<tr>
<td>5.</td>
<td>Recognize the appreciative purpose.</td>
</tr>
</tbody>
</table>

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| --- | |
| F1a, F3d | F3d |

### C. ASSIGNING

At the High School, Middle/Junior High, and Elementary levels, students will:

<table>
<thead>
<tr>
<th>OUTCOME 1.</th>
<th>Apply principles of listening to secure essential information.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective 1.</strong></td>
<td>Paraphrase an oral statement completely and accurately.</td>
</tr>
<tr>
<td>2.</td>
<td>Retell an oral account in sequence.</td>
</tr>
<tr>
<td>3.</td>
<td>Identify the main idea in an oral message.</td>
</tr>
<tr>
<td>4.</td>
<td>Identify supporting detail in an oral message.</td>
</tr>
</tbody>
</table>

| | |
| --- | |
| F1a, F3d | F3d |

<table>
<thead>
<tr>
<th>OUTCOME 2.</th>
<th>Recognize organizational patterns.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective 1.</strong></td>
<td>Recognize chronological patterns.</td>
</tr>
<tr>
<td>2.</td>
<td>Recognize topical patterns.</td>
</tr>
<tr>
<td>3.</td>
<td>Recognize spatial patterns.</td>
</tr>
<tr>
<td>4.</td>
<td>Recognize comparison and contrast patterns.</td>
</tr>
<tr>
<td>5.</td>
<td>Recognize problem-solution patterns.</td>
</tr>
<tr>
<td>6.</td>
<td>Recognize climactic patterns.</td>
</tr>
</tbody>
</table>

| | |
| --- | |
| F3 | F3 |
7. Recognize organizational devices, such as transitions that help to determine meaning.

OUTCOME 3. Comprehend spoken messages.
   Objective 1. Identify the communication rituals used in everyday situations (e.g., legal, occupational, religious, social).
   2. Recognize the effects of word choice (e.g., jargon, time-bound language) on comprehension.
   3. Develop the ability to concentrate more on content rather than presentation.
   4. Use verbal and nonverbal cues to determine meaning and sequence.
   5. Distinguish between connotative and denotative meanings.
   6. Compare new information to ideas and concepts retained in memory.

D. EVALUATING
   At the High School, Middle/Junior High, and Elementary levels, students will:
   OUTCOME 1. Use cognitive and affective elements of the message to give meaning to the listener.
      Objective 1. Distinguish between fantasy and reality.
      2. Distinguish between fact and opinion.
      3. Distinguish between literal and figurative.
      4. Distinguish between objective and emotional.
      5. Distinguish between relevant and irrelevant.
      6. Distinguish between complete and incomplete messages.
      7. Distinguish between clear and unclear messages.
   OUTCOME 2. Distinguish between valid and invalid inferences.
      Objective 1. Recognize the effects of propaganda techniques on meaning.

E. RESPONDING
   At the High School, Middle/Junior High, and Elementary levels, students will:
   OUTCOME 1. Listen to understand the message.
      Objective 1. Use intrapersonal skills to review the meaning of a message.
      2. Validate understanding of the message by an objective oral synopsis of the information.
      3. Recognize the effects of personal bias on meaning.
   OUTCOME 2. Promote a supportive communication environment.
      Objective 1. Encourage self-disclosure in others through supportive feedback.
      2. Provide appropriate minimal reinforcers (e.g., head nods, "uh-huh") while receiving communication.
      3. Time response to reflect a sensitivity to the communication process.

F. REMEMBERING
   At the High School, Middle/Junior High, and Elementary levels, students will:
   OUTCOME 1. Retain information in both short-term and long-term memory.
      Objective 1. Use notetaking techniques to record current information, to retrieve prior knowledge, and to link old information with new.
      2. Use semantic mapping.
3. Use precise writing.
4. Use principle-fact techniques.
5. Use the standard outline form in both key word and sentence form.

OUTCOME 2. Apply memory techniques to aid retention of messages.
   Objective 1. Use a grouping system.
   2. Use an ordering system.
   3. Use a reordering system.
   4. Use mnemonic strategies.

SPEAKING

A. MESSAGES

1. ETHICS
   At the Elementary level, students will:
   OUTCOME 1. Demonstrate an understanding of the relationship between oral communication and values.
   Objective 1. Develop a personal communication philosophy that is truthful, honest, and responsible.
   2. Demonstrate an awareness that because there are different ways to present the same subject, the oral communication should reflect the values of a communicator.
   3. Recognize the effects of plagiarism on communication.

2. EVIDENCE
   At the Elementary level, students will:
   OUTCOME 1. Recognize the basic categories of proof that a communicator can use to establish a position in an oral communication.
   Objective 1. Identify and discuss the use of examples to support ideas in a communication.
   2. Identify and discuss the use of statistics to support ideas in a communication.
   3. Identify and discuss the use of testimony to support ideas in a communication.

3. REASONING
   At the Elementary level, students will:
   OUTCOME 1. Apply principles of analytical thinking.
   Objective 1. Examine available data, such as physical data, symbolic material, basic assumptions.
   2. Order (inclusion, exclusion) available data.
   3. Draw conclusions about data.

4. LANGUAGE
   At the Elementary level, students will:
   OUTCOME 1. Recognize differences between oral and written communication.
   Objective 1. Identify and use language that is clear.
   2. Identify and use language that is expressive.
   3. Identify and use language that is suitable.

5. AUDIENCE ANALYSIS
   At the Elementary level, students will:
   OUTCOME 1. Recognize the influence that physical and societal demographic characteristics can have on the response of an audience.
   Objective 1. Apply the general components of demographic audience analysis (e.g., age, gender, religion, racial, ethnic, and cultural background) to different settings.
### OUTCOME 2

#### Objective 1
- Demonstrate an understanding of how situational audience analysis impacts the speaker audience relationship.
- Determine how the size of an audience can affect a communication.
- Determine how the environment for an audience can affect a communication.

#### Objective 2

#### Structure

1. **Organizational Analysis**
   - At the Elementary level, students will:
   - **Outcome 1**: Demonstrate an awareness that each presentation will have a singular major idea that requires further development.
   - **Objective 1**: Identify central ideas in various oral communications.
   - **Outcome 2**: Demonstrate that all major ideas in a communication have support.
     - **Objective 1**: Identify the position of main points to develop a central idea.
     - **Objective 2**: Identify the role of subpoints to develop a main point.
     - **Objective 3**: Recognize how supporting materials help prove a main point.
   - **Outcome 3**: Identify the various purposes of communication.
     - **Objective 1**: Recognize when the purpose of a message is to inform.
     - **Objective 2**: Recognize when the purpose of a message is to entertain.
     - **Objective 3**: Recognize when the purpose of a message is to persuade.

2. **Introductions**
   - At the Elementary level, students will:
   - **Outcome 1**: Organize oral messages into specific sequential components to help identify an introduction.
   - **Objective 1**: Develop messages with three basic components—introduction, body, conclusion—with the highlight on the introduction.

3. **Conclusions**
   - At the Elementary level, students will:
   - **Outcome 1**: Organize oral messages into specific sequential components to help identify a conclusion.
   - **Objective 1**: Develop messages with three basic components—introduction, body, conclusion—with the highlight on the conclusion.

4. **Presentation**
   - At the Elementary level, student will:
   - **Outcome 1**: Recognize that communicators have flexibility in presentational choices.
     - **Objective 1**: Recognize that communicators have various options in initiating communication relationships (e.g., meeting new people, greetings).
     - **Objective 2**: Recognize how ideas can be communicated using different formats (e.g., narrative, lecture).
   - **Outcome 2**: Recognize how expressive and appropriate vocal characteristics affect the communication process.
     - **Objective 1**: Recognize that vocal characteristics reflect personality.
     - **Objective 2**: Recognize the effect of proper articulation and pronunciation on understanding.
3. Recognize how varying volume, rate, and pitch can increase expressiveness.
4. Recognize the importance of adequate volume in a presentation.

3. NONVERBAL CHARACTERISTICS (eye contact, facial expression, posture, gestures, movement, personal appearance)
   At the Elementary level, students will:

   OUTCOME 1. Recognize the importance of nonverbal characteristics.
   Objective 1. Recognize the difference between covert and overt movement.
   2. Recognize that movement is a fundamental means of communication.
   3. Recognize that posture mirrors the attitude of the communicator.
   4. Recognize that eye contact establishes rapport and helps the presenter gain attention.
   5. Recognize that gestures add emphasis and express emotion.
   6. Recognize that the audience gains meaning by the facial expressions used by the communicator.
   7. Demonstrate an understanding of the role of clothing and grooming in communication.

4. AIDS TO PRESENTATION
   At the Elementary level, students will:

   OUTCOME 1. Recognize that communication effectiveness can be enhanced by audiovisual materials.
   Objective 1. Use audio visual symbols to provide effective memory instruments for an audience.
   2. Use audiovisual aids to minimize the time it takes for an audience to grasp a concept.
   3. Use the basic types of graphs (e.g., pie, circle, line, bar, picture) to supplement oral communication.

D. FEEDBACK
   At the Elementary level, students will:

   OUTCOME 1. Provide an appropriate response as an audience member to oral communication stimuli.
   Objective 1. Demonstrate attentive behavior to oral communication stimuli.
   2. Recognize appropriate audience decorum for an oral presentation.
   3. Identify the role of feedback in a communication model.

OUTCOME 2. Encourage audience participation in response to presentations.
   Objective 1. Invite expressions of others' feelings through verbal and nonverbal feedback.
   2. Ask questions of audience members to involve others in the communication process.

OUTCOME 3. Use the questioning process to help understand messages.
   Objective 1. Develop a process to help formulate appropriate questions.

ESSENTIAL GOALS AND OBJECTIVES FOR COMPUTER EDUCATION

1. COMPUTING AND ITS EVOLVING ROLE IN A TECHNOLOGICAL SOCIETY

   RATIONALE
   Students need to be aware of the role of technology and its future impact on society, as well as their lives.
As members of a society which utilizes technology and information processing, students also need to be cognizant of the social issues involved, their ethical obligations, and the legal responsibilities related to computer usage. By gaining a historical perspective, students will be able to identify trends in computing and formulate ideas about the future evolution and effect of the technology.

GRADES K-3

A. History of Computers and Computing
Goal: To understand the historical development of the computer.
Objectives: The learner will:
NONE

B. Role and Impact
Goal: To appreciate the role and impact of computers in society
Objectives: The learner will:
1. Describe ways in which the computer is used in the home, school, community, and workplace.

C. Social Issues
Goal: To understand the current and emerging ethical and social issues raised by the increased use of computers.
Objectives: The learner will:
NONE

D. Future Trends
Goal: To formulate theories about the future evolution and effect of computers and other emerging technologies.
Objectives: The learner will:
NONE

II. COMPUTING FUNDAMENTALS

RATIONALE:
This strand of Essential Goals and Objectives for Computer Education comprises skills and knowledge which permit the student, through actual use, to independently operate a computer system successful. It is recommended that basic skills be learned before more advanced topics and objectives are addressed.

GRADES K-3

A. Understanding Computer Systems
Goal: To understand the basic operation, terminology, and parts of computer systems
Objectives: The learner will:
1. Identify the major parts of a computer system.
2. Explain the functions of the major parts of a computer system.
3. Define and use appropriate computing terminology.
4. Identify selected peripheral devices for computer systems.
5. Describe the roles of hardware and software in computer operation.

B. Operating Computer Systems
Goal: To independently operate a computer system
Objectives: The learner will:
1. Demonstrate ability to begin and end a computer work session.
2. Demonstrate proper care of computer hardware and software.
3. Demonstrate keyboarding skills.
4. Operate a computer system using prepared software.

III. COMPUTER APPLICATIONS

RATIONALE:
Students need to use application software to understand how the computer can become a tool for solving problems. By becoming proficient in using word processing, data base management, and an electronic spreadsheet and familiar with computer graphics, communications software, and computer programming, a foundation will be built for enhancing problem solving skill.

GRADES K-3
A. Word Processing
Goal: To understand the creation, modification, and display of text using word processing.

Objectives: The learner will:
1. Enter text into the computer using a word processing program.
2. Edit the text entered.
3. Print the created document.

IV. COMPUTER ENHANCED PROBLEM SOLVING

RATIONALE
The computer can enhance the process of problem solving within the K-12 curriculum. Software designed to specifically develop problem solving skills can provide a foundation for application of these skills. The programs highlighted in the Computer Applications strand of this document are excellent tools to assist in applying these problem solving skills.

The development and application of problem solving skills using the computer are best accomplished when students work together. Computer interaction is most effective when human interaction is emphasized and encouraged.

GRADES K-3
A. The Computer as a Problem Solving Tool
Goal: To understand how computer-related tools can be used in the problem solving process
Objective: The student will:
1. Develop problem solving skills using software designed for this purpose.

MICHIGAN ESSENTIAL GOALS AND OBJECTIVES FOR ARTS EDUCATION (K-12)

THE GOALS OF DANCE EDUCATION

Goal I To use dance as a vehicle for self-expression through kinesthetic, affective, cognitive, and aesthetic aspects of the movement discipline.

a. Because the self is the primary instrument of dance, the learner will become aware of the body, its range and limitations of movement: what the body can do; how the body can move; where it moves.

b. The skills, understandings, and attitudes that students acquire through dance help them to externalize their reactions to life, foster the appreciation of beauty, challenge the intellect and broaden their social capacities.

Goal II To develop perceptive, imaginative, cognitive, and creative abilities through dance experiences.
## Michigan

<table>
<thead>
<tr>
<th>Goal III</th>
<th>To understand the value of dance for the development of self-concept and social awareness.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Because dance engages the self, the learner comes to understand more about the unique physical strengths and weaknesses of his/her own body and that of others.</td>
</tr>
<tr>
<td>b.</td>
<td>Dance students learn the necessity for give and take as they communicate their ideas and work toward satisfaction in problem solving.</td>
</tr>
<tr>
<td>c.</td>
<td>The dancer learns about human interaction and seeks to understand and regard the ideas of others.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Goal IV</th>
<th>To develop respect for the originality of expression in ourselves and in response to others in nonverbal communication.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Dance students learn to trust their own inventiveness, to take risks, accept challenges, to express and give form to feelings and ideas for the purpose of self-elucidation and to share these feelings and ideas with others.</td>
</tr>
<tr>
<td>b.</td>
<td>Dance requires the learner to bring aesthetic criteria to the evaluation and an appreciation of composition, choreography and performance.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Goal V</th>
<th>To foster understanding of the role of dance in our culture and in the culture of other people in an historical context.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Students will learn about the development of dance in America by participating in dance forms indigenous to America and studying the development through both cursory and in-depth historical references.</td>
</tr>
<tr>
<td>b.</td>
<td>Students will learn about the development of dance in historical periods, the cultural influence of dance during these periods and gain knowledge of the structure and meaning of dances of other cultures through the study of and participation in a variety of dance forms.</td>
</tr>
<tr>
<td>c.</td>
<td>Students learn about other art forms and the role of the arts and humanities in the development of diverse cultures.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Goal VI</th>
<th>To develop internal and external skills and resources.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>Dance activities provide a natural vehicle for the externalization of knowledge and skills. The student assimilates knowledge through the processes of exploration, improvisation, problem solving, dance making, and choreography.</td>
</tr>
<tr>
<td>b.</td>
<td>Students discover new aspects of themselves and the dance experience through the developmental acquisition of skills.</td>
</tr>
<tr>
<td>c.</td>
<td>The student acquires greater knowledge of the related arts and develops the ability to draw on these resources.</td>
</tr>
<tr>
<td>d.</td>
<td>The student develops the ability to refine the intent of a creative idea.</td>
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</tbody>
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### DRAMA/THEATER EDUCATION

<table>
<thead>
<tr>
<th>I=INTRODUCTION OF SKILLS OR CONCEPTS</th>
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<tbody>
<tr>
<td>D=DEVELOPMENT OF SKILLS OR CONCEPTS</td>
</tr>
<tr>
<td>R=REINFORCEMENT AND REFINEMENT</td>
</tr>
</tbody>
</table>
**Michigan**

**GOALS AND OBJECTIVES FOR DRAMA/THEATER, GRADES K-3**

### I. DEVELOP INTERNAL AND EXTERNAL PERSONAL RESOURCES

#### A. Sensory and Emotional Perception

1. Respond to and focus on details of sensory and emotional experiences.  
2. Use sensory and emotional recall to develop experiences as actor and viewer.  
3. Recognize individual differences in sensory perception and emotional states.

#### B. Imagination

1. Express images through dramatic play and storytelling and react to imaginary objects, environments and perceptions.  
2. Use imagination in playmaking.  
3. Use dramatic action to communicate and transform mental images.  
4. Use imagination to form and express thought, feeling, and character.  
5. Use imagination in theater production as participant and/or viewer.

#### C. Movement

1. Use movement for creative expression to explore thought, feeling and roles.  
2. Use movement to express thought, feeling, and character.  
3. Identify and use movement techniques to express character.

#### D. Language

1. Use language for personal exploration and social interaction, and commentary on personal experience.  
2. Use language to discover relationships through social interaction.

#### E. Voice

1. Use voice as a means of self-expression.  
2. Use voice to explore thought, feeling and role in dramatic activities.  
3. Identify and use vocal techniques to express a variety of characterizations.

#### F. Discipline

1. Demonstrate responsible behavior in a dramatic play.  
2. Demonstrate responsible behavior in dramatic activities.  
3. Demonstrate social discipline in dramatic activities.  
4. Develop and apply artistic discipline.

#### G. Self-Concept

1. Develop self-awareness and confidence in dramatic play.  
2. Discover self as effective in imagining, interacting and reflecting in dramatic activities.  
3. Improve understanding of self and others (similarities and differences) through expanding role repertoire.

### II. CREATE DRAMA/THEATER THROUGH ARTISTIC COLLABORATION

#### A. Interpersonal Skills/Ensemble

1. Develop ability to join with and respond to others in dramatic activities.  
2. Explore behavior appropriate to the dramatic situation.  
3. Cooperate and interact empathetically during activities.

#### B. Problem Solving

1. Recognize that people in stories and life have problems.
### Michigan

| I  | 2. | Explore the concept of problem and resolution, and appreciate alternative resolutions to problems in a dramatic context. | F2, F3g |
| I  | 3. | Explore consequences and implications of alternative resolutions to problems consequences and implications. | F2 |
| **C. Improvisation** | I 1. | Participate in dramatic play and improvised dramatic activities. | F3g |
| I 2. | Use improvisation for scripted and unscripted material. | F3g |
| **D. Characterization** | I 1. | Assume roles through imitation. | F3g |
| I 2. | Explore a variety of roles in life and fantasy situations. | F3g |
| I 3. | Incorporate physical, emotional, and social dimensions of roles and characters in scenes. | F3g |
| **E. Playmaking/Playwriting** | I 1. | Apply observations of and imitate life experiences and imaginary scenes in dramatic activities. | F3g |
| I 2. | Participate in playmaking focusing on the development and resolution of dramatic problems. | F3g |
| **F. Directing** | I 1. | Recognize and understand the role and responsibilities of the director. | F3g |
| I 2. | Comprehend and respond to the directing process. | F1, F3g |
| **G. Technical Elements** | I 1. | Recognize selected aspects of the real and/or imaginary environment during dramatic play. | F3g |
| I 4. | Recognize the contributions of technical elements in creating theatrical effects. | F3g |

### III. RELATE DRAMA/THEATER TO ITS SOCIAL CONTEXT

**A. Drama/Theater and Life**
I 1. Explore similarities and differences between life and drama/theater. F3g

**B. Roles and Careers**
I 1. Use role-playing to develop awareness of a variety of social roles and occupations. F3g

**C. Theater Heritage**
I 1. Develop awareness of historical and multicultural concepts through dramatic activities. F3g

### IV. FORM AESTHETIC JUDGEMENTS

**A. Dramatic Elements**
I 1. Explore roles and environments through dramatic activities using selected dramatic elements. F3g
I 2. Recognize, respond to, and evaluate elements in dramatic literature. F3g

**B. Theater Attendance**
I 1. Respond to live theater. F3g

**C. Theater and Other Arts**
I 1. Experience various art forms and relate to drama/theater. F3g
GOALS AND OBJECTIVES FOR VISUAL ARTS EDUCATION, GRADES K-3

I=INTRODUCTION OF SKILLS OR CONCEPTS
D=DEVELOPMENT OF SKILLS OR CONCEPTS
R=REINFORCEMENT AND REFINEMENT

I. HISTORICAL, CULTURAL AND SOCIAL CONTEXTS

To promote students' understanding and appreciation of artistic and cultural heritage and the role of art in contemporary society.

A. KNOWLEDGE

1. Artists and Their World
   Students Should Know That:
   D  a. humans have always created images in the past and in the present.
   D  b. the visual arts have played a role in the development of cultures throughout the world.
   I  c. artists generate and express ideas according to their own experience and visions.
   I  d. artists have borrowed ideas and received inspiration from works of past artists.
   I  e. twentieth century artists have created art works that reflect the technology and mobility of a modern world.

2. The Cultural Heritage
   Students Should Know That:
   I  a. there are a variety of images and art work from contemporary, historic and prehistoric cultures.
   I  b. the visual arts have played a significant role in the development of cultures throughout the world.
   I  c. the needs of a culture group often determine the art works produced by the group.
   I  d. works of art are often created to celebrate or commemorate important events.
   I  e. artisans have often relied upon the natural environment as a source of ideas and materials.
   I  f. the traditions of creating handcrafted folk art objects have been transmitted from one generation to another.
   I  g. many traditionally handcrafted art forms are now mass-produced because of technological advancements.

3. Contemporary Social Roles
   Students Should Know That:
   I  a. art works can be found in many places: museums, homes, public buildings, parks, films, and books etc.
   I  b. artistic people contribute to our society through careers as artists, in advertising, the media, product design, architectural construction, environmental design, landscaping and in numerous other professions.
   I  c. popular art forms (cartoons, films, record album covers, posters, etc.) attempt to appeal to a wide segment of society.
   I  d. the visual arts are interrelated to other areas of the school curriculum.
   I  e. trademarks, brand names, color and shape coding, and other visual symbols are used to convey messages and communicated ideas.
Michigan

<table>
<thead>
<tr>
<th>B. PERCEPTUAL, INTELLECTUAL AND PHYSICAL SKILLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Artists and Their World</td>
</tr>
<tr>
<td>Students Should Be Able To:</td>
</tr>
<tr>
<td>I a. recognize works of individual artists.</td>
</tr>
<tr>
<td>I b. classify art work according to subjects. (i.e. landscape, portrait, etc.)</td>
</tr>
<tr>
<td>I c. classify art works illustrating specific forms of expression (i.e., photography, graphics, painting, sculpture).</td>
</tr>
<tr>
<td>I d. describe the characteristics of a still life, a portrait, a self-portrait, a landscape, a cityscape.</td>
</tr>
<tr>
<td>I e. classify art works according to styles (expressionistic, realistic, surrealistic, etc.)</td>
</tr>
</tbody>
</table>

| 2. The Cultural Heritage                        |
| Students Should Be Able To:                    |
| I a. identify the purpose of an art object.    |
| I b. identify some of the symbols that different cultures use to convey common themes. |

| 3. Contemporary Social Roles                    |
| Students Should Be Able To:                    |
| I a. recognize and describe the role of artists within a community. |
| I b. recognize and describe ways that people are involved in the visual arts within the community. |
| I c. identify symbols, trademarks, emblems, insignia and other visual motifs that are used to identify people's occupations, authority, or interests. |
| I d. identify uses of the visual arts in business and industry, including architectural and commercial design, advertising, television, film, and art careers associated with all of these forms. |
| I e. identify art works that are displayed in their community. |
| I f. recognize "sculptural" art forms created for functional purposes, such as bridges, playgrounds, drinking fountains. |

<table>
<thead>
<tr>
<th>C. AFFECTIVE EXPERIENCES: ATTITUDES AND VALUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Artists And Their World</td>
</tr>
<tr>
<td>I a. an awareness that artists generate and/or express ideas according to their own personalities and experiences.</td>
</tr>
<tr>
<td>I b. an appreciation of the aesthetic values of others.</td>
</tr>
<tr>
<td>I c. an emotional awareness and response to the sensory qualities in an artist's work.</td>
</tr>
<tr>
<td>I d. a sensitivity to the expressive qualities in an artist's work.</td>
</tr>
<tr>
<td>I e. a desire to communicate one's own aesthetic values when viewing an artist's work.</td>
</tr>
<tr>
<td>I f. the ability to appreciate a wide variety of different artist's works.</td>
</tr>
</tbody>
</table>

| 2. The Cultural Heritage                        |
| Students Should Develop:                        |
| I a. an awareness that all people regardless of when they live, have emotional needs to visually express themselves. |
| I b. an appreciation of the art forms from different cultures. |
| I c. a sensitivity to the idea that cultural groups use a universal language to communicate beliefs and aesthetic values in visual form. |

| 3. Contemporary Social Roles                    |
| Students Should Develop:                        |

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Michigan

ID a. an awareness that learning about the visual arts is an integral part of the educational process.
I b. an awareness of how the values of society are expressed in the art forms created.
I c. sensitivity to the relationship between different cultural forms of artistic expression, such as body painting, tattoos, masks, cave drawings, and graffiti.
I d. the ability to compare the qualities of objects that were produced for the same function.

II. CREATING ART AND THE ART PRODUCTION PROCESS

To provide expressive and creative opportunities for experiences with art tools and materials in a sequential process acknowledging the schematic development of the student.

A. KNOWLEDGE

1. Vocabulary
   Students Should Know:
   I a. vocabulary related to technical processes.
   I b. vocabulary related to medium/media.
   I c. vocabulary related to composition.
   I d. vocabulary related to tools and equipment.
   I e. vocabulary related to design elements and concepts.
   I f. vocabulary related to forms of expression.

2. Media and Materials
   Students Should Experience:
   I a. painting
   I b. drawing
   I c. print making.
   I d. mixed media and fibers.
   I e. ceramics.
   I f. sculpture
   I g. computers and electronic media

3. Conceptual Strategies
   Students Should Know That:
   I a. composition is an orderly and planned arrangement of the elements and principles of art.
   I b. the process artists use to make art by conceiving an idea, elaborating and refining, and finally giving form with art materials and mediums.
   I c. the creating of art forms can stem from spontaneous expression based on prior knowledge and experience.
   I d. the art medium can serve as a source of inspiration for creative expression.
   I e. ideas can be developed from imagination, dreams and fantasies.
   I f. ideas can be developed from viewing other artist's works, trends or events in our society, nature or man made environments.
   I g. the use of natural and artificial light and its effect on composition.

B. PERCEPTUAL, INTELLECTUAL AND PHYSICAL SKILLS

1. Imaginative and Creative Skills
   Students Should Be Able To:
   I a. conceive, elaborate and refine new ideas.
### Michigan

1. Develop ideas from imagination and other visual inspiration.
2. Be aware of the differences between looking at something and truly seeing it.
3. Commit time and effort to fully develop an idea.

2. Use and Care of Equipment
   - Students Should Be Able To:
     1. Clean and care for basic art tools and materials.
     2. Demonstrate the ability to use a variety of basic art tools in a safe and appropriate manner.

3. Application of Technical Skills
   - Students Should Be Able To:
     1. Demonstrate painting skills
        1. Using and mixing colors: primary, secondary, warm/cool, light/dark, etc.
        2. Using a variety of tools, i.e., sponges, brushes
        3. Using a variety of media, i.e., finger paint, tempera, watercolor
        4. Developing painting techniques, i.e., wet brush, dry brush.
     2. Demonstrate drawing skills by:
        1. Using basic shapes and apparent form in an art work
        2. Making a variety of shapes, "abstract and representational."
        3. Drawing from direct observation
        4. Composing art work using a variety of lines, i.e., thick, thin, broken, curved, slanted, etc.
     3. Demonstrating tactile and apparent textures.
     4. The use of spatial relationships, i.e., depth, areas, size relationship, overlap, foreground, middle-ground, background.
     5. Utilizing both positive and negative space in composition.
     6. Creating patterns with lines, shapes and textures
     7. Exhibiting understanding of physical proportions
     8. Demonstrating printmaking skills by:
        1. Learning basic relief print making techniques
        2. Learning incised printing processes: styrofoam or found objects.
     9. Demonstrating skills in mixed media and fibers by:
        1. Creating 3-D objects from paper, i.e., folding tearing
        2. Composing an art product using mixed media or found objects.
        3. Creating collages, assemblages, handmade paper, weavings
        4. Using basic stitchery procedures, i.e., running stitch, cross stitch, couching
        5. Using basic basketry techniques (wrapping)
     10. Demonstrating ceramics skills by:
         1. The pinch/pull method of construction
         2. The coil/slab method of construction
     11. Demonstrating sculptural skills by:
         1. Assembling rigid materials by stacking, hammering gluing, i.e., wood, cardboard, styrofoam
     12. Demonstrating skills using computers and electronic media by:
         1. Recognizing that art work can be created using computers and other electronic media.
     13. Demonstrating skill in jewelry/metalwork by:
         1. Stringing beads, seeds, or found objects
         2. Making jewelry with dough, papier maché or clay
     14. Demonstrating photographic/video skills by:
         1. Using simple photography techniques, i.e., sun prints, drawing on slides, pinhole cameras, experimental
         2. Using simple animation, i.e. flip book

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j. demonstrate lettering/calligraphy skills by:
   I 1. drawing and cutting uniform letters
   I 2. using various calligraphy styles, i.e., Gothic, Roman, Chancery cursive, Text

C. AFFECTIVE EXPERIENCE: ATTITUDES AND VALUES

Students Should:

ID 1. develop an inquisitive mind
ID 2. demonstrate confidence and satisfaction in his/her achievements
ID 3. value his/her capabilities and creative potential
ID 4. develop a respect and appreciation for the ideas and creations of others
I 5. increase awareness of the creative process and multitude of choices available
I 6. develop an awareness of the barriers that inhibit or prohibit creative thought
I 7. develop the desire to complete a project as specified
I 8. demonstrate a willingness to improve art skills

III. ART ANALYSIS/CRITICISM

Through talking and writing about art in structure ways that are developmentally appropriate for the student, the learner will gain the ability to observe, describe, analyze, interpret, and make critical judgements about the form and content of art.

A. KNOWLEDGE

Students Should Know:

1. Vocabulary: Students should learn and use words whose meanings relate to or describe a process, characteristics or traits intrinsic to works of art
I 2. Strategies: Students should gather information in order to recognize, identify and classify works of art.

B. PERCEPTUAL, INTELLECTUAL AND PHYSICAL SKILLS

Students Should Know How To

1. Describe A Work of Art
   Students should be able to:
   I a. identify objects represented in a work of art
   I b. identify parts, forms, shapes, colors, lines, textures in a work of art.

2. Analyze A Work of Art
   Students should be able to:
   I a. use vocabulary to identify or describe an artwork
   I b. discern how and where the formal elements are used by the artist

C. AFFECTIVE EXPERIENCE: ATTITUDES AND VALUES

1. Interpretation of an Art Work
   Students should be able to:
   I a. discuss visual perception about works of art
   I b. discuss feelings expressed in a work of art
   I c. discuss the artist's use of media, subject matter or theme in expressing intent

2. Judgement
   Students should be able to:
   I a. look at works of art and discern how it makes the viewer feel and why
IV. AESTHETICS: A PHILOSOPHICAL BASIS FOR ART

An understanding of the nature, meaning and value of art is an important component of art education. The discussion of these philosophical questions sets art apart from the other areas of the curriculum.

A. KNOWLEDGE: DEFINING PROPERTIES OF AESTHETICS

Students should know that:

1. aesthetics is a branch of philosophy which deals with questions about the nature, meaning and value of art.
2. the ability to perceive and respond to art is unique to human beings
3. aesthetics is an attempt to explain the reasons why we find certain experiences and objects perceptually interesting and attractive.
4. one's concept of beauty may be different from another individual's concept of beauty.
5. concepts of beauty may differ from culture to culture

B. PERCEPTUAL, INTELLECTUAL AND PHYSICAL SKILLS

Students should develop the ability to:

1. observe and recall detail related to artistic experience
2. make discriminations of sensory qualities, i.e., variations in patterns, surface, color form, etc.
3. be receptive to new ideas
4. adapt to new situations
5. speculate

C. AFFECTIVE EXPERIENCE: ATTITUDES AND VALUES

1. be curious and develop a sense of wonder
2. value questions as well as answers
3. become more open to and aware of sensory qualities in works of art or in natural events
4. develop an awareness of the use of metaphors and symbols that relate to universal human themes
5. become more discriminating of and less satisfied with stereotypical images
6. tolerate ambiguity and uncertainty

ESSENTIAL GOALS AND OBJECTIVES FOR WRITING

OBJECTIVES FOR USING THE WRITING PROCESS

PRE-WRITING

Objectives: During the pre-writing part of the writing process, the student will:

read
write
draw
speak
listen
dramatize
brainstorm
interview
recall
research
classify
imagine and visualize
**DRAFTING**

Objectives: During the drafting part of the process, students will:
- choose a topic
- use invented spellings
- record experiences, feelings, and ideas on paper
- restart
- add or delete ideas
- create images
- connect ideas
- consider audience and format
- share writing with others
- continue reading and researching

**REVISING**

Objectives: When revising, the student will:
- add and delete information
- seek help
- refine purpose
- share writing orally with peers
- consider arrangement of sentences and paragraphs
- select precise language
- use a personal dictionary or thesaurus
- evaluate what was written
- project audience reaction

**PROOFREADING**

Objectives: When proofreading, the student will:
- correct sentence fragments and run-on sentences
- correct sentence syntax errors
- correct errors in usage, such as lack of subject-verb agreement, incorrect verb tense, and so on
- correct punctuation and capitalization
- correct illegible handwriting
- correct format problems, such as irregular margins, missing indentations, and so on
- identify and correct misspelled words

**PUBLISHING**

Objectives: After proofreading, a student will:
- prepare corrected copy for publication
- add illustrations, if possible
- share writing with appropriate audiences
- display writing in the classroom or school building
- seek ways to share writing with parents
- enjoy the published writing of classmates

**ESSENTIAL GOALS AND OBJECTIVES FOR FOREIGN LANGUAGE EDUCATION, GRADES K-12**

**PHASE I** At the earliest levels, or approximately the first 3-4 years of elementary foreign language study, students will be provided with opportunities to develop listening and speaking skills.

Students Learn To:
- Understand and use basic greetings and leave takings.
- Understand and orally recite cultural songs, rhymes and sayings.
Using memorized material, ask and respond to basic questions dealing with
personal information (name, age, family, likes/dislikes).
Respond to visual cues dealing with colors, shapes, health, weather, time, family
members, body parts, clothing, animals.
Recite sequences (numbers, days, months, seasons, ABC’s).
Answer information questions about familiar topics.
Using memorized material, ask permission, express confusion or lack of
understanding, make excuses.

Towards the end of this phase, students may begin reading of familiar material in
the second language. As with reading, writing is limited and relies
on the use of
familiar material. Cultural awareness is accomplished through songs, stories,
games and other classroom activities.

PHASE II During this phase, which may encompass three years at the upper elementary
grades or two years at the junior high, emphasis remains on developing listening
and speaking skills, but time spent on reading and writing in the foreign
language increases. Students begin to develop an awareness of grammatical
structures, but formal grammar instruction is kept to a minimum.

During This Phase, Students Will:
Give more extended personal information (such as date of birth) and personal
information about others.
Respond to visual cues dealing with school, home, city/community, sports,
action words, foods.
Make simple inquiries orally to seek information, meet needs or initiate a
conversation.
Begin to create with the language to express personal thoughts or needs on
simple, familiar topics.
Learn sounds/symbol correspondences of foreign language.
Read stories and other texts for (cultural) information.
Write simple sentences in response to structured questions, to describe objects or
people and for self-expression.

PHASE III: This phase follows an articulated K-6 elementary program. Taught in the junior
high, students are expected to develop proficiency in each of the four language
skills.

During This Phase, Students Will:
Learn about the language (grammar) and culture entirely through the medium of
the foreign language.
Learn to address individuals in the correct social register.
Recount a sequence of events in the present and past tenses orally and in writing.
Read and listen to authentic "texts" for information about history, geography and
other aspects of the target culture(s).
Increase the ability to create with the language to express ideas and needs, orally
and in writing.

FRACTIONS, DECIMALS, RATIO AND PERCENT

FRACTIONS (Note: Fractions include mixed numbers and whole numbers where
appropriate)

I. MEANING
To demonstrate and use the meaning of fractions.
Michigan

A. Conceptualization
1. To relate fractions to concrete models.

C. Problem Solving and Applications
1. To solve problems involving the meaning of fractions.

III. COMPARE/ORDER
To compare and order fractions.

A. Conceptualization
1. To compare and order using models and appropriate fractions.

DECIMALS

I. MEANING
To demonstrate and use the meaning of decimals.

A. Conceptualization
1. To relate decimals to models.
2. To solve problems involving the meaning of decimals.

III. COMPARE/ORDER
To compare and order decimals.

A. Conceptualization
1. To compare or order decimals using concrete models, word names, or decimal symbols.

MEASUREMENT

I. LENGTH AREA, VOLUME, ANGLES
To measure length, area, volume and angles.

A. Conceptualization
1. To identify and describe the concept of length and the relative sizes of the standard units.
5. To determine the length of an object or a line segment with an appropriate unit and a standard measuring instrument using hands-on activities.
8. To read various scales such as rulers and protractors.

B. Estimation
1. To estimate the length of a familiar object or drawing.

II. CAPACITY, MASS, TIME, TEMPERATURE
To measure and use liquid capacity, mass (weight), time, temperature, monetary value and relationships of the basic metric units.

A. Conceptualization
1. To recognize and use the concepts of mass, liquid capacity, time and temperature, including standard units, relative sizes, comparisons and their abbreviations and symbols.
2. To tell time to the nearest five minutes.
3. To measure liquid capacity and mass (weight) using appropriate standard units and measuring instruments.
4. To recognize and use U.S. coins and bills, $5 and less.
5. To read various scales, such as a thermometer.
8. To recognize and use the concept of precision of measurement.
B. Estimation
   1. To make estimations involving temperature, time and money.

C. Problem Solving and Applications
   1. To solve one-step verbal arithmetic problems, posed within a measurement context, including elapsed time and money.

GEOMETRY

I. SHAPE
   To recognize and use the shapes in one, two and three dimensions.

   A. Conceptualization
      1. To identify and illustrate appropriate geometric shapes.
   B. Problem Solving
      1. To solve problems involving appropriate geometric shapes.

II. SHAPE PROPERTIES
   To recognize and use properties of one, two and three dimensional shapes such as equal sides, equal angles and symmetry.

   A. Conceptualization
      1. To identify or illustrate properties of appropriate geometric shapes.
   B. Problem Solving and Applications
      1. To solve problems using properties of appropriate geometric shapes.

III. RELATIONS AMONG GEOMETRIC OBJECTS
   To recognize and use the relations of congruence, similarity, intersection, parallelism and perpendicularity for appropriate figures in one, two and three dimensions.

   A. Conceptualization
      1. To identify and illustrate appropriate relations among figures.
   B. Problem Solving and Applications
      1. To solve problems using the appropriate relations among shapes.

IV. POSITION
   To recognize and use informal and formal coordinate systems on lines and planes to specify locations and distances.

   A. Conceptualization
      1. To identify and produce points satisfying given conditions.
   B. Estimation
      1. To estimate distances and positions in the coordinate plane.
   C. Problem Solving and Applications
      1. To solve problems using position concepts and notation.

VI. VISUALIZING-SKETCHING-CONSTRUCTING
   To visualize, sketch and construct geometric objects.

   A. Conceptualization
      1. To visualize, sketch and construct geometric shapes or relationships.
   B. Problem Solving and Applications
      1. To solve problems requiring visualizing sketching or constructing geometric shapes or relationships.
STATISTICS AND PROBABILITY

I. TABLES
   To construct, read and interpret tables.
   A. Conceptualization
      1. To read tables and identify existing patterns in tables.
   B. Computation
      1. To construct tables from data.
      2. To record data in existing tables.

II. GRAPHS
   To construct, read and interpret graphs.
   A. Conceptualization
      1. To read graphs:
         a. Picture graphs, Bar graphs
   C. Computation
      2. To construct graphs.
   D. Problem Solving and Applications
      1. To select a graph that fits given information.

IV. PROBABILITY
   To read, interpret, determine and use probabilities.
   A. Conceptualization
      1. To compare the likelihood of simple events.

ALGEBRAIC IDEAS

VARIABLES

I. EXPRESSIONS
   To understand and use expressions containing variables.
   A. Conceptualization
      1. To recognize and use the concept of variable in expressions.

II. VERBAL, SYMBOL, MODEL RELATIONS
   To use variables in translating among verbal expressions, symbols, and situations that are pictorial or practical.
   A. Conceptualization
      1. To recognize physical or pictorial models for relations and operations.

III. OPEN SENTENCES
   To use variables to write and solve open sentences.
   A. Conceptualization
      1. To recognize and use the concept of variable in open sentences.
   B. Computation
      1. To find solutions to open sentences.
   C. Problem Solving and Applications
      1. To find solutions to problems stated verbally.
### REAL NUMBERS AND PROPERTIES

#### III. EXPONENTS, POWERS AND ROOTS
To recognize and use concepts of exponents, powers and roots.

<table>
<thead>
<tr>
<th>A. Conceptualization</th>
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<tbody>
<tr>
<td>1. To recognize and use patterns of squares and cubes.</td>
</tr>
</tbody>
</table>

### PROBLEM SOLVING AND LOGICAL REASONING

#### I. PATTERNS
To identify, use, and construct patterns.

| A. To identify a patterns and determine a missing element. |

#### II. UNDERSTANDING PROBLEMS
To demonstrate an understanding of a problem

| A. To determine what is to be found. |
| B. To identify necessary information to solve a problem. |
| C. To determine insufficient information. |
| D. To formulate appropriate questions. |
| E. To formulate a problems for mathematical expressions or number sentences. |

#### III. PROBLEM SOLVING STRATEGIES
To select and apply appropriate problem solving strategies.

| A. To identify and use a patterns to solve a problem. |
| B. To make an organized list or table to solve a problem. |
| C. To make and test to solve a problem. |
| E. To make or use a drawing, a graph or a physical model to solve a problem. |
| F. To write an open sentence to solve a problem. |
| H. To eliminate possibilities to solve a problem. |
| I. To select the appropriate operation(s) to solve a one-step or multi-step problem. |

#### V. LOGICAL REASONING
To use logical reasoning.

| A. To determine the attributes used to classify a set and vice-versa. |

### CALCULATORS

#### I. CALCULATORS KEYS AND FEATURES
To recognize specific calculator keys and selected calculator features.

| A. To recognize specific calculator keys. |
| C. To recognize appropriate calculator keys related to selected terms associated with mathematical operations. |

#### II. COMPUTATION
To perform appropriate computations with a calculator.

| A. To use a calculator to compute sums and differences using whole numbers. |
### III. LIMITATIONS AND CALCULATOR DISPLAY

To recognize certain common limitations to calculators and be able to interpret selected calculator-displayed symbols.

A. To recognize and interpret the calculator display.

### ESSENTIAL GOALS AND OBJECTIVES FOR SOCIAL STUDIES EDUCATION

<table>
<thead>
<tr>
<th>I=INTRODUCE</th>
<th>D=DEVELOP</th>
<th>R=REINFORCE</th>
</tr>
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<tbody>
<tr>
<td>KNOWLEDGE GOALS AND OBJECTIVES, GRADES K-3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Understand the rights and responsibilities of democratic citizenship.
   - I a. Identify rights and liberties guaranteed in the United States Constitution. E
   - I b. Understand situations in which rights have been denied. E
   - I c. Understand that an individual’s rights may differ with those of another individual or with the general welfare. E
   - I d. Understand differences between stated rules and actual practices. E
   - I e. Understand and support the right of all to present different points of view. E, G3a
   - I j. Know the responsibility people have to maintain a democratic society. E

2. Understand the role and function of law in a democracy.
   - I a. Understand the purposes of law. E
   - I b. Understand how legal and judicial decisions are made. E
   - I c. Understand how laws can be changed. E

3. Understand persistent global issues.
   - I a. Define global issues which affect people all over the world F3

4. Understand diverse human cultures, customs, beliefs, and values systems or ethnic groups.
   - I a. Understand that people everywhere have the same basic needs, but the manner in which they meet these needs differs according to their culture. F3, G3
   - I b. Understand that customs and habits differ from one group to another. F3, G3
   - I c. Understand that within a community there may exist one or several cultural, racial, or ethnic groups. F3, G3
   - I d. Recognize the importance of being objective and fair in regard to cultural, racial, or ethnic groups. F3, G3

5. Understand the history and present state of their own and other cultures.
   - I a. Know basic historical facts related to the development of the United States and other cultures. F3
   - I b. Understand urban, rural and suburban development. F3
   - I c. Understand the impact of technology on society. F3
   - I d. Understand changes in female and male roles. F3
   - I e. Understand that there are differences in family structures. G3a
   - I f. Understand changes in family, work, and population patterns. F3
   - I g. Identify occupations and career choices. F3
   - I h. Understand the career decision making and planning process. F3
   - I i. Identify methods, processes, and effects of change and continuity. F3
### Michigan

6. Understand basic economics and economic systems.
   - a. Understand basic economic concepts.
   - b. Understand the role of money in the economy.
   - c. Understand factors that influence economic behavior.
   - d. Understand economic concepts as they apply to individual decision-making.

7. Understand how to be an effective producer and consumer of goods and services.
   - a. Understand factors that influence consumer behavior.
   - b. Give examples of their own listed resources and unlimited wants.
   - c. Demonstrate comparison shopping skills and the use of consumer aids in shopping for various goods and services.
   - d. Identify deceptive sales techniques and practices.
   - e. Recognize the need to conserve energy.

8. Understand geographic principles/concepts including relationships between people and the physical environment and the significance of place, location, region, interaction, and diffusion.
   - a. Define the terms environment, place, location, region and interaction.
   - b. Describe the physical environment.
   - c. Understand how the physical environment is used to meet human needs and wants.
   - d. Describe how people have responded to the physical environment.
   - e. Identify the locations and characteristics of major places.
   - f. Understand why people, things, activities, are located where they are.
   - g. Understand how people change the physical environment.
   - h. Describe the location and characteristics of major regions.
   - i. Describe the interaction which take place within the regions and between regions.
   - j. Describe how culture changes as a result of the diffusion of ideas and the migration of people.

9. Know the main structure and functions of government.
   - a. Know the purposes of government.
   - b. Understand the range and importance of decisions make by state and local government.
   - c. Associate governmental actions with the appropriate level of government.

10. Understand the organization of human societies.
    - a. Compare customs and habits of groups.
    - b. Understand ways groups are interdependent, cooperative, and competitive.
    - c. Understand types of conflicts between groups and ways conflicts are resolved.
    - d. Understand how and why groups differ.
    - e. Understand the decision-making processes used by groups.

11. Understand the relationships between individuals and groups.
    - a. Identify the variety of roles one can have within a group.
    - b. Understand that the role within a group may be assigned or achieved.
    - c. Understand reasons why there are different roles within groups.
    - d. Understand the possible advantages and disadvantages of belonging to a variety of groups.

12. Understand the psychology of human behavior.
    - a. Understand the effect of family interaction on a child's development.
    - b. Understand the effects of biological factors on human behavior.
    - c. Understand verbal and non-verbal indicators of attitude.
    - d. Understand the influence of self-concept, perception, role expectations and role conflicts on personal behavior.
**DEMOCRATIC VALUES GOALS AND OBJECTIVES**

1. Develop awareness and concern for the rights and well-being of others.
   I a. Show concern for the well-being of others' rights.
   I b. Show concern for the dignity of others.
   I c. Be aware of the distinctive characteristics of others.

2. Develop a positive self-concept, which includes an awareness of one's self worth, values, ethnic background, and culture.
   I a. Recognize the way in which activities reflect one's own personal values.
   I b. Become aware of family and peer values.
   I c. Respect for their own heritage and background.
   I d. Realize how personal behavior and learning experiences contribute to a positive self-concept.
   I e. Recognize acceptable criteria for judging individual actions in a democracy.

3. Develop an understanding of the values, ethnic background and cultures of people from a variety of racial/ethnic/cultural groups.
   I a. Recognize that ethnic backgrounds and culture determine people's values.
   I b. Be aware of positive attributes individuals worthy of emulation from a variety of cultural groups, including groups which make up the American society.
   I c. Recognize behaviors which hurt others.
   I d. Recognize commonalities and differences among beliefs, values, and behaviors of people from a variety of racial/ethnic/cultural groups.
   I e. Be aware of ways of positively interacting with others of varying backgrounds.
   I f. Show respect for the dignity and worth of those who belong to a variety of cultural, racial, or ethnic groups.
   I g. Recognize the effects of cultural diversity in society.
   I h. Recognize relationships and conflicts among beliefs, values, and behaviors of other persons and groups.

4. Develop a reasoned commitment to the principles and value which sustain a democracy.
   ID a. Accept the rights and responsibilities of democratic citizenship.
   ID b. Respect the right of all to present different points of view in the classroom.
   ID c. Respect the right of all to present different points of view in the community.
   I d. Respect and support the role and function of laws in a democracy.
   I e. Respect and support the role and function of responsible dissent in a democracy.

5. Develop a commitment to participate in society and governments both as an individual and as a member of a group.
   ID a. Be aware of responsibilities people have to maintain a democratic society.
   ID b. Recognize characteristics of good leader.
   ID c. Recognize examples of equity.
   ID d. Recognize examples of injustices.
   ID e. Defend rights and liberties of all people.
   I f. Support equal opportunity.
   I g. Recognize and encourage ethical and lawful behavior in others.
   I j. Recognize that individual civic action is important.
   I k. Work for improvement of conditions by applying personal skills.
   I l. Participate in government.

**SKILLS, GOALS AND OBJECTIVES**

1. Gather, interpret, analyze, summarize, synthesize and evaluate information.
Use a variety of senses to obtain information.
Choose appropriate sources for information desired.
Obtain desired information from a variety of sources.
Group data into appropriate categories.
Recognize that people may interpret the same objects or events differently.
Identify cause and effect relationships.
Distinguish between fact and opinion.
Formulate predictions based on factual information.
Translate information from one form to another.
Draw inferences from a variety of sources.
Identify specific sub-topics of major topics.
Detect bias in data presented.
Compare and contrast information.
Select main ideas from information.
Arrange information in usable forms.
Draw conclusions.
Formulate hypotheses.
Determine different outcomes if events were changed.
Propose a new plan.
Decide if information is significant to the topic.
Evaluate the quality of information.
Test hypotheses and revise as needed.
Recognize the occasion and need for decisions.
Analyze the problem.
Identify possible alternative courses of action.
Project long and short term consequences of possible alternative courses of action.
Identify and evaluate consequences of possible alternative courses of action.
Choose and develop strategies to carry out the decision.
Apply the strategies in implementing a decision or solving a problem.
Re-evaluate and reformulate the process if goals are not met or new information is introduced.
Present own ideas.
Paraphrase what has been heard and obtain agreement from the speaker that the paraphrasing is correct.
Listen and respond appropriately.
Solicit clarification from others when needed.
Encourage others to express themselves.
Recognize that divergent roles exist within a group.
Recognize emotions and feelings operating within a group and allow for their expression.
Recognize and permit the expression of different values, beliefs and ideas within a group.
Remain open to change.
Use word analysis skills.
Use context clues to gain meaning.
Use appropriate late sources to gain meaning of essential terms and vocabulary.
Recognize, define and appropriately use social studies terms.
## Michigan

<table>
<thead>
<tr>
<th>ID</th>
<th>Objective</th>
<th>NEEDCODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>e.</td>
<td>Obtain literal meaning from written materials.</td>
<td>F3</td>
</tr>
<tr>
<td>f.</td>
<td>Obtain interpretive and implied meaning from written materials.</td>
<td>F3</td>
</tr>
<tr>
<td>g.</td>
<td>Identify and use various parts of a book and other written material.</td>
<td>F3</td>
</tr>
<tr>
<td>h.</td>
<td>Read for a variety of purposes.</td>
<td>F3</td>
</tr>
<tr>
<td>i.</td>
<td>Adjust reading to suit various purposes.</td>
<td>F3</td>
</tr>
<tr>
<td>j.</td>
<td>Use resources and services that the library provides.</td>
<td>F3</td>
</tr>
<tr>
<td>k.</td>
<td>Apply computer operational skills to run a software program.</td>
<td>F3</td>
</tr>
</tbody>
</table>

5. Map and globe skills.

- **ID a.** Identify that globes and maps are models.
- **ID b.** Orient a map and note directions.
- **ID c.** Locate places on maps and globes.
- **ID d.** Use scale and compute distances.
- **ID e.** Identify, interpret and use map symbols.
- **ID f.** Compare and contrast maps.

## ESSENTIAL GOALS AND OBJECTIVES FOR SCIENCE EDUCATION

### ELEMENTARY

**Constructing New Scientific Knowledge** (objectives for grade levels)

- **Objective 1.** Generate reasonable question about the world, based on observation. (F3)
- **Objective 2.** Develop solutions to unfamiliar problems through reasoning, observation, and/or experimentation. (F2a, F3)
- **Objective 3.** Manipulate simple mechanical devices and explain how they work. (F3)
- **Objective 4.** Use simple measurement devices to make metric measurements. (F3)
- **Objective 5.** Develop strategies and skills for information gathering and problem solving. (F2a, F3)
- **Objective 6.** Construct charts, graphs, and prepare summaries of observations. (F3)

**Reflecting on Scientific Knowledge** (objectives for grade levels)

- **Objective 1.** Develop an awareness of the need for evidence in making decisions scientifically. (F2)
- **Objective 2.** Show how science concepts can be interpreted through creative expression such as language arts and fine arts. (F3, F3g)
- **Objective 3.** Develop an awareness of and sensitivity to the natural world. (no match)
- **Objective 4.** Describe how technology is used in everyday life. (F3)
- **Objective 5.** Develop an awareness of the contributions made to science by people of diverse backgrounds. (F3)

### USING SCIENTIFIC KNOWLEDGE TO UNDERSTAND LIFE SCIENCE

**Cells** (objectives for grade levels)

- **Objective 1.** Describe cells as living systems. (F3)

**Living Things** (objectives for grade levels)

- **Objective 1.** Compare and classify familiar organisms on the basis of observable physical characteristics. (F3)
- **Objective 2.** Describe vertebrates in terms of observable body parts and characteristics. (F3)
- **Objective 3.** Describe life cycles of familiar organisms. (F3)
- **Objective 4.** Compare and contrast food, energy, and environmental needs of selected organisms. (F3)
- **Objective 5.** Describe functions of selected seed plant parts. (F3)

**Heredity** (objectives for grade levels)

- **Objective 1.** Give evidence that characteristics are passed from parents to young. (F3)
<table>
<thead>
<tr>
<th>Michigan</th>
<th>NCZ01CO3E</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Evolution (objectives for grade levels)</strong></td>
<td></td>
</tr>
<tr>
<td>Objective 1. Explain how fossils provide evidence about the nature of ancient life.</td>
<td>F3</td>
</tr>
<tr>
<td>Objective 2. Explain how physical and/or behavioral characteristics of organisms help them to survive in their environments.</td>
<td>F3</td>
</tr>
<tr>
<td><strong>Ecosystems (objectives for grade levels)</strong></td>
<td></td>
</tr>
<tr>
<td>Objective 1. Identify familiar organisms as part of a food chain or food web and describe their feeding relationships within the web.</td>
<td>F3</td>
</tr>
<tr>
<td>Objective 2. Explain common patterns of interdependence and interrelationships of living things.</td>
<td>F3</td>
</tr>
<tr>
<td>Objective 3. Describe the basic requirements for all living things to maintain their existence.</td>
<td>F3</td>
</tr>
<tr>
<td>Objective 4. Describe systems that encourage growing plants and animals.</td>
<td>F3</td>
</tr>
<tr>
<td>Objective 5. Describe positive and negative effects of humans on the environment.</td>
<td>F3</td>
</tr>
<tr>
<td><strong>Using Scientific Knowledge To Understand Physical Science</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Matter And Energy (objectives for grade levels)</strong></td>
<td></td>
</tr>
<tr>
<td>Objective 1. Classify common objects and substances according to observable attributes: color, size, shape, smell, hardness, texture, flexibility, length, weight, buoyancy, states of matter, magnetic properties.</td>
<td>F3</td>
</tr>
<tr>
<td>Objective 2. Measure weight, dimensions, and temperature of appropriate objects and materials.</td>
<td>F3</td>
</tr>
<tr>
<td>Objective 3. Identify properties of materials that make them useful.</td>
<td>F3</td>
</tr>
<tr>
<td>Objective 4. Identify forms of energy associated with common phenomena.</td>
<td>F3</td>
</tr>
<tr>
<td>Objective 5. Describe the interaction of magnetic materials with other magnetic and non-magnetic materials.</td>
<td>F3</td>
</tr>
<tr>
<td>Objective 6. Describe the interaction of electrically charged material with other charged or uncharged material.</td>
<td>F3</td>
</tr>
<tr>
<td>Objective 7. Describe possible electrical shock hazards to be avoided at home and at school.</td>
<td>C3</td>
</tr>
<tr>
<td><strong>Changes in Matter (objectives for grade levels)</strong></td>
<td></td>
</tr>
<tr>
<td>Objective 1. Describe common physical changes in matter (size, shape, melting, freezing, dissolving).</td>
<td>F3</td>
</tr>
<tr>
<td>Objective 2. Prepare mixtures and separate them into their component parts.</td>
<td>F3</td>
</tr>
<tr>
<td>Objective 3. Construct simple objects that fulfill a technological purpose.</td>
<td>F3</td>
</tr>
<tr>
<td><strong>Motions of Objects (objectives for grade levels)</strong></td>
<td></td>
</tr>
<tr>
<td>Objective 1. Describe or compare motions of common objects in terms of speed and direction.</td>
<td>F3</td>
</tr>
<tr>
<td>Objective 2. Describe how forces (pushes or pulls) speed up, slow down, stop, or change the direction of a moving object.</td>
<td>F3</td>
</tr>
<tr>
<td>Objective 3. Use simple machines to make work easier.</td>
<td>F4</td>
</tr>
<tr>
<td><strong>Waves and Vibrations (objectives for grade levels)</strong></td>
<td></td>
</tr>
<tr>
<td>Objective 1. Describe sounds in terms of their properties (pitch, loudness).</td>
<td>F3</td>
</tr>
<tr>
<td>Objective 2. Explain how sounds are made.</td>
<td>F3</td>
</tr>
<tr>
<td>Objective 3. Describe light from a light source in terms of its properties.</td>
<td>F3</td>
</tr>
<tr>
<td>Objective 4. Explain how light illuminates objects.</td>
<td>F3</td>
</tr>
<tr>
<td>Objective 5. Explain how shadows are made.</td>
<td>F3</td>
</tr>
<tr>
<td><strong>Using Scientific Knowledge To Understand Earth And Space Science Geosphere (objectives for grade levels)</strong></td>
<td></td>
</tr>
<tr>
<td>Objective 1. Describe major features of the earth's surface.</td>
<td>F3</td>
</tr>
<tr>
<td>Objective 2. Recognize and describe different types of earth materials.</td>
<td>F3</td>
</tr>
<tr>
<td>Objective 3. Explain how rocks and fossils are used to understand the history of the earth.</td>
<td>F3</td>
</tr>
<tr>
<td>Objective 4. Describe natural changes in the earth's surface.</td>
<td>F3</td>
</tr>
<tr>
<td>Objective 5. Describe uses of materials taken form the earth.</td>
<td>F3</td>
</tr>
</tbody>
</table>
### Michigan

<table>
<thead>
<tr>
<th>Objective</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.</td>
<td>Demonstrate means to recycle manufactured materials, and a disposition toward recycling.</td>
</tr>
<tr>
<td><strong>Hydrosphere (objectives for grade levels)</strong></td>
<td></td>
</tr>
<tr>
<td>Objective 1.</td>
<td>Describe how water exists on earth in three states.</td>
</tr>
<tr>
<td>2.</td>
<td>Trace the path that rain water follows after it falls.</td>
</tr>
<tr>
<td>3.</td>
<td>Identify sources of drinking water.</td>
</tr>
<tr>
<td>4.</td>
<td>Describe uses of water.</td>
</tr>
<tr>
<td><strong>Atmosphere and Weather (objectives for grade levels)</strong></td>
<td></td>
</tr>
<tr>
<td>Objective 1.</td>
<td>Describe the atmosphere.</td>
</tr>
<tr>
<td>2.</td>
<td>Describe weather conditions and climates.</td>
</tr>
<tr>
<td>3.</td>
<td>Describe seasonal changes in weather.</td>
</tr>
<tr>
<td>4.</td>
<td>Explain appropriate safety precautions during severe weather.</td>
</tr>
<tr>
<td><strong>Solar System, Galaxy, and Universe (objectives for grade levels)</strong></td>
<td></td>
</tr>
<tr>
<td>Objective 1.</td>
<td>Compare and contrast the sun, moon, and earth.</td>
</tr>
<tr>
<td>2.</td>
<td>Describe the motions of the earth and moon around the sun.</td>
</tr>
</tbody>
</table>
Nebraska

Background

The state department of education began developing curriculum frameworks in the fall of 1994. Content standards have been completed in agricultural education, business education, mathematics, and science. Standards are in draft form or being written in family and consumer science, foreign languages, industrial technology, social studies, and the visual and performing arts. The goal is to have all currently funded frameworks completed by fall 1996. Standards in language arts and marketing will be developed when funding is available. The curriculum frameworks describe student learning for grades pre-K-5, 6-8, and 9-12 and are voluntary. There are no state assessments.

Nebraska

<table>
<thead>
<tr>
<th>MATHEMATICS AND SCIENCE FRAMEWORKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>OVERVIEW OF K-12 SCIENCE</td>
</tr>
<tr>
<td>PRIMARY</td>
</tr>
<tr>
<td>MATTER</td>
</tr>
<tr>
<td>PATTERNS OF CHANGE:</td>
</tr>
<tr>
<td>Investigate properties of solids, liquids, and gases.</td>
</tr>
<tr>
<td>ENERGY:</td>
</tr>
<tr>
<td>Explore relationship between energy and phase changes.</td>
</tr>
<tr>
<td>SYSTEMS &amp; INTERACTIONS:</td>
</tr>
<tr>
<td>Explore effect of physical treatments on matter.</td>
</tr>
<tr>
<td>SCALE &amp; STRUCTURE:</td>
</tr>
<tr>
<td>Construct large objects from smaller parts. Informally use concrete activities to develop a sense of relative size.</td>
</tr>
<tr>
<td>FORCE AND MOTION</td>
</tr>
<tr>
<td>PATTERNS OF CHANGE:</td>
</tr>
<tr>
<td>Observe and describe motion.</td>
</tr>
<tr>
<td>ENERGY:</td>
</tr>
<tr>
<td>Explore light, heat, sound, and electricity.</td>
</tr>
<tr>
<td>SYSTEMS &amp; INTERACTIONS:</td>
</tr>
<tr>
<td>Investigate relationship between force and motion.</td>
</tr>
<tr>
<td>Explore machines and technology.</td>
</tr>
<tr>
<td>SCALE &amp; STRUCTURE:</td>
</tr>
<tr>
<td>Recognize the concept of parts create the whole.</td>
</tr>
<tr>
<td>UNIVERSE</td>
</tr>
<tr>
<td>PATTERNS OF CHANGE:</td>
</tr>
<tr>
<td>Observe and represent patterns of moon, sun, and seasons.</td>
</tr>
<tr>
<td>ENERGY:</td>
</tr>
<tr>
<td>Observe and represent the effects of the sun's energy.</td>
</tr>
</tbody>
</table>
### Nebraska

<table>
<thead>
<tr>
<th>NEODEXIDE</th>
<th><strong>SYSTEMS &amp; INTERACTIONS:</strong></th>
<th>Observe and graph meteorological changes.</th>
<th>F3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SCALE &amp; STRUCTURE:</strong></td>
<td>Recognize the concept of parts create the whole.</td>
<td>F3</td>
<td></td>
</tr>
<tr>
<td><strong>DIVERSITY</strong></td>
<td><strong>PATTERNS OF CHANGE:</strong></td>
<td>Classify objects and organisms.</td>
<td>F3</td>
</tr>
<tr>
<td></td>
<td>Examine growth and development.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ENERGY:</strong></td>
<td>Observe that plants need light.</td>
<td>F3</td>
<td></td>
</tr>
<tr>
<td><strong>SYSTEMS &amp; INTERACTIONS:</strong></td>
<td>Connect specific plants and animals to their particular environments.</td>
<td>F3</td>
<td></td>
</tr>
<tr>
<td><strong>SCALE &amp; STRUCTURE:</strong></td>
<td>Recognize differences and similarities among organisms.</td>
<td>F3</td>
<td></td>
</tr>
<tr>
<td><strong>CELLS AND HEREDITY</strong></td>
<td><strong>PATTERNS OF CHANGE:</strong></td>
<td>Investigate the concept that animals reproduce their own kind.</td>
<td>F3</td>
</tr>
<tr>
<td></td>
<td>Chart growth of an organism.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ENERGY:</strong></td>
<td>Conduct experiments to show animals need food; plants need light.</td>
<td>F3</td>
<td></td>
</tr>
<tr>
<td><strong>SYSTEMS &amp; INTERACTIONS:</strong></td>
<td>Observe and compare individual likenesses and differences.</td>
<td>F3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Examine a variety of familiar plants and animals; consider what they need to stay alive.</td>
<td>F3</td>
<td></td>
</tr>
<tr>
<td><strong>SCALE &amp; STRUCTURE:</strong></td>
<td>Compare different plants and their parts.</td>
<td>F3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Observe objects with a microscope/magnifier.</td>
<td>F3</td>
<td></td>
</tr>
<tr>
<td><strong>INTERDEPENDENCE</strong></td>
<td><strong>PATTERNS OF CHANGE:</strong></td>
<td>Investigate endangered species</td>
<td>F3</td>
</tr>
<tr>
<td><strong>ENERGY:</strong></td>
<td>Construct and discuss food chains.</td>
<td>F3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Develop and maintain a healthy body.</td>
<td>F3</td>
<td></td>
</tr>
<tr>
<td><strong>SYSTEMS &amp; INTERACTIONS:</strong></td>
<td>Investigate habitats of local plants and animals and their interdependence.</td>
<td>F3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Communicate social and cultural responsibilities.</td>
<td>F3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Relate body parts and systems.</td>
<td>F3</td>
<td></td>
</tr>
<tr>
<td><strong>SCALE &amp; STRUCTURE:</strong></td>
<td>This is addressed informally in centers for concrete activity in order to develop sense of relativity of some terms; e.g., big, bigger, little, small, etc.</td>
<td>F3</td>
<td></td>
</tr>
</tbody>
</table>

### OVERVIEW OF K-12 MATHEMATICS

#### ELEMENTARY (K-6)

**NUMBER SENSE**

**ESTIMATION:**
Apply estimation to computation.  
F3c

**PROBLEM SOLVING:**
Apply problem-solving processes  
F2, F3c
**Nebraska**

<table>
<thead>
<tr>
<th>TECHNOLOGY:</th>
<th>COMMUNICATIONS:</th>
<th>MEASUREMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use calculators, computers, and other technology.</td>
<td>Discuss number system.</td>
<td>ESTIMATION:</td>
</tr>
<tr>
<td></td>
<td>Describe and evaluate number relationships such as fractions, decimals, and percentages.</td>
<td>Compare and describe measurements.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Estimate measure of mass, length, volume, and time.</td>
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<tr>
<td></td>
<td></td>
<td>Choose appropriate units.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PROBLEM SOLVING:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Explore measurement in real-life situations.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TECHNOLOGY:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select and use appropriate tools.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>COMMUNICATIONS:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Express measurements in a variety of units.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CONNECTIONS:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use measurements in other disciplines.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>REASONING/LOGIC:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Observe attributes using a variety of units.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Justify chosen unit of measurement.</td>
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<tr>
<td></td>
<td></td>
<td>SPATIAL RELATIONSHIPS/GEOMETRIC TOPICS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ESTIMATION:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Predict properties of shapes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PROBLEM SOLVING:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Solve problems using shapes and diagrams.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Apply perimeter, area, and circumference.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Explore volume and surface area.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TECHNOLOGY:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Explore geometric shapes and solve geometric problems using a variety of technology.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>COMMUNICATIONS:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Identify properties and use appropriate geometric vocabulary.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CONNECTIONS:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Explore geometric shapes in the world.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>REASONING/LOGIC:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Investigate changes of shapes.</td>
</tr>
</tbody>
</table>

**DATA ANALYSIS**

| ESTIMATION: | PROBLEM SOLVING: |
|------------|----------------|-------------|
| Predict experimental probabilities. | Formulate and solve problems that involve collecting and analyzing data. |
| | Experiment with probability. |
| | Make predictions. |

**NCES CODE:**

- F4a
- F3c
- F3c
- F3c
- F2a
- F3a
- F3c
- F3c
- F3c
- F3c
- F3c
- F3c
- F2a, F3c
- F3c
- F2a, F3c
- F3c
- F2, C3c
<table>
<thead>
<tr>
<th>Nebraska</th>
</tr>
</thead>
<tbody>
<tr>
<td>TECHNOLOGY: Use a variety of technology to analyze data and represent it graphically.</td>
</tr>
<tr>
<td>COMMUNICATIONS: Explain inferences and convincing arguments that are based on data analysis. Describe data using graphic representations. Read tables and form conclusions.</td>
</tr>
<tr>
<td>CONNECTIONS: Systematically collect, organize, and interpret data in all disciplines.</td>
</tr>
<tr>
<td>REASONING/LOGIC: Explore concepts of probability.</td>
</tr>
</tbody>
</table>

### PATTERN AND FUNCTIONS

| ESTIMATION: Analyze patterns. |
| PROBLEM SOLVING: Represent and solve problems. Apply Venn diagrams to objects and groups. |
| TECHNOLOGY: Explore patterns. |
| COMMUNICATIONS: Describe relationships. Investigate using graphs. |
| CONNECTIONS: Recognize and describe patterns found in the world. Explore patterns in art and other disciplines. Explore use of tessellations. |
| REASONING/LOGIC: Investigate patterns. Explore Venn diagrams. |

### ALGEBRAIC TOPICS

| ESTIMATION: Estimate expressions using manipulatives. |
| PROBLEM SOLVING: Solve for an unknown value using manipulatives. |
| TECHNOLOGY: Use a variety of technology to explore variables. |
| COMMUNICATIONS: Relate manipulative to symbols. |
| CONNECTIONS: Use real objects as variables. |
| REASONING/LOGIC: Explore variation in real objects and expressions. |

### DISCRETE MATHEMATICS

Foundations are laid for many discrete topics in the elementary and middle levels. These topics include probability, functions, patterns, sets, and networks.

### ADVANCED TOPICS

NONE
Background

In 1993, the legislature passed the New Hampshire Educational Improvement and Assessment Act. The law required the state to define what students should know and be able to do in language arts and mathematics in elementary school, and in language arts, math, science and social studies in middle and high schools. The Center for Resource Management, Inc., a private agency in partnership with the New Hampshire Department of Education Bureau of Special Education Services, has developed the Student Outcome Information System that may be used by New Hampshire public schools. The student-level profiles are designed to help school administrators and instructional staff identify the specific students who are experiencing success or who are at risk.
### TEST AND ASSESSMENT PROFILE

Student progress and achievement on specific tests and assessments.

### LONGITUDINAL OUTCOME REPORTS (second year and thereafter)

- Annual comparisons of absence, suspension, retention, and dropout rates
- Annual comparisons of student grade performance for each subject area and each grade level.
- Annual comparisons of anticipated and achieved percentiles on standardized tests.

### STUDENT-LEVEL OUTCOME REPORTS

The Student-Level Profiles are designed to help school administrators and instructional staff identify the specific students who are experiencing success or who are at risk. Student outcome data can be sorted to produce individual student lists representing specific populations—grade level, gender, disability, special program, ability level, or academic grouping.

### INDIVIDUAL STUDENT LISTS

<table>
<thead>
<tr>
<th>Description</th>
<th>No Match</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students with maximum number of allowed absences</td>
<td>no match</td>
</tr>
<tr>
<td>Students involved in two or more disciplinary actions or suspension incidents</td>
<td>no match</td>
</tr>
<tr>
<td>Students with above satisfactory grades in two or more subject areas</td>
<td>no match</td>
</tr>
<tr>
<td>Students with below satisfactory grades in two or more subject areas</td>
<td>no match</td>
</tr>
<tr>
<td>Students who withdrew from school by reason from withdrawal</td>
<td>no match</td>
</tr>
<tr>
<td>Students retained in grade/lacking sufficient credits to advance by grade level</td>
<td>no match</td>
</tr>
<tr>
<td>Students performing above the level anticipated on tests/assessments</td>
<td>no match</td>
</tr>
<tr>
<td>Students performing below the level anticipated on tests/assessments</td>
<td>no match</td>
</tr>
</tbody>
</table>
Background

In September 1992, the state board of education adopted competency frameworks that spell out, in broad terms, what students should know and be able to do in key subjects at the end of 12th grade. In November 1992, the state board also adopted "standards for excellence" that broadly define the literacies, attitudes, and attributes students should know and be able to do upon graduation. Both the competency frameworks and standards for excellence are mandatory and are part of state board of education regulations. The competency frameworks apply to grades K-12; they do not describe student learning at specific grades. The state is currently developing benchmarks for grades 4 and 8. The standards for excellence describe student learning at grade 12.

New Mexico

STANDARDS FOR EXCELLENCE, STUDENT OUTCOMES LITERACIES (MARCH 1993) AND COMPETENCY FRAMEWORKS (SEPT 1992)

The standards for Excellence Student Outcomes comprises both literacies and attitudes/attributes. The competency frameworks (in brown [plain text]) are correlated to literacy outcomes (in blue [bold type]). It is our belief that the attitudes and attribute outcomes are embedded through the curriculum.

KNOWLEDGE, UNDERSTANDING AND APPLICATION OF THE STRUCTURE AND USE OF THE ENGLISH LANGUAGE AS WELL AS OTHER LANGUAGES;

- Develop decision-making and communication skills, including the ability to express choices related to health.
- Speak and write using the conventions of correctness, and for a variety of audiences and purposes.
- Use writing, reading, speaking and listening as tools for learning in all subject areas.
- Learn to communicate mathematically, Students should learn to use mathematical language to clarify, refine, and consolidate their thinking so that they can read, write and discuss ideas.
- Communicate proficiently in the language studied, through listening, speaking, reading, and writing in a variety of situations and for a variety of purposes.
- Demonstrate an awareness that the means of expressing ideas and feelings differ from language to language, reflecting the attitudes of a culture.
- Understand that music is a vehicle for communication and self-expression.
- Develop and use communication skills.

C3, D3, F1
F1a, F3b
F1a, F3b, F3d
F1a, F3c
F1a, F3
no match
F3g
F1
Demonstrate media skills through manipulation of various materials and techniques, through care of tools, familiarity with a wide variety of artistic materials and techniques, and safety in the classroom.

Read, write, and perform arithmetic and mathematical operations, listen and speak in the medium in which business is conducted.

Learn to value mathematics. Students need experiences related to the cultural, historical, scientific, and technological evolution of mathematics so that they can appreciate the role of mathematics in the development of a society and explore, apply and exhibit relationships among mathematics and the physical and life sciences, the social sciences and the humanities.

K-4 estimation, number sense and numeration, concepts of whole numbers, operations, computation, geometry and spatial sense, measurement, statistics and probability, fractions and decimals, patterns and relationships.

Understand relationships between music and history.

Using topics from all science disciplines:

Understand energy as it applies to potential sources, forms, conversions, living systems, applications and their effects.

Understand balance and change through time in natural entities and systems, including different kinds of change.

Understand structure, for example kinds of structure, organization, relationships among parts and how at different scales different properties are revealed.

Understand systems and interactions between systems, within systems and subsystems, and among objects.

Understand that our society and its values are affected by science and technology.

CREATIVE AND HIGHER ORDER THINKING SKILLS AND PERSONAL ATTITUDES AND ATTRIBUTES LEADING TO ETHICAL DECISION MAKING TO MEET THE CHALLENGES OF LIFE;

Develop the capacity to make thoughtful judgements in art.

Understand complex interrelationships.

Recognize the power to reach one's personal potential by making positive health and life choices.

Value family relationships and appreciate the role of each person in creating a positive family environment.

Value the role of moderation in avoiding excess or deficiency states, including food and exercise.

Understand that every individual human being is valuable and unique.

Respond personally, analytically and critically to written and spoken language.

Recognize, analyze and respond to propaganda.

Learn to reason mathematically. Students need to make conjectures, gather evidence, and build arguments to support fundamental mathematical concepts.

Evaluate another culture fairly and from an informed knowledge base.

Apply knowledge of musical elements (rhythm, melody, harmony, dynamics, tone, color, form and style) when learning and performing music.

Use critical thinking skills to discuss and evaluate music.

Evaluate and accept the risks and safety factors that may affect physical activity as an important part of one's lifestyle.

Commit to physical activity as an important part of one's lifestyle.

Understand, apply and evaluate scientific principles (i.e., biomechanical, psychological, and physiological) to learn and improve skills and participate successfully.

Demonstrate an understanding from which informed attitudes are developed about the potential benefits and hazards associated with various technologies.

Demonstrate creative approaches to problem-solving.

Develop individual responsibility for the democratic system.
INTegrating Previous Experiences and Knowledge With New Experience and Knowledge:

- Develop the capacity to personalize and experience art.
- Understand the role of art in history and in various cultures.
- Manage change and diversity.
- Use a variety of reading and listening strategies and understand when each is appropriate.
- Take risks, knowing that making errors is part of learning.
- Develop music skills through singing, moving, playing instruments, listening, creating, reading and writing music.
- Develop aesthetic sensitivity through music.
- Demonstrate knowledge of skill performance, rules, strategy, and terminology for at least three sports and activities.
- Demonstrate intermediate or advanced competence in at least one activity from three of the six categories: aquatics, dance, outdoor pursuits, individual activities / sports, and team sports.
- Demonstrate science information and skills as applied to real world problems and situations.
- Understand historical connections among past, present and future.

Identifying, Accessing, Evaluating, and Utilizing Information;

- Develop visual awareness and work with principles and elements of design.
- Self-assess and self-correct.
- Analyze tasks, adjust tasks.
- Identify, organize, plan and allocate resources.
- Acquire knowledge of history and philosophy, of rules and terminology; assess strategy and tactics of the activity.
- Develop skills in making nutritious choices when buying, preparing, and eating food.
- Develop skills in emergency care and in the prevention of intentional and unintentional injuries.
- Locate and use information for specific purposes and from a variety of sources.
- Read and listen for a variety of purposes, including the gathering of information, the extending of experience and the achievement of pleasure.
- Become mathematical problems solvers. To develop these abilities, students need this experience of working with diverse problem-solving situations.
- Recognize and respond to a variety of music.
- Develop and understanding of and respect for various cultures through music.
- Establish personal fitness goals using the results of fitness assessments to establish goals in a personal program of physical activity.
- Accept differences between personal characteristics and the idealized body images and elite performance levels portrayed in the media.
- Feel empowered to maintain and improve physical fitness motor skills and knowledge about physical activity.
- Develop a multicultural perspective that respects the dignity and worth of all people.
- Interpret and use map and globe skills, graphs, charts, time-lines, and diagrams.
- Understand the environment as a complex and fragile system, with limited resources, which is impacted by human decision and activity.
- Demonstrate science process skills.

Knowledge and Understanding of the Social Value, Dignity, and Necessity of Earning a Living;

- Manage career decisions/goal setting.
- Demonstrate work ethics.
- Think creatively, make decisions and solve problems in work situations.
Value cooperation and responsible competition in learning, play and work.
Develop and practice appropriate ethics, self-control, self-discipline, commitment and self-esteem.
Understand vocational and avocational possibilities.

WORKING COOPERATIVELY AND ASSUMING RESPONSIBILITIES AS MEMBERS OF A TEAM;
Respect individual expression and express one's self through art.
Participate in or lead a group process.
Teach others new skills.
Work without supervision.
Negotiate toward agreements.
Generate a pride in achievement, appreciation of self and team effort (cooperation) in achievement--hard work and fair play--and respect for the ability of others.
Use language to share experiences and gain insight into their own and others lives.
Demonstrate an appreciation for their own and other languages.
Demonstrate a respect for differences, such as cultural, linguistic, societal, and individual diversity.
Actively participate in making music alone and with others.
Exhibit socially desirable and acceptance behaviors in the areas of respect for others, assuming responsibility, leadership, and contributing to the group.
Demonstrate appropriate and safe laboratory skills and practices.
Understand what is required of citizens in a democracy.
Develop social and political participation skills.

MANAGING PERSONAL AND FINANCIAL RESOURCES APPROPRIATELY;
Work with a variety of technologies and systems to communicate.
Develop the ability to set short-range goals.
Integrate/evaluate the value of lifetime applications of an activity.
Become confident in their own ability. Students should view themselves as capable of using their growing mathematical power to make sense of new problem situations in the world around them.
Select and participate in appropriate physical activities by analyzing personal characteristics.
Willingly participate in a progression of physical activities which contribute to the attainment of personal goals and the maintenance of wellness.
Understand relationships between society, its laws, and institutions.
Demonstrate economic literacy.

UNDERSTANDING OF THE HISTORICAL EVOLUTION OF THE DEMOCRATIC PRINCIPLES OF THE CONSTITUTIONAL GOVERNMENT OF THE UNITED STATES;
Display responsibility, self-esteem, sociability, integrity and honesty.
Apply concepts in consumer health, including the effects of consumer demands and advertising on health.
Use other languages to understand and appreciate all aspects of a culture, including literature, philosophy, the arts, geography, social customs, history, government, and the sciences.
Develop and understanding of world-wide relationships of all sorts between and among nations.
NEW MEXICO

APPLICATION OF THE PRINCIPLES AND PROCESSES OF OUR REPRESENTATIVE FORM OF GOVERNMENT AND UNDERSTANDING HOW THEY AFFECT INDIVIDUALS, COMMUNITIES, TRIBES, STATE, NATIONS, AND THE WORLD;

Act to promote a healthy school and community through school projects and partnerships with community agencies.

Act to create a healthy global environment.

Act to respect differences in mental and physical abilities of people due to various handicapping conditions.

Appreciate and respect one's own language, culture, and literature and the languages, cultures and literature of others.

Demonstrate an understanding of the effects that language can have on behavior and behavior on language.

Understand the complex nature of culture.

Demonstrate geographic understanding using the five fundamental themes of geography (location, place, movement, human interaction with environment, and regions).

UNDERSTANDING OF THE DIFFERENCES AMONG VARIOUS FORMS OF GOVERNMENT;

Recognize the importance of multilingualism and multiculturalism in a global economy.

Develop and use research and study skills.

Develop a knowledge base of United States and New Mexico history, geography, economy, politics and arts.

UNDERSTANDING AND APPLICATION OF THE BASIC ELEMENTS OF HEALTH MAINTENANCE;

Know how to maintain one's own health, including concepts of personal hygiene, rules of safety, injury prevention, rehabilitative methods, and use of medical products.

Understand the physical, mental, emotional, and social aspects of human growth and development, including stages of development, human sexuality, child care and parenting, and aging.

Understand health practices that contribute to lifelong wellness and prevention of conditions such as heart and lung diseases, diabetes, high blood pressure, and cancer.

Understand how to protect oneself and others from infectious diseases, including HIV/AIDS.

Understand how to protect oneself and others from harmful effects of alcohol, tobacco, and other legal and illegal drugs.

Develop stress management, coping and refusal skills, and the ability to handle peer pressure.

Demonstrate, practice and enjoy exercises that promote lifelong fitness, including cardiovascular fitness, muscular endurance and strength, and flexibility.

Learn and understand the concepts of safety, sportsmanship, nutrition and health to maintain an acceptable level of physical fitness essential for participation.

Develop large and small motor skills needed for making music through body movements.

Exhibit greater self-confidence, self-respect, self-awareness, and self-esteem.

Demonstrate and practice critical thinking, problems resolution and decision-making skills.

STANDARDS FOR EXCELLENCE: STUDENT OUTCOMES, ATTITUDES AND ATTRIBUTES

New Mexico students are successful, productive members of society as demonstrated by:

a. A desire to learn and perform at their full potential;
A positive self-concept as evidenced by constructive expression of one's own physical, emotional, and mental uniqueness, and capabilities, strengths, talents, goals, and aspirations.

c. A respect for self and others, based on the recognition of individual similarities and differences, opinions, cultures, and concerns of others;

d. A respect for the authority, responsibilities, and privileges protected by the United States Constitution and Bill Of Rights;

e. An appreciation of the world's literature, art, music, and cultural attributes, particularly those that make our state and nation great and unique;

f. Personal and interpersonal skills necessary to function successfully as responsible members within families, workplace, communities, tribes, nations, and the world;

g. A willingness to strive toward the attainment of positive personal and academic goals;

h. Assuming personal responsibility for shaping their own future;

i. Making decisions which promote good health; and

j. A respect for life and the environment based on the recognition that all life is interdependent.
New York

Document Utilized

*Learning Centered Curriculum and Assessment for New York State* (1991)

**Background**

The *Learning Centered Curriculum and Assessment for New York State* specifies student skills, characteristics, and capabilities that are to be incorporated in curriculum frameworks. These curriculum frameworks (expected to be completed in 1995) will not be developed by grade level; instead they will specify standards that are developmentally appropriate for broad levels of student learning at the elementary, middle, and commencement or graduation levels. The frameworks will include: areas of study (kinds of knowledge to be acquired), core concepts (major ideas to be understood), key competencies (important skills to be developed), and performance indicators (illustrations of how students can demonstrate their knowledge, skills, and understanding). The board of regents has yet to decide whether the frameworks will be mandatory or voluntary.

### New York

<table>
<thead>
<tr>
<th>THE REGENTS' GOALS FOR ELEMENTARY, MIDDLE, AND SECONDARY SCHOOL STUDENTS—1991</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong> Each student will master communication and computation skills as a foundation to:</td>
</tr>
<tr>
<td>1.1 Think logically and creatively.</td>
</tr>
<tr>
<td>1.2 Apply reasoning skills to issues and problems.</td>
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<tr>
<td>1.3 Comprehend written, spoken, and visual presentations in various media.</td>
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<tr>
<td>1.4 Speak, listen to, read, and write clearly and effectively in English.</td>
</tr>
<tr>
<td>1.5 Perform basic mathematical calculations.</td>
</tr>
<tr>
<td>1.6 Speak, listen to, read, and write at least one language other than English.</td>
</tr>
<tr>
<td>1.7 Use current and developing technologies for academic and occupational pursuits.</td>
</tr>
<tr>
<td>1.8 Determine what information is needed for particular purposes and be able to use libraries and other resources to acquire, organize, and use that information for those purposes.</td>
</tr>
</tbody>
</table>

| 2. Each student will be able to apply methods of inquiry and knowledge learned through the following disciplines and use the methods and knowledge in interdisciplinary applications: |
| 2.1 English language arts. |
| 2.2 Science, mathematics, and technology. |
| 2.3 History and social science. |
| 2.4 Arts and humanities. |
| 2.5 Language and literature in at least one language other than English. |
| 2.6 Technical and occupational studies. |
| 2.7 Physical education, health, and home economics. |

| 3. Each student will acquire knowledge, understanding, and appreciation of the artistic, cultural, and intellectual accomplishments of civilization, and develop the skills to express personal artistic talents. Areas include: |
| 3.1 Ways to develop knowledge and appreciation of the arts. |
| 3.2 Aesthetic judgements and the ability to apply them to works of art. |
| 3.3 Ability to use cultural resources of museums, libraries, theaters, historic sites, and performing arts groups. |
| 3.4 Ability to produce or perform works in at least one major art form. |
New York

3.5 Materials, media, and history of major arts forms.
3.6 Understanding of the diversity of cultural heritage.

4. Each student will acquire and be able to apply knowledge about political, economic and social institutions and procedures in this country and other countries. Included are:

4.1 Political, economic, and social processes and policies in the United States at national, State and local levels.
4.2 Political, economic, and social institutions and procedures in various nations; ability to compare the operation of such institutions; and understanding of the international interdependence of political, economic, social, cultural and environmental systems.
4.3 Roles and responsibilities the student will assume as an adult, including those of parent, home manager, family member, worker, learner, consumer and citizen.
4.4 Understanding of the institution of the "family," respect for its function, diversity, and variety of form, and the need to balance work and family in a bias-free democratic society.

5. Each student will respect and practice basic civic values and acquire and use the skills, knowledge, understanding, and attitudes necessary to participate in democratic self-government. Included are:

5.1 Understanding and acceptance of the values of justice, honesty, self-discipline, due process, equality, and majority rule with respect for minority rights.
5.2 Respect for self, others, and property as integral to a self-governing, democratic society.
5.3 Ability to apply reasoning skills and the process of democratic government to resolve societal problems and disputes.

6. Each student will develop the ability to understand, appreciate, and cooperate with people of different race, sex, ability, cultural heritage, national origin, religion, and political, economic, and social background, and to understand and appreciate their values, beliefs, and attitudes.

7. Each student will acquire knowledge of the ecological consequences of choices in the use of the environment and natural resources.

8. Each student will be prepared to enter upon post-secondary education and/or career-level employment at graduation from high school. Included are:

8.1 The interpersonal, organizational, and personal skills needed to work as a group member.
8.2 The ability to use the skills of decision making, problem solving, and resource management.
8.3 An understanding of ethical behavior and the importance of values.
8.4 The ability to acquire and use the knowledge and skill to manage and lead satisfying personal lives and contribute to the common good.

9. Each student will develop knowledge, skills and attitudes which will enhance personal life management, promote positive parenting skills, and enable functioning effectively in a democratic society. Included are:

9.1 Self-esteem
9.2 Ability to maintain physical, mental, and emotional health.
9.3 Understanding of the ill effects of alcohol, tobacco, and other drugs and of other practices dangerous to health.
### New York

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.4</td>
<td>Basic skills for living, decision making, problem solving, and managing personal resources to attain goals.</td>
</tr>
<tr>
<td>9.5</td>
<td>Understanding of the multiple roles adults assume, and the rights and responsibilities of those roles.</td>
</tr>
<tr>
<td>9.6</td>
<td>Basic skills for parenting and child development.</td>
</tr>
<tr>
<td>10</td>
<td>Each student will develop a commitment to lifetime learning and constructive use of such learning, with the capacity for undertaking new studies, synthesizing new knowledge and experience with the known, refining the ability to judge, and applying skills needed to take ethical advantage of technological advances.</td>
</tr>
</tbody>
</table>

### ESSENTIAL SKILLS AND DISPOSITIONS

A person who is prepared to live well, to work productively, and to participate effectively in civic and political life in a democracy exhibits the following skills and dispositions. An effective curriculum develops these essential skills and dispositions in every student across all subject areas.

#### A. Managing Resources

Resources include time, fiscal and material means, and human qualities and endeavors which are needed to carry out activity.

1. Identifies, organizes, plans, and allocates resources—time, fiscal, material, and human—to accomplish goals.
2. Monitors, reflects upon, and assesses one’s own progress and performance.

#### B. Managing Information

Information management focuses on the ability to access and use information from various sources, such as other people, libraries, museums and other community resources.

1. Acquires and evaluates information using a wide variety of sources and technologies.
2. Manages, organizes, interprets and communicates information for different purposes.
3. Accesses and processes information acquired from data bases, computer networks and other emerging information systems.
4. Appreciates and gains understanding of new developments in information technology.
5. Selects and analyzes information and communicates the results to others using written, graphic, pictorial, or multimedia methods.

#### C. Developing Personal Competence

Personal competence includes values, self-management, and the ability to plan, organize, and take independent action.

1. Exhibits integrity and honesty.
2. Takes initiative and personal responsibility for events and actions.
3. Exhibits ethical behavior in home, school, workplace, and community.
4. Regards oneself with esteem and others with respect, with intelligent and humane regard for cultural differences and different abilities.
5. Balances personal, family, and work life.

#### D. Developing Interpersonal and Citizenship Competencies

1. Can analyze new group situations.
2. Participates as a member of a team. Works cooperatively with others and contributes to the group with ideas, suggestions, and effort.
New York

3. Teaches others. Helps others learn.
4. Exercises leadership. Communicates through feelings and ideas to justify a position; encourages, persuades, convinces, or otherwise motivates an individual or group.
5. Negotiates and works toward agreements that may involve exchanging resources or resolving divergent interests.
6. Understands, uses, and appreciates multiple perspectives. Works well with males and females and with people from a variety of ethnic, social, or educational backgrounds.
7. Joins as an informed participant in community, civic, and political life.

E. Working With Systems And Technology
Systems skills include the understanding and ability to work with and within natural and constructed systems. Technology is the process and product of human skill and ingenuity in designing and making things out of available resources to satisfy personal and societal needs and wants.

1. Understands systems. Knows how social, organizational, biological, and technological systems work and operates effectively within them.
2. Monitors and corrects performance. Distinguishes trends, predicts impact of actions (inputs) on system operations, uses output to diagnose deviations in the functions (processes of a system, and takes the necessary action (feed-back) to correct performance.
3. Designs and improves systems. Makes suggestions to improve existing systems and develops new or alternative ones.
4. Selects technology. Judges which set of procedures, tools, apparatus, or machines, including computers and their programs, will produce the desired results.
5. Applies technology to tasks. Understands the overall intent and the proper procedures for using tools, setting up and using apparatus, and operating machines, including computers and their programming systems.

F. Developing Entrepreneurial Skills
Entrepreneurial skills include both the cognitive abilities needed to make informed judgements, leading to creative and effective activity, and the disposition to meet challenges as varied as public speaking, musical performance, physical activity, and many more. Such skills include exploring the unknown and challenging conventions.

1. Makes considered and informed judgements.
2. Meets and accepts challenges.
3. Makes considered and informed assertions; makes commitments to personal visions.
4. Acts appropriately when the outcome is uncertain.
5. Responsibly challenges conventions and existing procedures or policy.
6. Uses self-evaluation to adjust and adapt.
7. Experiments creatively.

G. Thinking, Solving Problems, Creating
The thinking and problem-solving category includes observing, experimenting, and drawing upon elements listed under the other essential skills categories. Creatively can be expressed through different types of intelligences such as logical/sequential, visual/spatial, musical, kinesthetic, and interpersonal.

THINKING
1. Makes connections; understands complex relationships and interrelationships.
<table>
<thead>
<tr>
<th></th>
<th>SOLVING PROBLEMS</th>
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<tbody>
<tr>
<td>2</td>
<td>Views concepts and situations from multiple perspectives in order to take account of all relevant evidence.</td>
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<td>3</td>
<td>Synthesizes, generate, evaluates, and applies knowledge to diverse, new, and unfamiliar situations.</td>
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<td>4</td>
<td>Applies reasoned action to practical life situations.</td>
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<tr>
<td>5</td>
<td>Imagine roles not yet experienced.</td>
<td></td>
<td>no match</td>
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<td>6</td>
<td>Designs problem-solving strategies and seeks solutions.</td>
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<td>F2a</td>
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<td>7</td>
<td>Asks questions and frames problems productively, using methods such as defining, describing, gathering evidence, comparing and contrasting, drawing inferences, hypothesizing, and posing alternatives.</td>
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<td>F2a</td>
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<td>8</td>
<td>Re-evaluates existing conventions, customs, and procedures in solving problems.</td>
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<td>9</td>
<td>Imagines, plans, implements, builds, performs, and creates, using intellectual, artistic, dexterous, and motor skills to envision and enact.</td>
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<td>no match</td>
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<td>10</td>
<td>Chooses ideas, procedures, materials, tools, technologies, and strategies appropriate to the task at hand.</td>
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<td>F, F4</td>
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<td>11</td>
<td>Adjusts, adapts, and improvises in response to the cues and restraints imposed by oneself, others, and the environment.</td>
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<td>no match</td>
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<td>12</td>
<td>Makes decisions and evaluates their consequences.</td>
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<td>CREATING</td>
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<td>13</td>
<td>Translates cognitive images and visions into varied and appropriate communication of ideas and information, using the methods of one or more disciplines--Imagining</td>
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<td>14</td>
<td>Originates, innovates, invents, and recombines ideas, productions, performances, and/or objects--Creating</td>
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<td>no match</td>
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<td>15</td>
<td>Responds aesthetically--Appreciating</td>
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<td>F3g</td>
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</tbody>
</table>
North Carolina

Documents Utilized

Circle of Childhood (August, 1990)
Appendix C, Communication Skills Proficiencies: Grade Level Benchmarks (1993)
Overview: Mathematics K-8 (no date)
Competency Goals and Objectives, Information Skills (revised 1992)
Competency Goals and Objectives, Computer Skills (revised 1992)

Background

Since 1990, the state has had mandatory standards (called the "standard course of study") in computer skills, English/language arts, healthful living, information skills, mathematics, science, social studies and vocational education. The standards are grade-specific for grades K-12. Benchmarks in different skill areas have been developed as developmentally appropriate indicators of progress toward proficiency in these goals and objectives. The benchmarks are designed to enable teachers to assess student progress over time and in a variety of situations rather than to make promotion decisions. In 1989, the State Board of Education approved the piloting of a new curriculum, Circle of Childhood, that includes goals and objectives for children ages 3-5.

<table>
<thead>
<tr>
<th>North Carolina</th>
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</thead>
<tbody>
<tr>
<td><strong>ASSESSING CHILDREN'S GROWTH (AGES 3-7)</strong></td>
</tr>
<tr>
<td><strong>I. SELF WORTH</strong></td>
</tr>
<tr>
<td>Smiles frequently</td>
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<tr>
<td>Explores the environment with confidence</td>
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<tr>
<td>Makes decisions</td>
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<tr>
<td>Talks with adults and peers about activities</td>
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<tr>
<td>Tries again when mistakes are made</td>
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<tr>
<td>Expresses and accepts affection</td>
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<tr>
<td>Works cooperatively with one or two children for short periods of time</td>
</tr>
<tr>
<td>Accepts responsibility</td>
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<tr>
<td>Develops good health and safety habits</td>
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<tr>
<td>Identifies body parts and functions</td>
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<tr>
<td><strong>II. VALUE AND RESPECT OF THE ENVIRONMENT AND PERSONAL RESPONSIBILITY</strong></td>
</tr>
<tr>
<td>Takes turns</td>
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<tr>
<td>Aware of others feelings/safety</td>
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<tr>
<td>Responds to requests</td>
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<tr>
<td>Begins to show tolerance of others</td>
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<tr>
<td>Listens to others</td>
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<tr>
<td>Chooses playmates</td>
</tr>
<tr>
<td>Begins to share with others</td>
</tr>
<tr>
<td>Enjoys participation in group discussions and activities</td>
</tr>
<tr>
<td>Begins to show self-control when interacting with others</td>
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<tr>
<td>Demonstrates good health/safety habits</td>
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<tr>
<td>Demonstrates self-help skills</td>
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<tr>
<td>Helps in efforts to clean and maintain outside environment and the home</td>
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</tbody>
</table>
North Carolina

Brings in items of nature to share
Talks about the natural world
Enjoys caring for plants and animals

III. EXPANDS CURIOSITY THROUGH USE OF ALL THE SENSES

Asks questions
Explores the natural and physical environment
Talks about experiences
Tests limits
Enjoys books
Explores actions and operation of the body
Expresses surprise, wonder and excitement in new activities
Explores space
Uses all the senses

IV. PATTERNS AND RELATIONSHIPS

Begins to observe and make simple comparisons
Begins to draw, paint and talk about family members
Begins to verbalize own actions
Begins to describe objects using the senses
Begins to distinguish one animal from another, things that sing/float, loud/soft etc.
Indicate a notion of where things belong
Responds to music with whole body
Sorts
Patterns
Measures (non-standard)
Makes comparison leading to seriation
Represents experiences and discoveries through drawings, graphs and the various Forms of language
Demonstrate beginning concept of numbers
Demonstrates non-standard measuring
Beginning understanding of spatial relations
Beginning to verbalize relations and transformations

V. EXPRESS AND REPRESENT THOUGHTS, FEELINGS, AND EXPERIENCES

Oral Language Stages
Social stages:
egocentric talk
associative talk,
collaborative talk involving concrete thought.
Structural stages:
telegraphic speech
structural omissions
structural explorations
Functions:
basic needs
directs and persuades
reports, questions
predicts
imagines
North Carolina

<table>
<thead>
<tr>
<th>solves problems</th>
<th>plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>tells stories</td>
<td>relationship maintenance.</td>
</tr>
</tbody>
</table>

Artistic Expression Stages:
- random scribbles
- longitudinal and circular scribbles
- naming
- floating figures
- base line

Use of Media:
- explores a variety of media
- uses media to solve problems
- uses media in non-traditional ways
- uses media to express emotions

Perception of Writing:
- same mark over and over
- different marks
- special marks
- marks stand for something
- same letter in different ways
- words stand for something
- linearity and directionality
- invented spelling

Displays interest in making books
- explores books
- retells stories
- checks books in and out of media center and public library
- orientation to print at developmental level
- "reads" along with teacher
- begins to make sense of print at developmental level

Art Forms
- enjoys music
- explores voice and instruments to create sound
- uses objects which become people, animals and other things
- explores capabilities and limitations of own body
- uses body for solving problems, expressing thoughts and feelings and for discovering new concepts
- engages in "becoming" experiences

Chooses games and materials, books, art materials
- Chooses a partner
- Decides what to build
- Chooses between wagon and tricycle
- Chooses between milk and juice
- Uses trial and error method
- Sorts and matches objects by size, color, texture or shape
- Returns objects to storage unit by matching outline
- Seeks help for things unable to do alone
- Explains how an activity is done
- Begins to work through personal problems

VII. DEVELOP APPROPRIATE THINKING PROCESSES IN RELATION TO THE IMMEDIATE AND PERSONAL ENVIRONMENT.
- Makes statements, asks question
North Carolina

Changes strategies
Performs physical acts to solve problems
Reveals how he/she is bound by perception
Uses materials in original, imaginative ways
Believes what he/she sees even when evidence is presented to the contrary

VIII. DEVELOP AND EXPAND CAPACITY TO USE LARGE AND SMALL MUSCLES IN IMMEDIATE AND PERSONAL ENVIRONMENT

Uses a variety of materials and equipment
Tries out new movements, using whole body (locomotive and
Moves in many different directions, at different speeds, with different force
Uses small muscles in painting, drawing, using manipulatives

MATHEMATICS PROFICIENCIES

KINDERGARTEN

Demonstrates an emerging understanding of the relationships of numbers
Uses counting for a variety of purposes
Models numbers and relates symbols to numbers
Uses comparative vocabulary
Recognizes plane and solid figures
Begins to use classification skills
Copies and creates patterns
Sequences events and objects
Identifies and explains the value of pennies and nickels
Participates in a variety of problem solving activities
Describes concrete and pictorial graphs created by the group
Uses spatial visualization

COMPETENCY GOALS AND OBJECTIVES INFORMATION SKILLS (1992)

GOAL 1 The learner will experience a wide variety of reading, listening, and viewing resources to interact with ideas in an information-intensive environment.

Objective 1.1 The learner will explore reading, listening, viewing sources and formats.

FOCUS:
- Participate in read-aloud, storytelling, and booktalking experiences
- Identify characteristics of various genres
- Acknowledge ownership of ideas in a variety of formats
- Identify elements of composition
- Identify characteristics of various media formats
- Investigate potential sources of information outside the school
- Select and use sources and formats independently

Objective 1.2 The learner will identify criteria for excellence in design, content, and presentation of information and formats.

FOCUS:
- Identify standards of excellence for judging media resources
- Apply identified standards to a variety of resources
- Develop and support personal standards for selecting resources for information needs and enjoyment

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## North Carolina

### Objective 1.3
The learner will critique information sources and formats

**FOCUS:**
- Analyze the merits of literary and design presentations
- Assess reliability, relevance, and integrity of resources
- Recognize the power of the media to influence
- Determine usefulness of resources for instructional and personal needs

### Objective 1.4
The learner will relate ideas and information to life experiences

**FOCUS:**
- Describe own cultural heritage and environment
- Collect information about diverse cultures, environments, and peoples
- Relate similarities and differences to personal life experiences
- Identify contributions of individuals and cultures
- Recognize how the presentation of information and ideas is influenced by social, cultural, political and historical events

### Objective 1.5
The learner will communicate reading, listening, and viewing experiences

**FOCUS:**
- Apply communications processes effectively
- Produce media in various formats based on reading, listening, viewing experiences
- Credit sources used in communicating reading, listening, viewing experiences

### Goal 2
The learner will identify and apply strategies to access, evaluate, use, and communicate information for learning, decision-making, and problem-solving

### Objective 2.1
The learner will explore research processes that meet information needs.

**FOCUS:**
- Acknowledge that there are a variety of reasons for seeking information—curricular pursuits, personal interests, problem-solving and decision making
- Explore print, electronic, human, and community reference sources
- Recognize that a systematic approach is more productive than a random approach
- Describe several research process models

### Objective 2.2
The learner will engage in research process to meet information needs.

**FOCUS:**
- Develop a search strategy: define and analyze the task
- Determine format of the end product
- Identify known and unknown information
- Establish personal goals for the task
- Select the most appropriate model for the task
- Prepare a plan
- Access Information: identify resources
- Gather information
- Credit sources
- Critique Information: verify reliability of the sources
- Analyze and synthesize information
- Determine further needs, if any
- Revise/restructure the search
Outline information to be used
Use Information: follow a prescribed procedure of developing products
Create, produce and/or present a final product
Credit sources of information
Evaluate the Process and the Product: assess the extent to which the process was appropriate
Appraise the technical quality of the product
Determine how well the product communicated information to the audience

COMPETENCY GOALS AND OBJECTIVES: COMPUTER SKILLS
GRADE LEVEL: KINDERGARTEN

GOAL 1: The learner will understand important issues of technology-based society and will exhibit ethical behavior in the use of computer technology.
Objective 1.1: Identify the computer as a machine that helps people work and play.

GOAL 2: The learner will demonstrate knowledge and skills in using computer technology.
Objective 2.1: Identify the physical components of a computer system (e.g., monitor, keyboard, disk drive, printer).
Objective 2.2: On a keyboard, identify letter, numbers, and other commonly used keys (e.g., RETURN/ENTER, space bar).
Objective 2.3: Demonstrate correct use of a computer.

COMMUNICATION SKILLS PROFICIENCIES: GRADE LEVEL
BENCHMARKS

READING--KINDERGARTEN

CHARACTERISTICS OF A READER: PERCEIVES SELF AS A READER AND WRITER
Participates and listens during reading situations.
Joins in to read refrains in predictable books.
Develops a repertoire of favorite books, poems, rhymes, and songs.
Chooses books as a free time activity.
Engages in talk about books and stories.
Uses book language while pretending to read.
Demonstrates awareness that print conveys meaning by trying to read.

READING STRATEGIES: USES STRATEGIES TO GAIN CONTROL OF PRINT
Uses concepts about books such as:
  - Knows the front and back of a book.
  - Turns pages correctly
Uses Concepts about print such as:
  - Knows left-to-right and top-to-bottom directionality.
  - Points to words one-to-one as teacher reads.
  - Knows concepts of word and letter.
  - Knows where to begin reading.
  - Knows letters of own name and letters from environment.
  - Recognizes own name in print.
Uses pictures as cues to meaning.

READING COMPREHENSION: UNDERSTANDS THAT PRINT CONVEYS MEANING
Discusses meaning of stories.
North Carolina

**RESPONDING TO TEXTS**
- Responds to texts in a variety of ways such as orally, artistically, dramatically, and through other projects.
- Recounts through retelling details, events, and ideas from familiar stories and other literary materials.
- Recounts through retelling concepts and details from informational texts.
- Comments on and reads some environmental print.
- Follows pictorial directions.
- Reads own dictated stories.
- Demonstrates sense of story.
- Pretend reads predictable pattern books.

**WRITING**

**KINDERGARTEN**

**CHARACTERISTICS OF THE WRITER: PERCEIVES SELF AS A WRITER**
- Shows preferences for a particular pieces of individual or group writing.
- Contributes to group stories.
- Chooses to write as a free time activity.
- Perceives self as a writer.
- Demonstrates understanding that print conveys meaning by trying to write.
- Demonstrates a knowledge of the difference between picture and print.

**COMPOSING PROCESS: USES STRATEGIES TO GAIN CONTROL OF PRINT**
- "Reads," understands, and explains own writing.
- Writes with left to right and top to bottom directionality.
- Uses letters of own name in writing.
- Writes using signs, letters, and other symbols in immediate environment.

**COMPOSING PRODUCTS: USES PRINT TO CONVEY MEANING**
- Copies words from signs in immediate environment.
- Writes own name.
- Uses a mixture of drawings and writing to convey and support an idea.
- Retells a story or experience using pictures and letter strings.
- Dictates a personal narrative.
- Draws and writes signs, labels, and notes to record observations and ideas.
Oklahoma

Document Utilized

Priority Academic Student Skills -- P.A.S.S. (September, 1993)

Background

The Education Reform and Funding Act, passed in April 1990, called for the development of a core curriculum in six core areas: the arts, language arts, languages, mathematics, science, and social studies. There are also content standards in four other areas: instructional technology; technical education; health, safety, and physical education; and hands-on career exploration and information skills. In the fall of 1993, the state did an extensive revision of the standards in all areas. Each subject is organized differently, but all include standards for grades K-12. Schools are required to include the state's core curriculum in their local curriculum, but districts can choose how to implement the standards. Criterion-referenced tests are under development to assess mastery of the standards in grades 5, 8, and 11.

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<th>Kindergarten</th>
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<tr>
<td><strong>Social Skills</strong></td>
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<tr>
<td>Social skills include interacting with others, work habits and self-help skills. To develop these skills children need daily opportunities to choose activities and materials. By the completion of the school year, the child will:</td>
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<tr>
<td>a. Work and play cooperatively in a variety of settings (e.g., in large and small groups, learning centers).</td>
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<td>b. Exhibit behavior that demonstrates an understanding of school and classroom guidelines (e.g., rules, routines, schedules, procedures, respecting property of others).</td>
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<td>c. Listen to others while in large and small groups.</td>
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<td>d. Stay involved in a self-selected activity for an appropriate length of time (approximately 15 to 20 minutes).</td>
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<td>e. Follow simple verbal directions.</td>
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<tr>
<td>f. Work independently and/or cooperatively to solve problems.</td>
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<td>g. Select and complete a task while working at a learning center.</td>
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<tr>
<td>h. Choose a variety of materials and activities from learning centers.</td>
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<tr>
<td>i. Recognize dangerous situations and take action to protect self (e.g., use of telephone, safety rules).</td>
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<tr>
<td>j. Attend to personal tasks (e.g., clothing, personal hygiene).</td>
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<tr>
<td><strong>Creative Skills</strong></td>
</tr>
<tr>
<td>Creative skills are developed through working with play dough, sand, water, dramatic play areas, blocks, creative stories, art, music, movement and a variety of materials. By the completion of the school year, the child will:</td>
</tr>
<tr>
<td>a. Express thoughts and ideas about work or play.</td>
</tr>
<tr>
<td>b. Develop and verbalize solutions to simple problems.</td>
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<tr>
<td>c. Think of new uses for familiar materials.</td>
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</table>
LANGUAGE ARTS
Young children begin to develop language arts skills through the context of shared reading with quality children's literature, shared writing, language experience, reading and writing centers.

By the completion of the school year, the child will:

a. Complete simple rhyming pairs (e.g., boat/coat).
b. Hear and repeat sound in a sequence (e.g., hand rhythms, vocal sounds, numbers in a sequence, letters in a sequence, five sounds in a sequence).
c. Hear and repeat a simple eight-to-ten work about an event or activity.
d. Tell what happens first, middle and last about an event or activity.
e. Dictate a story about an event or experience.
f. Answer questions and contribute ideas that are relevant to the conversation or group discussion.
g. Speak using complete sentences that include a subject, verb, simple phrases and some adjectives (i.e., I rode a big bus to school).
h. Tell what is happening in a picture.
i. Identify and read first and last name in print.
j. Reproduce a three-object pattern from memory (e.g., square - square - circle).
k. Identify and name eight basic colors (black, blue, red, yellow, orange, green, brown, purple).
l. Match at least half of the upper-case letters with the lower-case letters.
m. Begin to use initial and ending consonant sounds.
n. Begin to name letters of the alphabet.
o. Begin to recognize, name and match words in context.
p. Read his or her own "writing" to the group, teacher and/or parent (e.g., may be pictures, attempts at letters, initial consonants, words and phrases).
q. Demonstrate left-to-right and top-to-bottom eye movement when engaged in appropriate activities (e.g., looking at pictures in sequence, following print on a page).
r. Show basic parts of a book (front and back), hold book correctly, indicate where to begin reading.
s. Print first and last name on unlined paper.
t. Trace, copy and generate shapes, letters and numerals. Children may still be reversing some letters.

MATHEMATICS
Young children begin to develop mathematical understanding through experiences with a wide variety of real objects provided in learning centers and practical situations (e.g., blocks, pegs, buttons, cooking).

By the completion of the school year, the child will:

a. Identify, name and draw a circle, square, rectangle and triangle when shown an example.
b. Identify some three-dimensional objects (e.g., box, can etc.).
c. Sort objects, group into a set and tell what the objects have in common (e.g., color, size, shape).
d. Build groups or sets that have more than, less than and equivalent quantities and tell which have more or less.
e. Pair and count objects using one-to-one correspondence (e.g., one napkin for each child at snack time).
f. Count orally from one to twenty.
g. Count objects in a set orally one-by one from zero through ten.
h. Construct, identify and name sets of objects zero through ten.
i. Identify and name numerals zero through ten (0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10) in and out of sequence.
j. Match sets of objects to numeral zero through ten.
Oklahoma

k. Point to objects and name their ordinal position first through fifth.  
F3c

l. Write numerals zero to ten, in and out of sequence, on unlined paper. Children may still be reversing some numerals.  
F3c

m. Identify and name sizes such as big, bigger, biggest; small, smaller, smallest; small, medium, large.  
F3c

n. Identify and name lengths such as long, longer, longest; short, shorter, shortest.  
F3c

o. Put objects in graduated order from shortest to tallest, thinnest to thickest.  
F3c

p. Identify and name a penny, nickel, dime and quarter.  
F3c

q. Help create and explain a simple graph such as a bar graph showing how many boys and girls are in the class.  
F3c

r. Complete and construct simple patterns with objects such as car, block, car, block.  
F3c

s. Demonstrate (with objects) spatially related terms such as on, above, below, beside, under, on top of behind and over.  
F3c

t. Identify the days of the week and months of the year.  
F3c

MOTOR SKILLS

Young children need the opportunity to develop large and small motor skills through indoor and outdoor activities and games.

By the completion of the school year, the child will:

a. Demonstrate basic locomotion movements such as walking, running, jumping, hopping, galloping and skipping.  
C4b

b. Demonstrate nonlocomotor movements such as bending, stretching, pulling, pushing, etc.  
C4b

c. Balance on one foot for approximately five seconds.  
C4

d. Walk and balance on four-inch line or balance beam.  
C4

e. Coordinate large arm movements such as easel painting, woodworking, climbing, throwing, playing rhythm band instruments, writing on chalkboard, playing with blocks, catching and tossing.  
C4

f. Demonstrate strengthened hand and eye coordination while working with pegs, stringing beads, using pattern blocks, using crayons, pencils, paint brushes and fingerpaint on plain paper, cutting with scissors, using glue and a variety of puzzles.  
F3

g. Hold and use pencil, crayons and marker using thumb and two fingers.  
F3

SCIENCE

Science knowledge is developed through experiences with real animals, plants and objects in the classroom science center and the environment.

By the completion of the school year, the child will:

a. Observe and describe characteristics of the four seasons such as temperature, weather, appropriate clothing, etc.  
F3

b. Observe and describe characteristics of weather using vocabulary such as sun, rainbow, clouds, fog, shadows, dew, frost, rain, hail, sleet, snow, lightning, thunder, temperature and tornado.  
F3

c. Observe and describe what various plants and animals need for growth.  
F3

d. Observe, classify and describe the sensory attributes of objects according to taste, smell, hearing, touch and sight.  
F3

e. Observe, describe and classify real objects according to their common properties (e.g., animals, plants).  
F3

f. State the opposite properties of some objects, such as magnetic—nonmagnetic, float-sink, heavy-light, rough-smooth, hard-soft, solid-liquid, and wet-dry.  
F3

g. Observe and describe the sequence of "simple" life cycles such as plants, frogs, butterflies and chickens (e.g., seed/plant, egg/chicken).  
F3
h. Discuss basic health needs of human beings such as good nutrition, dental care and exercise.
i. Describe simple conservation measures used to protect our environment (e.g., recycling).
j. Observe, describe and experiment with vibration and sound such as rubber bands, bottles of water, homemade telephone.

SOCIAL STUDIES
Social studies provides an opportunity to develop an integrated curriculum using topics such as transportation, national symbols, holidays and economics. These experiences can be provided through learning centers, resource people, projects, field trips, etc.

By the completion of the school year, the child will:

a. State his/her full name, age, birthdate, address, telephone number and name of parent or guardian.
b. Identify the title of various school helpers and the individual who occupies that job in the immediate school setting, including principal, secretary, custodian, counselor, librarian, nurse, cook and teacher.
c. Identify common occupations that occur within their immediate surroundings (e.g., bus driver, policeman, fireman).
d. Identify how children within the local community and around the world have needs in common and are also unique as to languages, food, clothing, transportation and customs.
e. Recognize Oklahoma on a map of the United States.
f. Begin to develop and understanding of city, town, state, country.

LANGUAGES: PROFICIENCY LEVEL--INTRODUCTORY
At the end of the Introductory Proficiency Level of studying a language in its cultural context, students will recognize some similarities and differences between the target culture and their own.

1. Speaking: At the Introductory Level, repetition, frequent pauses and production errors can be expected. The Student Will:
   a. Use isolated words and learned phrases (two or three words at a time).
   b. Use vocabulary which is sufficient for handling classroom situations and basic needs.
   c. Express basic courtesies.

2. Listening/Comprehending: At the introductory Level, repetition, rephrasing, slow rate of speech may be needed for comprehension. The Student Will:
   a. Understand short, learned statements, questions, commands and courtesies.

3. Reading/Interpreting: At the Introductory Level, phrases and sentences may require a second reading. The Student Will:
   a. Identify learned words and phrases including cognates (words recognizable in two languages and having similar meaning) and borrowed words.

4. Writing: At the Introductory Level, practical writing skills for communication will be minimal. The Student Will:
   a. Copy or transcribe familiar words or phrases and reproduce some from memory.
## Oregon

**Background**

The Oregon Educational Act for the 21st Century, passed by Oregon lawmakers in 1991, identified 36 content goals. The state now is developing curriculum frameworks based on those goals. In grades K-3, the standards will be interdisciplinary. In grades 4-12, they will be by subject area: the arts, civics and government, economics, English/language arts, geography, health and physical education, history, mathematics, science, second languages, and technology. The state is also developing performance standards at grades 3, 5, 8, and 10 for 11 outcomes that students must meet to earn a Certificate of Initial Mastery. Upon completion these C.I.M. standards will likely include grade 12. The C.I.M. standards are mandatory. The state board will decide whether the content standards are mandatory or voluntary for districts.

| Oregon |
|---|---|
| 1. The use of diverse and emerging technologies to access and process information across the instructional areas. | F4 |
| 2. The study of technology systems, their influence on individuals and society; their development and use in various fields. | F4 |
| 3. The study of the dynamics of language as central to thought and expression, giving voice to thought in conceptualizing, shaping, and representing human experience, including: | F1 |
| a. Various levels of language (e.g., formal, information, colloquial, slang); | F3b |
| b. The structure and function of language as a symbol system; | F1, G3 |
| c. Issues of stereotyping and bias in language; and | F1 |
| d. Understanding how language is used to influence, manipulate, and control. | F1, F3b |
| Awareness of various levels of language usage (e.g., formal and informal, colloquial, slang) used in oral and written presentations | no match |
| Awareness of real from imaginary | F3 |
| Development of the concepts of metaphor, simile, analogy with responses to "What is it like?" "What does it remind you of?" type of questions | |
| 4. The view of reading, using a variety of strategies to: | F3 |
| a. Construct meaning from a range of text and multimedia sources; | no match |
| b. Make connections with one’s own life; | no match |
| c. Monitor and evaluate one’s own comprehension; and | F2, F3 |
| d. Analyze and reflect. | F3a |
| Use multiple strategies to identify words from print and multi-media messages (e.g., letters, pictures, context, structure, phonetic cues) | F2b, F3a |
| Use of comprehension strategies to construct meaning (e.g., cause and effect, sequencing, retelling using main idea, personal experiences and prior knowledge) from a variety of text and multimedia sources | F3 |
| Reading a variety of materials for a variety of purposes | F3a |
| Use of self correcting strategies when reading does not make sense (rereading, cross-checking) | |
| 5. The development of writing as a tool for learning, reflecting, and conveying meaning in a variety of forms and modes for a range of purposes and audiences, including the use of multiple media for publication and presentation. | F3 |
Use of multi-step process (e.g., generating ideas, planning, drafting, revising, editing, proofreading, and publishing/sharing) when communicating in informal oral, written and visual forms (e.g., stories, poster, poems, reports, learning logs, personal letters)

Writing in several modes (e.g., narrative, descriptive, expository, persuasive, and imaginative) to convey meaning

Writing/speaking about concrete, familiar concepts and experiences to close-by audiences (peers, family members, neighbors, teachers)

Beginning self-reflection through the use of writing traits (e.g., ideas and content, organization, sentence fluency, conventions)

6. The development of speaking as a means for oral exchanges of information, including using language to:
   a. Deliver presentations and demonstrate effective skills relevant to the audience;
   b. Ask and answer questions; and
   c. Communicate ideas effectively in group situations.

Use of multi-step process (e.g., gather and organize information, draft and make notes, plan presentation) when making informal presentations (e.g., collaborative learning experiences, reports to small group or class)

Making informal presentations (e.g., reciting/retelling stories) to a close-by audience (e.g., peers, family members, neighbors, teachers)

Beginning use of effective delivery skills (e.g., voice, diction, volume, nonverbal signals) and writing skills (e.g., content, organization)

Beginning group participation skills (e.g., participating in group discussion, defining group goals)

7. The development of listening as a way of obtaining meaning through oral messages presented in a variety of media, including:
   a. Identifying the purpose of an oral message;
   b. Analyzing and evaluating verbal and nonverbal messages and the way they are delivered;
   c. Using empathetic and appreciative listening skills to enrich understanding; and
   d. Engaging in verbal and nonverbal interaction with a speaker to ensure effective communication.

Use of listening skills for a variety of purposes (e.g., consistently following classroom routine, retelling stories heard in class, attentive listening for information and enjoyment)

Showing response to oral instructions (e.g., eye contact and attentive body posture toward speaker)

8. The study of how works of literature reflect, record, communicate, and influence the interpretation of human experience, including learning to:
   a. Make informed analysis of the purpose and meaning of literary works;
   b. Evaluate how the form and content of a literary work contributes to its message and impact; and
   c. Understand how literature defines and binds us as a national and global community.

Describing several pieces of significant children literature

Identification of simple literary forms (e.g., poetry, short prose selection)

Identifying simple elements of fiction (e.g., character, setting and plot) and forms of figurative language (e.g., simple analogies, similes)

Relating literature to own life as well as recognizing common personal concerns in literature from different cultures (e.g., ethnic, religious, linguistic, national groups)
9. The development of the technical and problem-solving skills and knowledge necessary for creative communication and personal expression through creating and performing in the literary, visual, and performing arts (i.e., music, dance, drama).

<table>
<thead>
<tr>
<th>Activity</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DANCE</strong></td>
<td></td>
</tr>
<tr>
<td>Observe and discuss how dance is different from other forms of human movement (such as sports, everyday gestures)</td>
<td>F3g</td>
</tr>
<tr>
<td>Take an active role in a class discussion about interpretations of and reactions to a dance.</td>
<td>A2c, F3g</td>
</tr>
<tr>
<td>Present their own dances to peers and discuss their meanings with competence and confidence</td>
<td>F1a, F3g</td>
</tr>
<tr>
<td><strong>DRAMA</strong></td>
<td></td>
</tr>
<tr>
<td>Script writing by planning, and recording improvisations based on personal experience and heritage, imagination, literature, and history</td>
<td>F3, F3g</td>
</tr>
<tr>
<td>Acting by assuming roles and interacting in improvisations</td>
<td>F3g</td>
</tr>
<tr>
<td>Designing by visualizing and arranging environments for classroom dramatizations</td>
<td>F3g</td>
</tr>
<tr>
<td>Directing by planning classroom dramatizations</td>
<td>F3g</td>
</tr>
<tr>
<td><strong>MUSIC</strong></td>
<td></td>
</tr>
<tr>
<td>Sing independently, on pitch and in rhythm, with appropriate timbre, diction and posture, and maintain a steady tempo.</td>
<td>F3g</td>
</tr>
<tr>
<td>Perform on instruments on pitch, in rhythm, with appropriate dynamics and timbre, and maintain a steady tempo.</td>
<td>F3g</td>
</tr>
<tr>
<td>Improvise &quot;answers&quot; in the same style to given rhythmic and melodic phrases</td>
<td>F3g</td>
</tr>
<tr>
<td>Create and arrange music to accompany readings or dramatizations</td>
<td>F3g</td>
</tr>
<tr>
<td>Read whole, half, dotted half, quarter, and eighth notes and rest in 2/4, 3/4, and 4/4 meter signatures</td>
<td>F3g</td>
</tr>
<tr>
<td><strong>VISUAL ART</strong></td>
<td></td>
</tr>
<tr>
<td>Know the differences between materials, techniques, and process</td>
<td>F3g</td>
</tr>
<tr>
<td>Describe how different materials, techniques, and processes cause different responses</td>
<td>F3g</td>
</tr>
<tr>
<td>Use how different media, techniques, and processes to communicate ideas, experiences, and stories</td>
<td>F3g</td>
</tr>
<tr>
<td>Know the difference among visual characteristics and purposes of art in order to convey ideas</td>
<td>F3g</td>
</tr>
<tr>
<td>Describe how different expressive features and organizational principles cause different responses</td>
<td>F3g</td>
</tr>
<tr>
<td>Use visual structures and functions of art to communicate ideas</td>
<td>F1, F3g</td>
</tr>
<tr>
<td>Explore and understand prospective content for works of art</td>
<td>F3g</td>
</tr>
<tr>
<td>Select and use subject matter, symbols, and ideas to communicate meaning</td>
<td>F1, F3g</td>
</tr>
<tr>
<td><strong>LITERARY ART</strong></td>
<td></td>
</tr>
<tr>
<td>Recognition and practice with formulaic poetry (e.g., cinquain, tanka, diamante, haiku)</td>
<td>F3g</td>
</tr>
</tbody>
</table>

10. The study of how works of literary, visual and performing (i.e., music, dance, drama) art and artists reflect, record, communicate, influence, and change cultural values.

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>DANCE</strong></td>
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</tr>
<tr>
<td>Perform folk dances from various cultures with competence and confidence</td>
<td>F3g</td>
</tr>
<tr>
<td>Learn and effectively share a dance form a resource in their own community; describe the cultural and/or historical context</td>
<td>F3g, G3</td>
</tr>
<tr>
<td>Accurately answer questions about dance in a particular culture and time period (for example, in colonial America, why and in what settings did people dance? What did the dances look like?)</td>
<td>F3g</td>
</tr>
</tbody>
</table>
### DRAMA
Researching by finding information to support classroom dramatizations
Understanding context by recognizing the role of theater, film, television, and electronic media daily life

### MUSIC
Identify by genre or style aural examples of music from various historical periods and cultures

### VISUAL ARTS
Know that the visual arts have both a history and specific relationships to various cultures.
Identify specific works of art as belonging to particular cultures, times, and places
Demonstrate how history, culture, and the visual arts can influence each other in making and studying works of art

### LITERARY ART
Recognition of literary patterns which reflect an outlook on life

11. The study of how to make informed critical and aesthetic judgements about works of literary, visual and performing (i.e., music, drama, dance) art, based on criteria and the ongoing development of personal taste and values.

### DANCE
Explore, discover, and realize multiple solutions to a given movement problem; choose their favorite solution and discuss the reasons for that choice.
Observe two dances and discuss how they are similar and different in terms of one of the elements of dance (such as space, through body shapes, levels, pathways).

### DRAMA
Comparing and connecting art forms by describing theater, dramatic media (such as film, television, and electronic media), and other art forms.
Analyzing and explaining personal preferences and constructing meanings from classroom dramatizations and from theater, film, television, and electronic media productions.

### MUSIC
Identify simple music forms when presented aurally.
Device criteria for evaluating performances and compositions.
Identify similarities and differences in the meanings of common terms used in the various arts.

### VISUAL ART
Understand there are various purposes for creating works of visual art.
Describe how people's experiences influence the development of specific artworks.
Understand there are different responses to specific artworks.

12. The study of numeration: A strong sense constructed through the understanding of number systems, their properties, number theory, and their relationship to each other.
Construct number meanings through real-world experiences and the use of physical materials.
Show understanding of our numeration system by relating counting, grouping and place-value concepts.
<table>
<thead>
<tr>
<th>Oregon</th>
<th>F3c</th>
<th>F2, F3c</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show an understanding of the use of the addition, subtraction, and multiplication operations.</td>
<td>F3c</td>
<td></td>
</tr>
<tr>
<td>Show an understanding of the mathematical language and symbolism of operations.</td>
<td>F3c</td>
<td></td>
</tr>
<tr>
<td>Show an understanding that a wide variety of problem structures can be represented by a single operation.</td>
<td>F3c</td>
<td></td>
</tr>
<tr>
<td>Show an understanding that a wide variety of problem structures can be represented by a single operation.</td>
<td>F3c</td>
<td></td>
</tr>
<tr>
<td>Show an understanding of sense of operations.</td>
<td>F3c</td>
<td></td>
</tr>
</tbody>
</table>

13. The study of measurement—selecting appropriate attributes, units, and tools to measure length, capacity, weight, area, volume, time, temperature, and angle while developing formulas and procedures to solve problems.

Understand the attributes of length, capacity, weight, area, volume, time, temperature and angle.

Understand estimation in measurement.

Understand measurement in problem and everyday situations.

14. The study of statistics and probability: collecting, organizing, displaying, and analyzing information; using numerical data to predict events.

Explores concepts of chance.

Collect, organize and describe data.

Displays data concretely and pictorially.

15. The study of mathematical procedures—operating with whole numbers, fractions, decimals, integers and rational numbers; selecting, using, and inventing appropriate methods for computing including mental computation, pencil and paper calculation, calculators, computers or other technology; and interpreting results while linking physical models to procedures.

Explore estimation strategies.

Determine reasonableness of results.

Model, explain and develop competency of basic facts and algorithms (whole number addition, subtraction, and multiplication).

Use a variety of mental computation techniques.

Select and use most appropriate computation technique (mental, paper and pencil, calculator).

16. The study of patterns, functions, relationships, and algebra: Studying patterns to make conjectures about relationships; graphically representing functions to make connections within mathematics (most often using graphing calculators and computers); and using algebra (the language of mathematics) to do mathematics while exploring relationships and developing generalizations.

Recognize, create, describe, and extend a wide variety of patterns.

Model equality of sets and inequality of sets.

Represent concretely and verbally or symbolically describe mathematical relationships.

17. The study of geometry: Exploring shape, are, and volume to build a foundation of geometrical thinking; and using models to develop spatial visualization and extend the understanding of location, distance, patterns in space, symmetry, and coordinate geometry.
### Oregon

| Sort, classify, and describe shapes. | F3c |
| Explore geometric figures, identify properties and create combinations of shapes. | F3c |
| Develop spatial sense through concrete experiences with two and three dimensional figures. | F3c |
| Use geometric concepts to explore number and measurement ideas. | F3c |
| Recognize an awareness of geometry in the world. | F3c |

18. The study of science facts, concepts, principles and theories from physical systems, earth and space systems, and life systems that provide a foundation for understanding and applying science.

- Identify examples of change in the environment.
- Demonstrate a physical change with simple objects.
- Explore patterns.
- Recognize a cycle. Arrange parts of a cycle and identify the pattern of a cycle.
- Explore possible causes for an event.
- Identify the relationship between a cause and an effect.
- List characteristics of organisms that distinguish them from non-living systems.
- Explore examples of symmetry found in the environment.
- Identify and describe a population.

19. The study of science as inquiry, a set of interrelated processes by which scientists pose questions, investigate phenomena, and cultivate deeper understanding about the natural world.

- Explore objects using all senses.
- Use simple instruments to enhance observations.
- Describe physical properties of objects.
- Use a list of observations of an event to make an inference about the event.
- Analyze an event to make an inference about a reason for the event.
- Use prior experience to generate a prediction.
- Create a test to verify a prediction.
- Use observations to predict new observations.
- Explore patterns, sequences and classes of objects.
- Identify characteristics of objects which make them similar or different.
- Sort objects into sets.
- Sequence objects into set.

20. The study of connections among and within the natural sciences, between science and mathematics, and between science and technology/engineering.

- Identify relationships across science disciplines.
- Show how skills in mathematics and concepts are used in describing scientific investigations.
- Explore measurement by using standard and arbitrary measuring devices.
- Compare objects to a measuring device.
- Identify measurable properties.

21. The study of how science and technology are influenced by and, in turn, influence the culture and context in which they operate.

- Identify technology that is used and how it helps society.

22. The study of history, including:

   a. The development and changing character of human societies;

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### Oregon

<table>
<thead>
<tr>
<th>Fraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. The economic and technological development of human societies in the quest to sustain and improve life;</td>
</tr>
<tr>
<td>b. People's development of their understanding of themselves, their place in the universe, and</td>
</tr>
<tr>
<td>c. The development of political theories, organizations, and institutions.</td>
</tr>
<tr>
<td>d. Family life now and in the recent past; family life in the local community and state long ago.</td>
</tr>
<tr>
<td>e. History of their own local community and communities in North America varied long ago.</td>
</tr>
<tr>
<td>f. History of the indigenous peoples who first lived in their region or state; the first European, African and/or Asian-Pacific explorers and settlers who came long ago; and the many groups from regions throughout the world who have come into students' regions or state over the past 200 years and the recent past.</td>
</tr>
<tr>
<td>g. Significant events in the history of their state, significant problems that were encountered, and the people who played major roles in the history of their state.</td>
</tr>
<tr>
<td>h. The causes and nature of various movements of large groups of people into their own and other states in the US., now and long ago.</td>
</tr>
<tr>
<td>i. Folklore from various regions of the US. and how it helps to form a national heritage.</td>
</tr>
<tr>
<td>j. How democratic values came to be, and how they have been exemplified by people, events and symbols.</td>
</tr>
<tr>
<td>k. Selected attributes and historical development of societies in Africa, the Americans, Asia and Europe.</td>
</tr>
<tr>
<td>l. Major discoveries in science and technology, some of their social and economic effects, the major scientists and inventors associated with them.</td>
</tr>
</tbody>
</table>

### CHRONOLOGICAL THINKING

On listening to or reading historical stories, myths, and narratives, students should be able to reconstruct the basic organization of the narrative: its beginning, middle, and end.

In creating historical narratives of their own, such as their family's, their school's or community's history, students should be able to establish a chronology for the story, providing a beginning, middle, and end.

### HISTORICAL COMPREHENSION

On listening to or reading stories, myths, legends and narratives, students should be able to reconstruct the literal meaning of the passage by correctly recounting who was involved; the events that occurred; where they happened; what motives or events disclosed in the passage led to these developments; and the consequences or outcomes that followed.

Students should be able to read and interpret the visual data presented in historical photographs, paintings, and drawings of the people, places and historical events under study.

### HISTORICAL ANALYSIS AND INTERPRETATION

Compare and contrast likenesses and differences between people's lives, activities, beliefs, traditions, family structures, institutions, and so on at various times in the past and present, and among various groups with differing ethnic, religious, and national backgrounds.

In listening to or reading historical narratives, myths, legends, and stories, identify the differing motives, beliefs, interests, hopes, and fears of different people caught up in the event, and analyze how those feelings influenced their behaviors.
HISTORICAL ISSUES, ANALYSIS, AND DECISION-MAKING
In listening to or reading historical narratives, stories, myths, and legends, students should be able to identify problems that confronted people in the situation and to analyze how they were affected by them, the way(s) they tried to meet their problems, what they valued in taking these positions, and what the consequences were. Analyze whether or not the decision that was made was a good one. Whom did it help? Whom did it hurt? Were there other choices that could have been suggested in those circumstances and why.

HISTORICAL RESEARCH
Grades K-2 should be able to develop questions, conduct interviews, collect family photos and other records from past, and present their information orally, through illustrations and through stories.
In researching the history of their local community and state, grades 3-5 should be able to formulate questions, obtain information and use the information they obtain to create data retrieval charts, displays, and historical narratives describing events in the past.

U.S. HISTORY, ERA 1 (BEGINNING TO 1620): THREE WORLDS MEET
The basic characteristics of societies in the Americas, Western Europe, and West Africa that increasingly interacted after 1450.
Early European exploration and colonization, and the resulting cultural and ecological interactions.

U.S. HISTORY, ERA 2 (1585-1763): COLONIZATION AND SETTLEMENT
The early arrival of Europeans and Africans in the Americas and how these people interacted with Native Americans.
How political institutions and religious freedom emerged in the North American colonies.
How the values and institutions of European economic life took root in the colonies and how slavery reshaped both European and African life in the Americas.

U.S. HISTORY, ERA 3 (1754-1820S): REVOLUTION AND THE NEW NATION
The causes of the American Revolution, the ideas and interests involved in forging the revolutionary movement, and the reasons for the American victory.
How the American Revolution affected the social and economic relations among the new nation's many groups and regions.

U.S. HISTORY, ERA 4 (1801-1861): EXPANSION AND REFORM
United States territorial expansion between 1801 and 1861 and how it affected relations with external powers and Native Americans.
How the industrial revolution, the rapid expansion of slavery and the settlement of the West in the first half of the 19th century changed the lives of Americans and led toward regional tensions.
The extension, restriction and reorganization of political democracy after 1800.
The sources and character of religious, social and political reform in the antebellum period and what the reforms accomplished or failed to accomplish.

U.S. HISTORY, ERA 5 (1850-1877): CIVIL WAR AND RECONSTRUCTION
The causes of the Civil War.
The course and character of the Civil War and its effect on the American people.
Reconstruction plans and their successes and failures.
| Oregon |
|------------------|------------------|
| **U.S. HISTORY, ERA 6 (1870-1900): THE DEVELOPMENT OF THE INDUSTRIAL U.S.**  |
| The transformation of American life by the rise of big business, heavy industry, and mechanized farming.  |
| Massive immigration after 1870 and the new social patterns, conflicts, and ideas of national unity amidst growing cultural diversity.  |
| Rise of the American labor movement and the political issues which reflected the social and economic changes of the era.  |
| Federal Indian policy and United States foreign policy that emerged after the Civil War.  |
| **U.S. HISTORY, ERA 7 (1890-1930): THE EMERGENCE OF MODERN AMERICA**  |
| Attempts to address the problems of a modern, urbanizing industrial society by Progressives and others.  |
| The changing roles of the United States in world affairs during the progressive era through World War I.  |
| How the United States changed from the end of World War I to the eve of the Great Depression.  |
| **U.S. HISTORY, ERA 8 (1929-1945): THE GREAT DEPRESSION AND WORLD WAR II**  |
| The causes and consequences of the Great Depression.  |
| The Roosevelt presidency, the New Deal, the transformation of American federalism, and the development of the welfare state.  |
| The origins and course of World War II, the character of the war at home and abroad, and its reshaping of the U.S. role in the world affairs.  |
| **U.S. HISTORY, ERA 9 (1945-EARLY 1970s): POST-WAR UNITED STATES**  |
| Economic and social change in postwar America.  |
| Major postwar political decision from Truman to Johnson.  |
| The Cold War and the Vietnam conflict in domestic and international policies.  |
| Issues concerning racial and gender equality and civil liberties.  |
| **U.S. HISTORY, ERA 10 (1968-PRESENT): CONTEMPORARY UNITED STATES**  |
| Conservative resurgence under Reagan and Bush and the end of the Cold War.  |
| The continuing struggle for equality amid a new era of immigration.  |
| **WORLD HISTORY, ERA 1: THE BEGINNINGS OF HUMAN SOCIETY**  |
| The biological and cultural processes that gave rise to the earliest human communities.  |
| The processes that led to the emergence of agricultural societies around the world.  |
| **WORLD HISTORY, ERA 2 (4000-1000 BCE): EARLY CIVILIZATIONS AND THE RISE OF PASTORAL PEOPLES**  |
| The major characteristics of civilization and how civilization emerged in Mesopotamia, Egypt, and the Indus valley.  |
| Agrarian societies spread and new states emerge in the third and second millennia BCE.  |
| The political, social, and cultural consequences of population movements and militarization in Bursia in the second millennium BCE.  |
| **WORLD HISTORY, ERA 3 (1000 BCE-300 CE): CLASSICAL TRADITIONS, WORLD FAITHS, AND EXTENSIVE EMPIRES**  |
| Empire-building, trade, and migrations contribute to increasingly complex relations among peoples of the Mediterranean basin, Africa, and Central Asia, 1000-600 BCE.  |
The rise of Aegean civilization and the interrelations that developed between Hellenism and the cultural traditions of Southwest Asia and Egypt, 600-200 BCE.
The rise of large-scale empires in the Mediterranean basin, China, and India 600 BCE - 300 CE.
The rise of early agrarian civilizations in Mesoamerica.

WORLD HISTORY, ERA 4 (300-1000 CE): EXPANDING ZONES OF EXCHANGE AND ENCOUNTER
Imperial crises and their aftermath, 300-700 CE
Causes and consequences of the rise of Islamic civilization between the seventh and tenth centuries.
Major developments in East Asia in the era of the Tang dynasty, 600-900 CE.
The spread of agrarian populations and rise of states in Africa south of the Sahara.
The rise of centers of civilization in Mesoamerica and Andean South America in the first millennium C.

WORLD HISTORY, ERA 5 (1000-1500 CE): INTENSIFIED HEMISPHERIC INTERACTIONS
The maturing of an interregional system of communication, trade, and cultural exchange in an era of Chinese economic power and Islamic expansion.
The rise of European society and culture, 1000-1300 CE.
The rise of the Mongol empire and its importance for Afro-Eurasian peoples, 1200-1350.
The growth of states, towns, and trade in Sub-Saharan Africa between the 11th and 15th centuries.
Patterns of crisis and recovery in Afro-Eurasia, 1300-1450.
The expansion of states and civilizations in the Americas, 1000-1500.

WORLD HISTORY, ERA 6 (1450-1770): GLOBAL EXPANSION AND ENCOUNTER
How the transoceanic interlinking of all major regions of the world in the 1450-1600 period led to important global transformations.
How European society experienced political, economic, and cultural transformations in an age of global intercommunications, 1450-1750.
How large territorial empires dominated much of Eurasia between the 16th and 18th centuries.
Economic, political, and cultural interrelations among peoples of Africa, Europe, and the Americas, 1500-1750.
How Asian societies responded to the challenges of expanding European power and forces of the world economy.

WORLD HISTORY, ERA 7 (1750-1914): THE AGE OF REVOLUTIONS
The causes and consequences of political revolutions in the late 18th and 19th centuries.
The causes and consequences of the agricultural and industrial revolutions, 1700-1850.
The transformation of Eurasian societies in an era of global trade and rising European power, 1750-1850.
Patterns of nationalism, state-building, and social reform in Europe and North America, 1830-1914.
Patterns of global change in the era of Western military and economic domination, 1850-1914.

WORLD HISTORY, ERA 8: THE TWENTIETH CENTURY
The causes and global consequences of World War I.
The search for peace and stability in the years between the wars.
# Oregon

| The causes and global consequences of World War II. | F |
| How new international power relations took shape following World War II. | F |
| Promises and paradoxes of the second half of the 20th century. | F |

23. The study of geography, including the where and why of location, the physical and human-environment interactions and global connections and interdependence.

- The characteristics of maps, globes and other geographic tools and techniques
- How to orient a map with a directional symbol.
- The location of places, geographic features and patterns of the environment.
- Location of school, home, neighborhood, community, state and country.
- The characteristics and uses of spatial organization of the Earth's surface.
- The absolute and relative location of a community and places within it (e.g., parks, stores, landmarks).
- That places can be identified by similarities and differences in land use (e.g., urban, rural, residential, commercial, recreational and transportation).
- The physical and human characteristics of place.
- Physical and human characteristics of the local community (e.g., neighborhoods, schools, parks, creeks, shopping areas, airports, museums, sports stadiums, hospitals).
- Places can be defined in terms of their predominant human and physical characteristics (e.g., rural; urban; forested; desert; or by types of land forms, vegetation, water bodies, climate).
- The concept of regions.
- How a region is divided into areas (e.g., shopping areas and merchandise pick-up areas in a mall; a local neighborhood and a central business district in a community).
- That culture and experience influence people's perception of places and regions.
- Various culture groups in a community and their contributions to the development and appearance of that place and region.
- Physical processes that shape patterns on Earth's surface.
- Earth/Sun relationships and their effect on seasons, length of a day and weather and climate.
- Characteristics of ecosystems on Earth's surface.
- How elements of the environment (temperature, vegetation, precipitation) influence our lives.
- The nature, distribution, migration and movement of human population on Earth's surface.
- Short distance, daily movement patterns (e.g., how people get to school and stores; different ways people commute or travel about the city or countryside each day).
- The nature and complexity of Earth's cultural mosaics.
- How habits and styles of life are acquired from parents and other family members, friends, teachers, the media, and other sources.
- The patterns and networks of economic interdependence on Earth's surface.
- Economic land use in a community (e.g., industrial, commercial, recreational) and patterns of economic activity in an urban area (e.g., a central business district, industrial areas, malls).
- Origin-and-destination networks apparent in everyday life (e.g., relationship between long-distance phone calls, rates, and distance; relationship between distance and frequency of trips; the origins of food, clothing, and household items).
- The different modes of transportation used to move people and products (e.g., barges, airplanes, automobiles, pipelines, ships, railroads); their importance, and their advantages and disadvantages.
- The patterns of human settlement and their causes.
- The similarities and differences in population distributions within a community.
Forces of cooperation and conflict that shape the divisions of Earth's surface.  
Why people cooperate or engage in conflict to divide spaces (local groups might cooperate to use a park or a recreation field; a neighborhood might oppose the construction of a new highway).  
How Earth's physical and human systems are connected and interact.  
The functioning of a community as a system in terms of flows of people (commuting), movements of goods and traffic, and exchanges of ideas through media such as newspapers and television.  
How elements and properties of physical and human systems work together and separately (farms and interactions of soils, weather and climate, and market; clearing forests; removing rocks; domesticating plants and animals; using fertilizers; irrigation).  
The changing meaning and importance of resources.  
The role that resources play in our daily lives (resources used to generate electricity; resources used to produce automobiles, jewelry, clothing, books, medicines, wooden pencils).  
How geography is used to interpret the past.  
How areas of a community have changed over time.  

24. The study of economics, including:
   a. How economic systems function to address issues of resource allocation, income distribution, and economic stability and growth;
   b. The kinds and functions of economic institutions; and
   c. Concepts for evaluating economic actions and policies.

25. The study of comparative civics and government, including:
   a. The purposes of government and the role of law in societies;
   b. The foundation of the American political system;
   c. How the government established by the Constitution embodies the principles and purpose of American democracy;
   d. The relationship of American politics and government to world affairs; and
   e. The roles of the citizen in the American political system.

   What is government and what should it do?
   Simple description of government (describe in terms of people and groups who have the right to make, apply and enforce rules and laws for others in their school, community, and nation).
The difference between authority and power without authority and the idea that authority comes from the consent of the governed.

Why government is necessary in the classroom, school, community, state and nation.

Some of the major things governments do in their school, community, state, and nation.

The purposes of rules and laws and why they are important in their classroom, school, community, and nation.

The basic differences between limited and unlimited governments.

Reasons for limiting the powers of government.

What are the foundations of the American political system?

The essential characteristics of the United States Constitution and the Oregon constitution.

The importance of the United States Constitution and the Oregon constitution.

The importance of the fundamental values and principles of American democracy.

Some important beliefs Americans have about themselves and their government.

A description of diversity in the United States and its benefits and costs.

Conflicts that arise over diversity and ways conflicts can be prevented and managed.

The importance of Americans sharing and supporting certain values, principles, and beliefs.

The idea that conflicts sometimes arise between values and principles.

Ways people can work together to further the ideals of American democracy.

How does the government established by the Constitution embody the principles and purposes of American democracy?

The basic organization of the national government.

The major ways to limit the powers of the national government and their importance.

Examples of ways the national government protects individual rights and promotes the common good.

The most important responsibilities the Oregon constitution gives to state government.

The most important responsibilities of their local government.

The members of the legislative branches and the heads of the executive branches of their local, state, and national governments.

What is the relationship of American politics and government to world affairs?

How the world is divided into different nations which interact with one another.

Major ways nations interact one another.

Some of the important ways in which Americans and other peoples have influenced one another.

How and why events throughout the world have important effects on students’ lives and on their community, state, and nation.

What are the roles of the citizen in the American political system?

The meaning of citizenship in the United States.

How one becomes a citizen of the United States.

Why personal rights are important to the individual and to a democratic society.

Why political rights are important to the individual and to a democratic society.

Why economic rights are important to the individual and to a democratic society.

The importance of individuals assuming their personal responsibilities in order for American democracy to flourish.

The importance of individuals willingly assuming their public responsibilities in order for American democracy to flourish.

How participating in public life may help Americans attain their individual and community goals.
### Oregon

<table>
<thead>
<tr>
<th>Topic</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>The means by which citizens can influence the decisions and actions of their governments.</td>
<td>E, F3</td>
</tr>
<tr>
<td>How to evaluate and apply criteria useful in evaluating rules and laws.</td>
<td>F3</td>
</tr>
<tr>
<td>The importance of political leadership and public service in their school, community, state, and nation.</td>
<td>F3</td>
</tr>
<tr>
<td>How to explain and apply criteria useful in selecting political leaders.</td>
<td>E, F3</td>
</tr>
<tr>
<td>26. The study of core ethical values which our society shares and holds important including, but not limited to, respect, responsibility, trustworthiness, caring, honesty, justice and fairness, citizenship, and civic involvement.</td>
<td>D, E</td>
</tr>
<tr>
<td>Models of the core ethical values through literature and history.</td>
<td>F3</td>
</tr>
<tr>
<td>The importance of the core ethical values to individuals and society.</td>
<td>D, F3</td>
</tr>
<tr>
<td>Meanings of the core ethical values at the appropriate developmental level (i.e., what does it mean to be fair? What does it mean to be trustworthy?).</td>
<td>D</td>
</tr>
<tr>
<td>Introduction to values dilemmas (i.e., circumstances in which two or more “good” values come into conflict).</td>
<td>F3</td>
</tr>
<tr>
<td>Why it is sometimes difficult to practice the core ethical values (i.e., needs and desires of self vs. needs and desires of others).</td>
<td>D, F3</td>
</tr>
<tr>
<td>27. The study of one’s own cultural heritage, our nation’s heritage and the diverse cultural traditions and contributions of other peoples and nations to that heritage.</td>
<td>G3</td>
</tr>
<tr>
<td>The commonalities and differences in the ways groups, societies, and cultures address similar human needs and concerns.</td>
<td>G3</td>
</tr>
<tr>
<td>How experiences may be interpreted differently by people from diverse cultural perspectives and frames of references.</td>
<td>G3</td>
</tr>
<tr>
<td>Ways in which language, stories, folk tales, music, and artistic creation as expressions of culture influence behavior of people living in a particular culture.</td>
<td>F3, G3</td>
</tr>
<tr>
<td>Ways in which people from different cultures compare in the ways they think and deal with their physical environments and social conditions.</td>
<td>G3</td>
</tr>
<tr>
<td>Examples of the importance of cultural unity and diversity within and across groups.</td>
<td>G3</td>
</tr>
<tr>
<td>28. The study of interactions among diverse individuals, groups (e.g., ethnic, age), institutions (e.g., family, school), and systems (e.g., economic, political).</td>
<td>F3, G3</td>
</tr>
<tr>
<td>Concept of role (learned behavior patterns) in group situations (e.g., student, family member, peer play group, club member).</td>
<td>D, E</td>
</tr>
<tr>
<td>Concept of institutions (organizations having an educational, religious, or social purpose, [e.g., schools, churches, clubs, government]).</td>
<td>F3</td>
</tr>
<tr>
<td>Examples of tensions between and among individuals, groups or institutions, and how belonging to more than one group can cause tensions.</td>
<td>F3, G3</td>
</tr>
<tr>
<td>Examples of the role of institutions in furthering both continuity and change.</td>
<td>F3</td>
</tr>
<tr>
<td>Examples of group and institutional influences on people, events, and elements of culture (e.g., school calendar, laws, peer pressure).</td>
<td>F3</td>
</tr>
<tr>
<td>How groups and institutions work to meet individual needs and promote the common good and examples of where they fail to do so.</td>
<td>F3</td>
</tr>
<tr>
<td>29. SEE #10 ABOVE.</td>
<td></td>
</tr>
<tr>
<td>30. The development of speaking, listening, reading and writing in a second language (with emphasis on speaking and listening) within the appropriate cultural contexts.</td>
<td>F3</td>
</tr>
</tbody>
</table>

Throughout Stage 1 students will develop the ability to:
Greet and respond to greetings, introduce and respond to introductions (Function) in social interaction which is face-to-face (Context), using discrete, learned words, phrases and formulaic expressions (Text Type) which demonstrate awareness of culturally appropriate behavior (are effectively communicated [Accuracy in Familiar Situation]);

Engage in conversations (Function) in social interaction which is face-to-face (Context) using discrete, learned words and phrases (Text Type); and

Express likes and dislikes (Function) in social interaction which is face-to-face, lists, surveys, notes, and postcards (Context) using learned words and phrases (Text Type).

The message is generally comprehended (Accuracy in Familiar Situation).

31. The study and practice of individual physical, social, and emotional health strategies, including assessing and managing controllable health risks and safe/healthy environments.

Controllable Health Risks. The healthy student can identify, understand, assess (physical, emotional, and social strategies) and manage appropriately the following controllable health risks:

a. Tobacco;  
  c3a
b. Alcohol and other drugs;  
  c3a

c. Teen pregnancy, STD, AIDS/HIV;  
  c3a

d. Unintentional/intentional injuries;  
  d3d

e. Obesity; and  
  c4a
f. Physical inactivity.

Explain the importance of assuming responsibility for personal health habits.

Identify behaviors that are safe, risky, or harmful to self and others.

Demonstrate the ability to maintain positive health behaviors.

Demonstrate strategies to improve personal health.

Classify different advertising techniques used to impact health decisions.

Safe and Healthy Environments. The healthy student is able to create, support and be supported by safe and healthy environments.

Distinguish between safe and unhealthy environments.

Demonstrate methods of avoiding threatening situations involving other persons.

Explain how to get assistance in threatening circumstances.

Identify actions which can counter the negative effects on individuals living in abusive situations.

Demonstrate anger management and conflict resolution skills.

Identify how media seeks to influence thoughts and feelings.

Demonstrate injury prevention strategies for various contexts (e.g., auto, bike, pedestrian, water).

32. The development of lifetime wellness behaviors including physical strength, flexibility, cardiovascular endurance, and movement skills.

Lifetime Wellness. The healthy student understands the importance of living a healthy life for an entire lifetime and develops a commitment to practicing lifetime wellness.

Describe the interactions of the human body as they relate to relevant health issues.

Recognize the relationship between personal health behaviors and individual well-being.

Describe how family influences the health of individuals.

Recognize that most injuries and illnesses can be prevented.

Identify the most common health problems of children.

Identify health problems that require the help of a trusted adult.

Identify skills needed to be a responsible family member.

Demonstrate the steps to set personal health goals.
How to:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Code(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel, in different ways, in a large group without bumping into others or falling.</td>
<td>C4b</td>
</tr>
<tr>
<td>Travel, in forward and sideways directions, and change direction quickly in response to a signal.</td>
<td>C4b</td>
</tr>
<tr>
<td>Demonstrate clear contrasts between slow and fast speeds while traveling.</td>
<td>C4b</td>
</tr>
<tr>
<td>Distinguish between straight, curved, and zig-zag pathways while traveling in various ways.</td>
<td>C4b</td>
</tr>
<tr>
<td>Travel in a backward direction and change direction quickly, and safely, without falling.</td>
<td>C4b</td>
</tr>
<tr>
<td>Travel, changing speeds and directions, in response to a variety of rhythms.</td>
<td>C4b</td>
</tr>
<tr>
<td>Combine various traveling patterns in time to the music.</td>
<td>C4b</td>
</tr>
<tr>
<td>Jump and land using a combination of one- and two-foot take-offs and landings.</td>
<td>G</td>
</tr>
</tbody>
</table>

33. The exploration of individual interests, aptitudes, and abilities in relation to career development, including the establishment of educational, career, and other goals related to life roles.

Self-Knowledge
- Meaning and significance of self concept. (G2)
- How to describe personal likes and dislikes. (Fla, G2)
- How to make positive statements about self and others. (Fla, G2, G3)
- How behavior affects school and family situations. (D)
- How to identify and express personal feelings. (G1b)
- How people are unique. (G3a)

Educational and Occupational Exploration
- How academic skills can be used in the home and community. (F3)
- The importance of preparing for careers. (D, F3, G)
- How to describe the work of family members, school staff, and community members. (F3)
- How parents, relatives, adult friends, and neighbors can provide career information. (G)
- The importance of cooperation to perform a task. (G)
- Ways to meet personal needs through work. (Dld)
- How family members depend on one another, work together, and share responsibility. (no match)

Career Planning and Decision Making
- How choices are made. (F)
- The importance of planning. (F3)
- The changing life roles of men and women in work and family. (D, F, G)
- How decisions affect self and others. (B)

34. The study of (a) family relationships including how families function to meet the needs of their numbers; and (b) human development across the life span with emphasis on child development, parenting education, and aging. WORK IN PROGRESS

35. The study of individuals and families as producers and consumers of goods and services. WORK IN PROGRESS

36. The study of the relationship among individuals, families, and community environments in which they live, work, and contribute. WORK IN PROGRESS
Pennsylvania

Document Utilized

*Regulations of the State Board of Education, 22 Pa. Code Chapter 5 (July, 1993)*

**Background**

In 1991, the state board of education called for Pennsylvania to develop outcomes for what students should know and be able to do. The state has articulated 53 outcomes in nine academic areas: arts and humanities, career education, citizenship, communications (reading and writing), environmental studies, home economics, mathematics, science and technology, and wellness and fitness. The 53 outcomes are grouped into four categories: primary, intermediate, middle, and high school. The outcomes are mandatory, but each district decides which grades fall into each category. The state intends to create voluntary content standards separate from the 53 outcomes.

**Pennsylvania**

<table>
<thead>
<tr>
<th>GOALS OF QUALITY EDUCATION</th>
<th>CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Student learning outcomes describe the skills and abilities which students will be expected to demonstrate before graduating from a public school.</td>
<td>no match</td>
</tr>
<tr>
<td>1. High academic achievers.</td>
<td>D, E</td>
</tr>
<tr>
<td>2. Self-directed, lifelong learners.</td>
<td>no match</td>
</tr>
<tr>
<td>3. Responsible, involved citizens.</td>
<td>F4a</td>
</tr>
<tr>
<td>4. Collaborative, high-quality contributors to the economic and cultural life of their communities.</td>
<td>no match</td>
</tr>
<tr>
<td>5. Adaptive users of advanced technologies.</td>
<td>no match</td>
</tr>
<tr>
<td>6. Concerned steward of the global environment.</td>
<td>C</td>
</tr>
<tr>
<td>7. Healthy, continuously developing individuals.</td>
<td>A2a, A2b, D1d, E2b</td>
</tr>
<tr>
<td>8. Caring, supportive family and community members.</td>
<td>G2a, G2b</td>
</tr>
</tbody>
</table>

1. **Self-worth**
   Public schools should help students develop capabilities, talents, self understanding and a feeling of self-worth and acknowledge students for effort and achievement.

2. **Information and thinking skills**
   Public schools should help students develop the skills necessary to locate and manage information, solve problems and make decisions, including the processes of analysis, synthesis, creativity and evaluation.

3. **Learning independently and collaboratively**
   Public schools should encourage students to become independent life-long learners and to collaborate with others in developing knowledge, skills and new ideas.

4. **Adaptability to change**
   Public schools should prepare students to grow and develop in a world in which change is normal and constant.

5. **Ethical judgement**
   Public schools should teach students the importance of making ethical judgements for the common good.

6. **Honesty, responsibility and tolerance**
   Public schools should convey to students the need for honesty, integrity, individual responsibility and tolerance.

7. The quality school provides instruction throughout the curriculum so that each student may achieve the following academic goals:

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### Pennsylvania

<table>
<thead>
<tr>
<th>1. Communications</th>
<th>Each student shall become proficient in reading, composition, listening, speech, understanding, interpreting, analyzing and synthesizing information.</th>
<th>F3</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Mathematics</td>
<td>Each student shall become proficient in the use of varied mathematical process and applications to solve challenging problems and to create new ways of understanding information</td>
<td>F2, F3c</td>
</tr>
<tr>
<td>3. Science and Technology</td>
<td>Each student shall become proficient in applying the processes of analysis, synthesis and evaluation to the solution of challenging scientific problems and in the application and understanding of technology in society.</td>
<td>F3, F4</td>
</tr>
<tr>
<td>4. Environment and Ecology</td>
<td>Each student shall understand the environment and the student's ecological relationship with it in order to recognize the importance of the quality of life in a healthy and balanced environment.</td>
<td>no match</td>
</tr>
<tr>
<td>5. Citizenship</td>
<td>Each student shall understand local, State and United States history, geography, systems of government and economics and their relationship to the history, geography, systems of government and economics of other countries in the world and shall acquire and have opportunities to practice, in the school and in the community, the skills necessary for active participation in civic life.</td>
<td>A2b, E, F3</td>
</tr>
<tr>
<td>6. Arts and Humanities</td>
<td>Each student shall understand and appreciate the breadth of human accomplishment through the arts and humanities and shall have opportunities to practice creativity of thought and action and to demonstrate talent in the arts.</td>
<td>F3g</td>
</tr>
<tr>
<td>7. Career Education and Work</td>
<td>Each student shall explore varied career options and develop the skills and work habits needed to be productive, contributing member of society and the understanding that lifelong learning is necessary to maintain those behaviors, skills and attitudes.</td>
<td>no match</td>
</tr>
<tr>
<td>8. Wellness and Fitness</td>
<td>Each student shall acquire and use the knowledge and skills necessary to promote individual and family health and wellness.</td>
<td>C3</td>
</tr>
<tr>
<td>9. Home Economics</td>
<td>Each student shall understand and apply principles of money management, consumer behavior and child health to provide for personal and family needs.</td>
<td>no match</td>
</tr>
</tbody>
</table>

§ 5.202. Student Learning Outcomes

a. In designing educational programs, school districts shall provide for the attainment of the student learning outcomes under subsection (f) and any other student learning outcomes which they develop and describe in their strategic plans under § 5.203(c) (relating to strategic plans) as requirements for graduation from high school. Achieving the outcomes in this section requires students to demonstrate the acquisition and application of knowledge and appropriate actions. Achieving the outcomes does not require students to hold or express particular attitudes, values or beliefs. | no match |

b. A school district's curriculum shall be designed to provide all students with focused learning opportunities needed to attain these outcomes. | no match |

c. As required by § 5.203(c)(3), school districts shall develop outcomes to be attained by students at transition points from one organizational level to another and may develop outcomes to be attained at additional transition points. These transitional outcomes shall be designed to assure that students are making progress toward attainment of the outcomes needed to graduate from high school. The school district assessment plan under § 5.203(c)(5) shall include a description of how the transitional outcomes are measured by the district and how information from the school district assessments is used to assist students having difficulty meeting the transitional outcomes. | no match |
d. School districts shall develop standard for assessing the attainment of the outcomes under subsection (f) and any other student learning outcomes which they develop and describe in their strategic plans under § 5.203(c) for purposes of high school graduation and strategies for assisting students to attain them.

e. The student learning outcome in subsection (f) shall be attained by students in various ways and shall be assessed by school districts in various ways. Some will result from successful completion of a course; some from successful completion of a series of courses; some from independent study, community service or work experience; some from participation in extracurricular activities. Some students may meet some outcome expectations before they come to school. Exceptional students may meet outcome expectation by completion of their Individualized Education Programs under § 14.32 (relating to IEP). Some outcomes will be assessed by traditional test; some by other forms of assessment under § 5.232 (relating to school district assessment); some by teacher observation of student performance in school; some by attainment of IEP goals. Some students will need more instruction in some areas than other, and school districts are responsible for organizing programs to best accommodate the needs of their students.

(f) School district shall prepare all students to attain the following student learning outcomes.

1. Communications
   i. All students use effective research and information management skills, including location primary and secondary sources of information with traditional and emerging library technologies.
   ii. All students read and use a variety of methods to make sense of various kinds of complex texts.
   iii. All Students respond orally and in writing to information and ideas gained by reading narrative and informational texts and use the information and ideas to make decisions and solve problems.
   iv. All students write for a variety of purposes, including to narrate, inform and persuade, in all subject areas.
   v. All students analyze and make critical judgements about all forms of communication, separating fact from opinion, recognizing inconsistencies and judging the validity of evidence.
   vi. All students exchange information orally, including understanding and giving spoken instructions, asking and answering questions appropriately and promoting effective group communications.
   vii. All students listen to and understand complex oral messages and identify their purpose, structure and use.
   viii. All students compose and make oral presentations for each academic area of study that are designed to persuade, inform or describe.

2. Mathematics
   i. All students use numbers, number systems and equivalent forms (including numbers, words, objects and graphics) to represent theoretical and practical situations.
   ii. All students compute, measure and estimate to solve theoretical and practical problems, using appropriate tools, including modern technology such as calculators and computers.
   iii. All students apply the concepts of patterns, functions and relations to solve theoretical and practical problems.
   iv. All students formulate and solve problems and communicate the mathematical processes used and the reasons for using them.
   v. All students understand and apply basic concepts of algebra, geometry, probability and statistics to solve theoretical and practical problems.
<table>
<thead>
<tr>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>vi.</strong> All students evaluate, infer and draw appropriate conclusions from charts, tables and graphs, showing the relationships between data and real-world situations.</td>
</tr>
<tr>
<td><strong>vii.</strong> All students make decisions and predictions based upon the collection, organization, analysis and interpretation of statistical data and the application of probability.</td>
</tr>
</tbody>
</table>

3. **Science and Technology**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>i.</strong> All students explain how scientific principles of chemical, physical and biological phenomena have developed and relate them to real-world situations.</td>
<td>F3</td>
</tr>
<tr>
<td><strong>ii.</strong> All students demonstrate knowledge of basic concepts and principles of physical, chemical, biological and earth sciences.</td>
<td>F3</td>
</tr>
<tr>
<td><strong>iii.</strong> All students use and master materials, tools and processes of major technologies which are applied in economic and civil life.</td>
<td>F4a</td>
</tr>
<tr>
<td><strong>iv.</strong> All students explain the relationships among science, technology and society.</td>
<td>no match</td>
</tr>
<tr>
<td><strong>v.</strong> All students construct and evaluate scientific and technological systems using models to explain or predict results.</td>
<td>F2</td>
</tr>
<tr>
<td><strong>vi.</strong> All students develop and apply skills of observation, data collection, analysis, pattern recognition, prediction and scientific reasoning in designing and conducting experiments and solving technological problems.</td>
<td>F2a</td>
</tr>
<tr>
<td><strong>vii.</strong> All students evaluate advantages, disadvantages and ethical implications associated with the impact of science and technology on current and future life.</td>
<td>no match</td>
</tr>
<tr>
<td><strong>viii.</strong> All students evaluate the impact on current and future life of the development and use of varied energy forms, natural and synthetic materials, and production and processing of food and other agricultural products.</td>
<td>no match</td>
</tr>
</tbody>
</table>

4. **Environment and Ecology**

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<table>
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</thead>
<tbody>
<tr>
<td><strong>i.</strong> All students understand and describe the components of ecological systems and their functions.</td>
<td>no match</td>
</tr>
<tr>
<td><strong>ii.</strong> All students analyze the effects of social systems, behaviors and technologies on ecological systems and environmental issues.</td>
<td>no match</td>
</tr>
<tr>
<td><strong>iii.</strong> All students think critically and generate potential solutions to environment issues.</td>
<td>no match</td>
</tr>
<tr>
<td><strong>iv.</strong> All students evaluate the implications of finite natural resources and the need for conservation, sustainable agricultural development and stewardship of the environment.</td>
<td>no match</td>
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</table>

5. **Citizenship**

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<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td><strong>i.</strong> All students demonstrate an understanding of major events, cultures, groups and individual in the historical development of Pennsylvania, the United States and other nations, and describe themes and patterns of historical development.</td>
<td>F3</td>
</tr>
<tr>
<td><strong>ii.</strong> All students demonstrate understanding of themes and patterns of geography, know the location of major bodies of water, land masses and nations, and describe the relationships between geography and historical, economic and cultural development.</td>
<td>F3</td>
</tr>
<tr>
<td><strong>iii.</strong> All students describe the development and operations of economic, political, legal and governmental systems in the United States, assess their own relationships to those systems and compare them to those in other nations.</td>
<td>F3</td>
</tr>
<tr>
<td><strong>iv.</strong> All students examine and evaluate problems facing citizens in their communities, State, nation and world by incorporating concepts and methods of inquiry of the various social sciences.</td>
<td>F2, F3</td>
</tr>
<tr>
<td><strong>v.</strong> All students develop and defend a position on current issues confronting the United States and other nations, conducting research, analyzing alternatives, organizing evidence and arguments, and making oral presentation.</td>
<td>F2, F3</td>
</tr>
<tr>
<td><strong>vi.</strong> All students explain basic economic concepts and the development and operation of economic systems in the United States and other nations, and make informed decisions about economic issues.</td>
<td>F3</td>
</tr>
<tr>
<td><strong>vii.</strong> All students demonstrate their skills of communicating, negotiating and cooperating with others.</td>
<td>F1a, G4b</td>
</tr>
</tbody>
</table>
## Pennsylvania

| viii. | All students demonstrate that they can work effectively with others. |
| ix. | All students demonstrate and understanding of the history and nature of prejudice and relate their knowledge to current issues facing communities, the United States and other nations. |

<table>
<thead>
<tr>
<th>6. Arts and Humanities</th>
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<tbody>
<tr>
<td>i.</td>
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<td>ii.</td>
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<td>iii.</td>
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<td>iv.</td>
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<tr>
<th>7. Career Education and Work</th>
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<tbody>
<tr>
<td>i.</td>
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<td>iii.</td>
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<td>iv.</td>
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<th>8. Wellness and Fitness</th>
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<td>v.</td>
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<td>vi.</td>
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<tr>
<th>9. Home Economics</th>
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<td>ii.</td>
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<tr>
<th>NCEOCODE</th>
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<tbody>
<tr>
<td>D1d, G4b</td>
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<td>F3</td>
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<td>F3g</td>
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<td>D1c</td>
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<tr>
<td>C1b</td>
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<tr>
<td>C3, C4</td>
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<tr>
<td>C3a</td>
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<tr>
<td>C4a, C4b</td>
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<tr>
<td>G3b</td>
</tr>
<tr>
<td>no match</td>
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<tr>
<td>C3</td>
</tr>
</tbody>
</table>

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South Carolina

Documents Utilized

South Carolina Foreign Languages Framework (November, 1993)
South Carolina Visual and Performing Arts Framework (November, 1993)
South Carolina Mathematics Framework (November, 1993)

Note: Other frameworks still under development include science, English/language, arts, health and safety, social studies, and physical education.

Background

In November of 1993, the State Board of Education adopted the first three voluntary frameworks in foreign languages, visual and performing arts, and mathematics. The frameworks present essential components necessary for improving education by setting out broad, circular themes, topics, and objectives in multi-year blocks. They include clear expectations for all students and programs. Each framework uses different benchmarks. For example, in math, the benchmarks begin with grades K-3. In foreign languages, performance objectives are articulated at the elementary, middle, and high school levels. The state is in the process of revising its achievement assessments and graduation requirements to incorporate its standards for English, math, and science.

South Carolina

VISUAL AND PERFORMING ARTS FRAMEWORK

DANCE EDUCATION

COMPONENT ONE: AESTHETIC PERCEPTION--MULTISENSORY INTEGRATION/TECHNIQUE AND SKILLS

Goals
To develop an awareness of the body as an instrument of expression.
To increase movement/dance vocabulary.
To promote functional and artistic use of the movement/dance elements: body, space, time, dynamics/effort.

Overview
Aesthetic perception encompasses the range of experiences from awareness and exploration of movement potential to the analysis, selection, and application of the Space, Time, Dynamics/Effort factors to create skilled and refined movement. These successful experiences are the foundation for a sensitive dance participant/observer and enhance self esteem.

Objectives
Students will be able to:
Demonstrate an understanding of the key elements of movement/dance vocabulary.
Demonstrate an increased skill level in the use of body in space, in time, and with dynamic fluency.
Demonstrate increasing levels of coordination, balance, stamina, elevation, and technique appropriate to age and development.
Demonstrate kinesthetic awareness of the body in motion and in stillness.
Demonstrate knowledge and use of anatomically and kinesiologically sound movement principles for safety, efficiency, and longevity as a dancer.

GRADES K-2 SEQUENTIAL OVERVIEW
Students in grades K-2 are enriched in aesthetic perception through kinetic, visual, and tactile experiences designed to explore movement in a variety of problems from awareness to consciously gaining control of one's movement.
South Carolina

<table>
<thead>
<tr>
<th>CONTENT/SKILLS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BODY AS AN INSTRUMENT</strong></td>
<td></td>
</tr>
<tr>
<td>Body Awareness, Body Articulation</td>
<td>Explore, identify, and move with variety. Learn important safety facts about alignment and moving the body.</td>
</tr>
<tr>
<td>Body Actions: Axial, Locomotor</td>
<td>Demonstrate use of bending, stretching, and other axial movements; travel using simple locomotor steps to include walk, run, hop, jump, and leap.</td>
</tr>
<tr>
<td>Body Designs, Design Relationships</td>
<td>Explore making curved, linear, angular body designs.</td>
</tr>
<tr>
<td>Moving In Control</td>
<td>Move in control, using speed, weight transfer, balance, motor coordination.</td>
</tr>
<tr>
<td>Building Self Esteem</td>
<td>Successfully solve movement asks and feel confident about being a dancer.</td>
</tr>
<tr>
<td><strong>SPACE</strong></td>
<td></td>
</tr>
<tr>
<td>General/Personal, Range</td>
<td>Recognize and respect the differences between general and personal space while exploring range of movement possibilities.</td>
</tr>
<tr>
<td>Level, Direction, Pathway</td>
<td>Explore and distinguish among levels (low, middle, high), directions (forward, backward), and pathways (curved, straight, zigzag) while moving.</td>
</tr>
<tr>
<td>Body Design</td>
<td>Sustain concentration on the selected movement sequence or problem.</td>
</tr>
<tr>
<td>Focus</td>
<td>Sustain concentration on the selected movement sequence or problem.</td>
</tr>
<tr>
<td><strong>TIME</strong></td>
<td></td>
</tr>
<tr>
<td>Meter, Tempo</td>
<td>Recognize and move accurately to downbeat, duple, and triple meter, and respond accurately to the concept of tempo.</td>
</tr>
<tr>
<td>Form, Phrase</td>
<td>Experience phrasing in dance and music; recognize the basic concepts of form (beginning, ending, repetition) in dance phrase and in music.</td>
</tr>
<tr>
<td><strong>DYNAMICS/EFFORT</strong></td>
<td></td>
</tr>
<tr>
<td>Laban Effort Actions, Qualities</td>
<td>Recognize that movement done with different kinds of effort results in differences and contrasts in movement quality (e.g., strong, light, swing).</td>
</tr>
<tr>
<td>Flow, Duration</td>
<td>Experience tight and loose movement, and long and short movement for kinesthetic feeling and cognitive understanding.</td>
</tr>
<tr>
<td>Motivation</td>
<td>Explore the motivation of movement of a body part (e.g., arm, leg) and for the total body.</td>
</tr>
</tbody>
</table>

**COMPONENT TWO: CREATIVE EXPRESSION--PROCESS AND PRODUCT**

**Goals**
- To express ideas, feelings, and concepts in dance through the creative process.
- To apply choreographic tools and composition principles in evaluating dance works of self and others.
South Carolina

Overview
Creative expression includes gaining skill in using the tools as the creator of dance, recognizing and experiencing the necessity and the joy of exploration and experimentation as prerequisite to composition, and the process of selecting the significant form, structure, and aesthetic factors as a part of refining the product.

Objectives
Communicate personal feelings and ideas through movement with originality, individual style, and clarity.
Experience the creative process in dance through experimentation, improvisation, selection and synthesis.
Use abstract concepts and environmental and sensory stimuli as sources for composing dances.
Select and organize movement motifs, phrases, and dance compositions for others in informal and performance settings.
Apply choreographic criteria to assess works in progress and finished pieces by self and others.

GRADES K-2 SEQUENTIAL OVERVIEW
Dance experiences in grades K-2 focus on awareness of varied stimuli, exploration of movement response and range, and recognition of simple dance forms.

CONTENT/SKILLS

PERSON AND THE PROCESS
Exploration, Experimentation
Explore movement in response to stimuli; explore the elements of dance experience and process.
Composition: Select, Formulate, Clarify, Refine
Clearly execute one's own movement patterns so they may be shared with others.
Performance: Classwork/Studies, Works In Progress, Finished Piece
Show creative movement and dance patterns proudly to peers.

PRODUCT
Form And Structure: Phrase, Study, Dance, Solo, Duet, Group
Show awareness of the basic structure of beginning-middle-ending of personal work and that of others.
Choreographic Criteria: Self Evaluation
Increase awareness of general/personal space and improve ability to move safely (control) and freely within it.
Peer/Other Evaluation
None

COMPONENT THREE: DANCE HERITAGE--HISTORICAL AND CULTURAL

Goals
To acquire knowledge of the historical and cultural significance of dance and of the universality of the dance phenomenon, and to develop an awareness of the significance of dance for society.

Overview
Through participation in a variety of dance styles and through study of print and other visual media, students comprehend universal themes, cultural roots and differences in style, significance of dance in society, and the means for preservation of dance.

Objectives
Understand that dance reflects, records, and shapes history and plays a role in every culture as a universal language.
Become aware that dance takes many forms, is a valid form of expression for males and females, and can present and communicate ideas in many different ways.
Demonstrate cultural and historical similarities and differences among dance forms.
South Carolina

Demonstrate comprehension of a variety of dance styles and proficiency in executing more than one style.
Recognize the role of the dancer in society as an expressive artist, entertain-er, and creator of artistic values and accomplishments of civilization.
Identify important dance innovators in past and contemporary cultures.
Identify careers related to dance in contemporary society.

GRADES K-2 SEQUENTIAL OVERVIEW
Students in grades K-2 gain awareness and recognize different dance styles, different purposes of dance, and different ways to preserve dance.

CONTENT/SKILLS

SPECTRUM OF ROOTS AND STYLES
Universal Themes
Recognize that dances are different from each other, are about different things, and that dances are done to express special times and for special events.
Styles
Discover the variety of dance styles (e.g., ballet, jazz, tap, modern, creative).
Other Considerations
Recognize that dances are planned that use circles, lines, and free formations.

SIGNIFICANCE OF DANCE IN SOCIETY
Role Of Creator-Performer
Realize that the role of the dance creator and the performer are of equal importance.
Preservation Of Dance In Society
Recognize that there are different ways to learn about old and new dances.

DRAMA EDUCATION

COMPONENT ONE: AESTHETIC PERCEPTION
Goal
To develop understanding and appreciation of theater concepts and the dramatic process.
Objectives
Develop internal and external resources within the theater process.
Understand dramatic concepts through artistic collaboration.

GRADES K-2
Identify the senses and explore sensory experiences in immediate surroundings; imitate gestures and sounds from different environments and emotions; identify and discuss feelings shared in dramatic play; recognize and understand motivation for different emotions.
Understand Use Of Creativity In Playmaking And Communication
Store ideas, feelings, and concepts in the memory and express those through dramatic play and storytelling;
Imitate roles and experiences in life;
Respond to ideas, feelings, and concepts imitated by others;
Use action and props to nonverbally portray objects, environments, and characters;
Impersonate behavior patterns of people in dramatic activities.
Develop Understanding Of Movement In The Dram Process
Respond to verbal signals to move freely to varying rhythms and sounds;
Change movement direction, level, shape, size and speed;
Use action to respond to sounds, music, images, and poetry;
Define space, characters, and feelings through movement;
Develop body control in following directions;
South Carolina

Explore action to express thoughts, feelings, and characters.
Explore Use Of Language, And Recognize And Develop Voice For Expression, Thought, And Meaning

- Imitate sounds and sound combinations to express mood, feeling and emotion;
- Listen and respond to stories and dramatic activities;
- Explore sound and speech for objects and characters;
- Imitate voices and language of different people;
- Use discussion freely to share ideas and reactions to dramatic activities;
- Understand use of verbal and nonverbal communication.

Expand Interpersonal And Communications Skills, And Heighten Understanding Of Self-Concept

- Understand responsibility of body and voice in dramatic play and the value of cooperative participation;
- Demonstrate respect for others' ideas and feelings;
- Understand how individuals contribute in different ways;
- Explore ways to share ideas effectively toward dramatic play;
- Understand personal roles with interaction, listening, and responding.

COMPONENT TWO: CREATIVE EXPRESSION

Goal To develop and expand communication skills, collaborative problem-solving, and modes for self expression through the drama process.

Objectives Students will be able to:

- Expand verbal and non-verbal communication for expressions.
- Develop personal involvement and response through artistic collaboration.
- Develop creative applications to interpret and express dramatic concepts.

GRADES K-2 CONTENT/SKILLS

Develop And Expand Interpersonal Skills And Collaboration Skills

- Show thoughts and feelings through conversations with others in a variety of settings;
- Understand oral messages received;
- Gain attention in acceptable ways;
- Recognize that others' needs are different;
- Feel empathy and give encouragement to others;
- Use impersonation in drama activities;
- Experience both leader and follower roles;
- Give attention to and suggestions for performances and scenes;
- Share ideas freely in planning and discussion.

Develop And Expand Skills For Individual And Group Problem-Solving

- Recognize problems in stories, scenes, and character situations;
- Identify how characters attempt to solve and resolve problems;
- Discuss alternatives to resolutions and compare with real life situations;
- Reflect on consequences to character's actions and decisions;
- Enact character conflicts and define resolutions to problems.

Explore And Expand Dramatic Concepts Through Improvisation

- Use movement and nonverbal action to identify who, what, and where circumstances and consequences of actions;
- Demonstrate transformation of objects, self, and others;
- Adapt scenes to define beginning, middle, end;
- Respond to creative stimuli such as narrative, music, lights;
- Improvise action and dialogue in group scenes;
- Explore variations to an idea; develop scenes from stories and life experiences.

Explore And Expand Methods And Techniques For Characterization

- Assume roles through imitation;
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Experiment with sound and movement to suggest character;
Use simple props and costumes to define character roles;
Discuss reasons for various characters' actions;
Explore ways to demonstrate character emotions, moods, abilities and physical characteristics;
Explore and perform different character traits of humans, animals, and objects.

Apply Dramatic Concepts To Play Production And Playwriting
Create brief stories, and tell and enact them;
Expand concepts of beginning, middle, end with conflict and resolutions;
Determine main focus and theme of characters and scenes;
Demonstrate observations of people, places, and things;
Imitate life experiences and imaginary scenes in dramatic play;
Dramatize various conflicts among characters and discuss and perform solutions.

Understand The Role Of Directing In The Theater Process
Listen and respond to directions and side-coaching in dramatic activities;
Adapt to suggestions given to group work;
Encourage teamwork with group members;
Share movement, space, and dialogue responsibility.

Understand And Apply Technical Elements To The Theater Process
Distinguish between playing space and audience space;
Use objects for props and costumes;
Expand observations of sounds, environments, texture, color, space, body movement, and facial expressions.

COMPONENT THREE: THEATER HERITAGE--HISTORICAL AND CULTURAL

Goal To relate and understand the relevance, implications, and consequences of theatre to its social, cultural, and historical context.

Objectives Understand the role of theatre in different cultures and how theatre reflects, records, and shapes the history of different cultures.
Become aware of and understand different dramatic and literary themes, genres, and theatre conventions among different cultures and time periods.
Appreciate different aesthetic values among individuals and cultures.
Understand how theatre imitates and exaggerates life, and understand similarities and differences between theatre and life.

GRADES K-2 CONTENT/SKILLS
Develop Awareness Of Multicultural Concepts, Dramatic And Literary Genres, And Theater Conventions

Use dramatic play to explore a variety of societal roles;
Appreciate differences among individuals and among different societies;
Understand that individuals express differing ideas and opinions;
Engage in dramatic activities in which characters from diverse cultures are prominent;
Use cultural artifacts in dramatic play; discuss ways in which all characters contribute to making a whole;
Demonstrate appreciation for differences in role characteristics.

Compare And Contrast Theater With Life Situations
Play out and discuss real life situations and fantasy situations;
Differentiate between life and fantasy;
Compare dramatic situations with personal and observed experiences;
Participate with others in creative play that imitates home and school life;
Invent scenes through creative play that express creative ideas, actions, and characters;
**South Carolina**

Discuss observations of characters and actions portrayed.

Understand Roles And Careers For Theater
- Use role playing to develop awareness of a variety of social roles, occupations, and behaviors;
- Enact roles of family, school, and community members;
- Demonstrate positive attitudes toward important role of work in society;
- Recognize self in relation to home, community, and world of work.

**COMPONENT FOUR: AESTHETIC VALUING**

**Goal**
To develop skills and information to form individual aesthetic judgements in the informal drama process and for formal theater presentations.

**Objectives**
- Respond to the collaborative process with informed, responsible, and cooperative opinions and judgements.
- Evaluate formal theater experiences with an understanding of dramatic concepts and theater conventions.
- Utilize aesthetic judgements to develop, analyze, and improve all aspects of the drama process.

**GRADES K-2 CONTENT/SKILLS**

**Understand And Analyze Dramatic Elements**
- Explore roles and environments in dramatic activities;
- Listen and respond to stories, their characters, and actions;
- Identify subjects of stories;
- Use pictures, simple props, and costumes to define setting and character and feeling;
- Participate in dramatic activities and discuss scenes performed;
- Tell and re-tell stories with beginning, middle, and end;
- Recognize central ideas of scenes portrayed;
- Discuss how dialogue is used to express ideas and feelings;
- Express needs and differences between performance and audience spaces and responsibilities;
- Discuss and encourage to collaborative nature of drama activities.

**Respond To And Interpret Diverse Theatrical Experiences**
- Express physically and verbally what is noticed about drama activities and theater events;
- Recognize that the actor is different from the character portrayed;
- Discuss the needs in transforming a space into a place for performance;
- Identify characters most admired and most disliked;
- Give reasons for choices characters make in performance;
- Express emotions evoked by performance;
- Describe appearance, action, and purpose of characters seen and portrayed;
- Give suggestions for alternatives in the action viewed and played;
- Identify the most exciting and meaningful elements of scenes viewed and performed.

**Understand And Explore The Relationship Between Theater And Other Art Forms**
- Discuss how sensory stimuli is basic to all art forms;
- Explore manipulation of tools, media, and techniques required to form art works;
- Describe feelings aroused by attending to a variety of art forms;
- Discuss similarities and differences among the art forms;
- Explore other art forms used to motivate and comment upon dramatic activities;
- Describe emotions evoked and ideas expressed in dance, film, literature, music, theater, architecture, and visual art;
- Identify symbols used in all art forms.
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MUSIC EDUCATION

COMPONENT ONE: AESTHETIC PERCEPTION--CONCEPT DEVELOPMENT

**Goals**
- To develop sensitivity to the expressive qualities of music.
- To increase aural awareness.
- To encourage musical responsiveness, involvement, and discrimination.
- To promote understanding of the nature and structure of music.

**Objectives**
- Demonstrate an understanding of how sound is produced and modified.
- Demonstrate an understanding of the elements of music.
- Demonstrate an understanding of the structure and form of music.
- Demonstrate understanding that will lead to the effective use of written notation.

GRADERS K-2 SEQUENTIAL OVERVIEW

Students in grades K-2 experience a wide variety of sound sources, recorded music, and live performances. Students talk about their experiences.

**CONTENT/SKILLS**

<table>
<thead>
<tr>
<th>Sound Generations</th>
<th>Experience sounds from a variety of sources.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sound Modifications</td>
<td>Experiences various methods of changing sounds.</td>
</tr>
<tr>
<td><strong>Pitch</strong></td>
<td>Discriminate between high and low; identify pitch direction with body movements.</td>
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<tr>
<td></td>
<td>Match pitches in vocal range. Locate high/low sounds on pitched instruments.</td>
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<td></td>
<td>Identify melodic direction as up, down, or repeat.</td>
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<td></td>
<td>Recognize contrast of major and minor tonalities.</td>
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<tr>
<td><strong>Rhythm</strong></td>
<td>Recognize steady beat/no beat.</td>
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<td></td>
<td>Respond to accents and changing meters.</td>
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<td>Determine if music moves in twos or threes.</td>
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<td>Identify repeated rhythm patterns.</td>
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<td>Distinguish between steady beat and melodic rhythm.</td>
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<td></td>
<td>Perceive differences in even and uneven, long and short rhythmic durations.</td>
</tr>
<tr>
<td><strong>Harmony/Texture</strong></td>
<td>Recognize the difference in melody alone and melody with accompaniment.</td>
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<tr>
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<td>Recognize a round.</td>
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<td>Recognize chord changes in an accompaniment.</td>
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<td></td>
<td>Recognize thick/thin texture.</td>
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<tr>
<td><strong>Form</strong></td>
<td>Recognize musical phrases and phrase endings.</td>
</tr>
<tr>
<td></td>
<td>Show awareness of simple cadences.</td>
</tr>
<tr>
<td></td>
<td>Recognize introduction.</td>
</tr>
<tr>
<td></td>
<td>Recognize and identify sections of music as same/different.</td>
</tr>
<tr>
<td><strong>Tempo</strong></td>
<td>Identify speed of music as fast/slow, getting faster/slower.</td>
</tr>
<tr>
<td></td>
<td>Describe tempo in own words.</td>
</tr>
<tr>
<td><strong>Dynamics</strong></td>
<td>Describe music's volume level in own words.</td>
</tr>
<tr>
<td><strong>Timbre</strong></td>
<td>Identify the vocal sounds of children and adults.</td>
</tr>
<tr>
<td></td>
<td>Differentiate between solo and group singing.</td>
</tr>
<tr>
<td></td>
<td>Recognize and identify folk instruments, classroom instruments, and selected orchestral instruments.</td>
</tr>
</tbody>
</table>

168
Group instruments by sound and sight.
Distinguish between electronic sounds and traditional instrument sounds.

**COMPONENT TWO: CREATIVE EXPRESSION--SKILLS DEVELOPMENT**

**Goals**
- To become sensitive to the expressive qualities of musical sounds.
- To develop musical responsiveness, involvement, and discrimination.
- To develop skills necessary to become capable and intelligent performers, creators, and consumers of music.

**Objectives**
- Listen to music attentively and respond appropriately.
- Perform music using a variety of sound sources.
- Communicate musical ideas effectively through the use of notation.
- Demonstrate ability to develop and communicate original musical ideas.

**GRADES K-2 SEQUENTIAL OVERVIEW**
Musical expression requires development of technical skills. During grades K-2, students become involved in experiences that develop an awareness of singing, playing, creating, moving, and listening.

**CONTENT/SKILLS**

**Singing**
- Differentiate between singing/speaking voice.
- Sing simple rounds, descants, and ostinati patterns in limited range with accompaniment.

**Playing**
- Play simple rhythm instrument with steady beat.
- Play simple melodies by number notation.

**Movement**
- Recognize that movement involves use of space, use of energy, and use of time
- Walk, run, jump, clap, etc., to music freely and as directed.
- Demonstrate pulse of music with movement.

**Reading and Writing Music**
- Recognize the relationship between the musical score and the sound produced.
- Create symbols to notate musical sounds.

**Creating**
- Create simple melodies often while at play.
- Develop an "answer" phrase by singing a response to a musical "question."
- Create sound patterns with the body, the voice, or with instruments.
- Create an original melody for existing lyrics.
- Plan and arrange a short series of sounds to express an ideas.
- Recognize that music is a life vocation and that musicians work like other occupations.

**Listening**
- Listen attentively to a selected repertoire of music.
- Use musical terms and concepts to express thoughts about music.
- Practice audience and performance etiquette.

**COMPONENT THREE: MUSICAL HERITAGE--HISTORICAL AND CULTURAL**

**Goal**
- To develop awareness and demonstrate knowledge of the styles, idioms, performance media, and purposes of music that are part of our multicultural heritage.

**Objectives**
- Identify and become familiar with their own musical heritage.
- Identify some of the expressive elements in the music of different cultures and ethnic groups.
Describe some of the social and historical situations that have influenced the composition, style, selection, and performance of music.

GRADES K-2 SEQUENTIAL OVERVIEW
Students in grades K-2 become aware that music reflects many cultural and ethnic backgrounds, takes many forms, has a place in history, and reflected personally in their background.

CONTENT/SKILLS

Personal Heritage
Become aware that music is a part of and a reflection of many cultures and ethnic groups.

Musical Heritage
Recognize that music comes from different places and that different cultures use musical elements in distinct ways.

Social And Historical Heritage
Become aware of purposes of music.
Become familiar with well known compositions for voice, orchestra, solo instruments, and ensembles.
Listen to music of both "classical" and "modern" styles.
Become acquainted with compositions by American composers.
Recognize that music can belong to a different time.
Be aware of the contrasting musical sounds of "classical" and "popular" music.
Begin to demonstrate an awareness of musical qualities by describing music.
Develop some familiarity with small forms such as songs, games, and marches.

COMPONENT FOUR: AESTHETIC VALUING--APPLICATION OF KNOWLEDGE AND SKILLS

Goal To provide a sound basis of musical experiences that can be used in making intelligent judgements of musical value.

Objectives Demonstrate an understanding of the value and role of music in the lives of individuals and cultures.
Demonstrate an understanding of how the purpose and function of music in a particular situation have influenced compositions, selections, and performances.
Demonstrate an understanding of the ways that the elements of music have been combined to produce characteristic styles and forms.

GRADES K-2 SEQUENTIAL OVERVIEW
As students in grades K-2 expand their musical knowledge, they begin to make choices from a variety of aesthetic options. Classroom experiences provide the basis for making informed judgements.

CONTENT/SKILLS

Cultural Background
Recognize that music is a worldwide art.

Judgement
Begin to demonstrate an awareness of musical quality by describing sound.

Function Of Music
Become aware that music is a part of celebrations, ceremonies, and many other special occasions.

Music Structure and Elements
Become aware that the elements of music can be used to describe music and that music may be classified by its structure.
### SOUTH CAROLINA

**Valuing**
- Become aware that music is a part of everyday life.
- Respect music and musicians.
- Enjoy singing, moving, and playing instruments alone and with others.

### VISUAL ARTS EDUCATION

**COMPONENT ONE: AESTHETIC PERCEPTION--VISUAL AND TACTILE**

<table>
<thead>
<tr>
<th>Goal</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>To develop and expand aesthetic perception.</td>
<td>Increase aesthetic awareness of visual and tactile qualities in works of art, nature, events and objects within the total environment.</td>
</tr>
<tr>
<td>See the world directly and metaphorically perceiving the physical world in terms of visual and tactile qualities and symbols.</td>
<td></td>
</tr>
</tbody>
</table>

**GRADES K-2 SEQUENTIAL OVERVIEW**

In order to develop aesthetic perception, students need consistent instructional opportunities to examine a wide variety of forms that are natural and of human origin. As they interact with these forms, students reflect upon and talk about their observations and feelings, thereby becoming more perceptive of aesthetic qualities. Through these encounters, the range and the amount of aesthetic responses are increased and enriched.

**CONTENT/SKILLS**

- **Analyze Design Elements**
  - Describe works of art, nature and other objects within the total environment.
- **Recognize Use of Design Elements**
  - Describe some ways pictures, objects, and the environment may be organized.
- **Recognize Art Media and Processes**
  - Identify media (paint, clay, wood, metal, stone) used in creating works of art and other forms.
- **Recognize Artistic Mood**
  - Describe how a work of art makes you feel.
- **Describe Aesthetic Characteristics**
  - Describe design elements in artworks, nature, and the environment.
- **Discriminate Artistic Styles**
  - Look at two artworks of similar style or media and recognize that the two works are not identical.
- **Analyze Aesthetic Similarities and Differences**
  - Look at two artworks of the same subject and discuss general similarities and differences.
- **Recognize Artistic Characteristics**
  - Look at art reproductions and original artworks and discuss similarities and differences.
- **Recognize Aesthetic Characteristics**
  - Describe similarities and differences in pictures of two different environments.

**COMPONENT TWO: CREATIVE EXPRESSION--ARTISTIC KNOWLEDGE SKILLS**

<table>
<thead>
<tr>
<th>Goal</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>To develop and expand visual arts knowledge and skills in order to express ideas creatively.</td>
<td>Acquire artistic skills to express and communicate responses to experiences.</td>
</tr>
<tr>
<td></td>
<td>Recognize the importance of personal experiences and respect the originality in their own visual expressions and in the artwork of others.</td>
</tr>
</tbody>
</table>
Develop manipulative and organizational skills in using art media effectively to translate ideas, feelings, and concepts.

GRADES K-2 SEQUENTIAL OVERVIEW
Throughout grades K-2, students engage in drawing, painting, designing, sculpting, constructing, printmaking, and crafts. These activities involve the process of selecting, arranging, and decision-making. Students need a variety of experiences with art media.

CONTENT/SKILLS
Use Artistic Skills
Use drawing and painting techniques to depict ideas, feelings, and moods.

Apply Design Elements And Principles
Explore design principles by organizing paintings and drawings to demonstrate balance, repetition, and dominance.

Express Three-Dimensional Qualities
Explore modeling techniques by constructing forms using additive and subtractive methods.

Create In Print Media
Explore printmaking techniques using finger painting (mono), built-up (glue), or carved (styrofoam) surfaces to make impressions on another surface.

Create In Craft Media
Explore crafts processes such as weaving, modeling, and constructing.

Create In The Graphic Arts
Explore the use of symbols and signs to communicate ideas and feelings.

Create In The Photographic Medium
Use photographic processes (photograms) to create interesting designs.

Utilize Environmental Design
Explore the relationships of objects and space by arranging objects (blocks) in space.

Recognize Career Opportunities
Understand that careers in the visual arts exist and that artists use knowledge to create works of art objects used in everyday living.

COMPONENT THREE: VISUAL ARTS HERITAGE--HISTORICAL AND CULTURAL

Goal To acquire knowledge of historical and cultural developments which occur as a result of varying needs and aesthetic points of view.

Objectives Study a variety of artworks and accomplishments of contemporary, historic, and prehistoric cultures.
Understand that art reflects, records, and shapes history and plays a role in every culture.
Gain an understanding of their creative abilities and their heritage within the context of a comprehensive world view.
Clarify their own aesthetic values and learn to appreciate differences in the aesthetic values of others.

GRADES K-2 SEQUENTIAL OVERVIEW
Students in grades K-2 learn about art heritage in terms of contemporary times and places. Learning about artists, their contributions, and ways of communicating cultural values and beliefs of people through the visual arts are essential areas for study.
## CONTENT/SKILLS

<table>
<thead>
<tr>
<th>Skill</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognize Varying Cultural Themes</td>
<td>F3g</td>
</tr>
<tr>
<td>Analyze the Creative Process</td>
<td>F3g</td>
</tr>
<tr>
<td>Recognize Varying Cultural Styles</td>
<td>F3g</td>
</tr>
<tr>
<td>Sort artworks of the same style from a larger group representing a variety of styles.</td>
<td>F3g</td>
</tr>
<tr>
<td>Recognize the Artist's Role</td>
<td>F3g</td>
</tr>
<tr>
<td>Recognize Varying Cultural Styles</td>
<td>F3g</td>
</tr>
<tr>
<td>Recognize the Function of Visual Arts in a Community</td>
<td>F3g</td>
</tr>
<tr>
<td>Recognize Visual Arts from World Cultures</td>
<td>F3g</td>
</tr>
</tbody>
</table>

### COMPONENT FOUR: AESTHETIC VALUING--ANALYSIS, INTERPRETATION, AND JUDGEMENT

#### Goal
To develop a base for making informed aesthetic judgements.

#### Objectives
- Make informed responses to works of art, nature, and other objects within the total environment by using objective criteria for analysis, interpretation, and judgement.
- Derive meaning and value from experiences by making and justifying judgements about aesthetic qualities in works of art and other objects within the total environment.
- Use analysis, interpretation, and judgement about visual relationships based on learned aesthetic values to improve art production.

### GRADES K-2 SEQUENTIAL OVERVIEW
Aesthetic perception involves learning to see in the manner of the artist, through direct interactions with the environment, popular and serious works of art, and objects used for daily living.

Students in grades K-2 develop aesthetic perceptions by learning to use such thinking skills as observation, discrimination, comparison, contrast, and creativity. Classroom instruction in these early aesthetic interactions provides a base for making informed judgements.

#### CONTENT/SKILLS

<table>
<thead>
<tr>
<th>Skill</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyze Design Elements</td>
<td>F3g</td>
</tr>
<tr>
<td>Recognize Use of Design of Elements</td>
<td>F3g</td>
</tr>
<tr>
<td>Recognize Art Media and Processes</td>
<td>F3g</td>
</tr>
<tr>
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</tr>
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</tr>
<tr>
<td>Discriminate Artistic Styles</td>
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Analyze Aesthetic Similarities and Differences
Look at two artworks of the same subject and discuss general similarities and differences.

Recognize Artistic Characteristics
Look at art reproductions and original artworks and discuss similarities and differences.

Recognize Aesthetic Characteristics
Describe similarities and differences in pictures of two different environments.

FOREIGN LANGUAGES FRAMEWORK

PERFORMANCE OBJECTIVES

ELEMENTARY SCHOOL

In the beginning of a sequential elementary program, focus should be on listening and speaking skills. Reading and writing skills will develop later as students become more proficient in reading and writing in their native language. The following standards are designed to be compatible with standards on the secondary level so a sequential program can be achieved and are based on the assumption that students receive foreign language instruction three to five days a week.

Listening tasks--The student will be able to:
1. carry out simple commands.
2. respond to questions based on narratives, dialogues or announcements, to be presented either electronically or orally by the teacher.
3. identify and categorize familiar vocabulary items.
4. sequence events based on an oral narrative.
5. draw a picture based on an oral description, narration or command.

Speaking tasks--The student will be able to:
1. answer personal questions
2. role-play form a prepared dialogue
3. respond appropriately in face-to-face conversations
4. describe a picture or object.
5. give a command suggested by a picture
6. relay information to another student
7. describe self or family members
8. use appropriate courtesy phrases
9. express likes, dislikes, preferences

Reading tasks--The student will be able to:
1. scan text for specific information
2. locate specific information in text types, such as menus, newspaper articles, TV schedules, etc.
3. match labels with pictures
4. sequence events based on a reading passage
5. predict the conclusion of a story
6. make checklists of related words in a reading passage

Writing tasks--The student will be able to:
1. copy words and sentences written in foreign language
2. label pictures or objects
3. list and categorize familiar vocabulary
4. write familiar commands
Cultural tasks--The student will be able to:

1. recognize similarities and differences in cultural customs, such as celebrations of holidays
2. recognize and name typical foods
3. sing songs and recite rhymes
4. name and locate countries and major geographical features, such as rivers, mountains and oceans
5. identify flags, landmarks, monuments and major historical figures (care should be taken to avoid stereotypical portrayals when presenting cultural material)

MATHEMATICS FRAMEWORK

APPENDIX A: STANDARDS

**STRAND** NUMBER AND NUMERATION SYSTEM, GRADES K-3
Students will participate in problem-solving activities through group and individual investigations so that they can:
- establish a strong sense of number by exploring concepts such as counting, grouping, place value (other bases as well as base ten), and estimating;
- develop concepts of fractions, mixed numbers, and decimals;
- use models to relate fractions to decimals and to find equivalent fractions;
- communicate number relationships by exploring the comparing and ordering of numbers, fractions, mixed numbers, and decimals; and
- relate the use and understanding of numeration systems to their world

**STRAND** NUMERICAL AND ALGEBRAIC CONCEPTS AND OPERATIONS, GRADES K-3
Students will participate in problem-solving activities through group and individual investigations so that they can:
- use concrete models to develop an understanding of the concepts of addition, subtraction, multiplication, and division;
- investigate, model, and compare different strategies for constructing basic arithmetic facts with whole numbers;
- use models to allow students to construct their own algorithms for addition, subtraction, multiplication, and division of whole numbers;
- model, explain, and develop reasonable proficiency in adding, subtracting, and multiplying whole numbers and evaluating the reasonableness of results;
- compare and contrast different computational strategies for solving a specific problem;
- use mental computation, estimation, and calculators to predict results and evaluate reasonableness of results;
- use concrete models to explore operations on common and decimal fractions; and use whole numbers, common and decimal fractions, variables, equations, and inequalities to describe problem situations

**STRAND** PATTERNS, RELATIONSHIPS AND FUNCTIONS GRADES K-3
Students will participate in problem-solving activities through group and individual investigations so that they can:
recognize, describe, extend, and create a wide variety of patterns;
represent, discuss, and describe mathematical relationships;
use calculators to create and explore patterns;
make generalizations based on observed patterns and relationships;
examine the use of variables, equations, and inequalities to express relationships; and
connect patterns, relationships, and functions with other aspects of mathematics
and with other disciplines.

**STRAND GEOMETRY AND SPATIAL SENSE**

**GRADES K-3**

Students will participate in problem-solving activities through group and individual investigations so that they can:
- describe, model, and draw two-dimensional geometric shapes to develop spatial sense;
- describe and model three-dimensional geometric shapes to develop spatial sense;
- identify, classify, and compare geometric shapes according to attributes;
- investigate and predict the results of transformations of geometric shapes, including slides, flips, and turns;
- investigate and predict the results of combining and partitioning geometric shapes;
- explore informally tessellations, symmetry, congruence, similarity, scale, perspective, angles, and networks;
- connect geometry to related concepts in measurement and number; and
- identify and appreciate geometry in the world around them, including applications in science, art, and architecture.

**STRAND MEASUREMENT, GRADES K-3**

Students will participate in problem-solving activities through group and individual investigations so that they can:
- explore the concepts of length, capacity, weight (mass), perimeter, area, time, temperature, and angle;
- classify angles as acute, right, or obtuse;
- explore, discuss, and use nonstandard and standard (customary and metric) systems of measurement;
- use tools to compare units of measure within a given system;
- make and use estimates of measurement;
- make and use measurement in problems and everyday situations; and
- connect measurement to other aspects of mathematics and to other disciplines.

**STRAND PROBABILITY AND STATISTICS, GRADES K-3**

Students will participate in problem-solving activities through group and individual investigations so that they can:
- explore concepts of the likelihood of events, including impossible, not likely, equally likely, and certain events;
- generate questions, collect data, organize and display information, and interpret findings;
- identify and appreciate examples of probability and statistics in the world around them; and
- connect probability and statistics to other aspects of mathematics and to other disciplines.
South Dakota

Document Utilized

South Dakota Mathematics and Science Benchmarks--draft (January, 1994)

Background

In 1991, South Dakota was awarded a grant from the National Science Foundation to develop mathematics and science standards. In October 1994, South Dakota received a grant from the Innovations in Education Fund from the U.S. Department of Education to create standards in the arts, civics, English, foreign languages, geography, and history. Math and science standards describe student learning for grades K-2, 3-4, 5-8, and 9-12. Standards in the other subjects will describe learning in grades 2, 4, 8, and 12. The standards are voluntary; currently no performance or assessment standards relate to the content standards, although the state has had a testing program in place since 1985. Education officials how to create tests to complement the content standards once they are more fully developed.

### South Dakota

#### MATHEMATICS AND SCIENCE BENCHMARKS

<table>
<thead>
<tr>
<th><strong>NUMBER SENSE</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number sense is the ability to interpret and use numbers in counting and measurement situations and to sense the reasonableness of computational results.</td>
</tr>
</tbody>
</table>

**K-2 NUMBER SENSE BENCHMARKS**

All students will:

1. model numbers using manipulatives and symbols.  
2. demonstrate various modes of computation. (i.e., mentally, calculator, manipulatives, etc.)  
3. solve problems using numbers.  
4. communicate the reasonableness of their solutions.

**MEASUREMENT**

Measurement is a dimension, quantity, or capacity determined by comparison to a standard unit. The study of measurement shows useful and practical applications of mathematics.

**K-2 MEASUREMENT BENCHMARKS**

All students will:

1. select appropriate measurement tools and determine size of familiar objects.  
2. communicate how measurement is used in the world of work.  
3. compare objects based on dimensions.

**PATTERN RELATIONS**

Patterns, Relations and Functions: A pattern is an arrangement of objects or symbols in which relationships can be established.

**K-2 PATTERN RELATIONS BENCHMARKS**

All students will:

1. observe and extend patterns  
2. identify number patterns
STATISTICS
Statistics and Probability: Statistics is a mathematical tool used to analyze data. Probability is the mathematics of chance.

K-2 STATISTICS BENCHMARKS
All students will:
1. collect and describe data.
2. make predictions using data.

ALGEBRA
Algebra is a language of symbols used to communicate concepts, relationships and abstract ideas.

K-2 ALGEBRA BENCHMARKS
All students will:
1. communicate number relationships using objects.
2. illustrate number relationships using pictures or symbols.
3. represent situations using number sentences.

GEOMETRY
Geometry is a language used to communicate the properties of and relationships between objects. Spatial sense involves insights and intuition about two and three dimensional shapes and their characteristics, interrelationships of shape, and the effects of changes to shapes.

K-2 GEOMETRY BENCHMARKS
All students will:
1. describe a method of classifying geometric shapes.
2. identify connections between geometry and daily life.

SCIENCE

NATURE OF SCIENCE
The nature of science involves a systematic approach to problem solving through inquiry, observation, validation, experimentation, communication and collaboration.

K-2 NATURE OF SCIENCE BENCHMARKS
All students will:
1. use their senses to observe the world around them.
2. use tools to get additional information about the world around them.
3. compare observable objects and events.
4. communicate their observations of the world around them through telling, writing, drawing, and listening.
5. experiment to make a change in the world around them and describe what happens.

SYSTEMS
A system is a group of related things and processes functioning as a unit for a defined purpose.

K-2 SYSTEMS BENCHMARKS
All students will:
1. identify the parts and observable characteristics of a simple system.
2. describe and compare observable changes in a simple system.
MODELS
"A model of something is a simplified imitation that we can help us understand it better. A model may be a device, a plan, a drawing, an equation, a computer program, or even just a mental image." p157 Science for All American

K-2 MODELS BENCHMARKS
All students will:
1. participate in activities that explore toys as models.
2. describe how a model is like other things.
3. create models that represent familiar objects.

PATTERNS OF CHANGE
Patterns of change are variations that occur within models or systems. Consistency, defined as equilibrium, stability, or symmetry, is a concept imbedded within patterns of change.

K-2 PATTERNS OF CHANGE BENCHMARKS
All students will:
1. communicate observations about how things change in some ways and stay the same in some ways.

INTEGRATED BENCHMARKS

NATURE OF SCIENCE/NUMBER SENSE K-2
All students will:
communicate an event using manipulatives and symbols.

NATURE OF SCIENCE/MEASUREMENT K-2
All students will:
 communicate size comparisons based on measurement.

NATURE OF SCIENCE/PATTERN RELATIONS K-2
All students will:
identify and communicate patterns that are observed in the natural world.

NATURE OF SCIENCE/STATISTICS K-2
All students will:
describe their observations concerning the natural world using data they have collected.

NATURE OF SCIENCE/ALGEBRA K-2
All students will:
use number sentences to represent situations they observe.

NATURE OF SCIENCE/GEOMETRY K-2
All students will:
classify objects based on geometric shape.

SYSTEMS/NUMBER SENSE K-2
All students will:
describe observable changes in a system using numbers.

SYSTEMS/MEASUREMENTS K-2
All students will:
observe and compare measurable changes within a simple system.

SYSTEMS/PATTERN RELATIONS K-2
All students will:
identify the patterns observed within a system.

SYSTEMS/STATISTICS K-2
All students will:
identify parts of a simple system by collecting factual information.
<table>
<thead>
<tr>
<th>Course</th>
<th>Task</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYSTEMS/ALGEBRA K-2</td>
<td>All students will: communicate number relationships using characteristics of a system.</td>
<td>F3c</td>
</tr>
<tr>
<td>SYSTEMS/GEOMETRY K-2</td>
<td>All students will: communicate a method for classifying the geometric shapes within a system.</td>
<td>F3c</td>
</tr>
<tr>
<td>MODELS/NUMBER SENSE K-2</td>
<td>All students will: represent number relationship using models.</td>
<td>F3c</td>
</tr>
<tr>
<td>MODELS/MEASUREMENT K-2</td>
<td>All students will: compare models to the real objects by using the measurement tools at hand.</td>
<td>F3</td>
</tr>
<tr>
<td>MODELS/PATTERN RELATIONS K-2</td>
<td>All students will: communicate patterns using models.</td>
<td>F3</td>
</tr>
<tr>
<td>MODELS/STATISTICS K-2</td>
<td>All students will: graph objects in various ways.</td>
<td>F3c</td>
</tr>
<tr>
<td>MODELS/ALGEBRA K-2</td>
<td>All students will: communicate relationships using familiar objects.</td>
<td>F3c</td>
</tr>
<tr>
<td>MODELS/GEOMETRY K-2</td>
<td>All students will: identify geometric shapes in familiar models and the actual objects.</td>
<td>F3c</td>
</tr>
<tr>
<td>PATTERNS OF CHANGE/NUMBER SENSE K-2</td>
<td>All students will: communicate numerically how natural objects/events change in observable patterns.</td>
<td>F3c</td>
</tr>
<tr>
<td>PATTERNS OF CHANGE/MEASUREMENT K-2</td>
<td>All students will: will use measurement to discover that a pattern of change is occurring.</td>
<td>F3, F3c</td>
</tr>
<tr>
<td>PATTERNS OF CHANGE/PATTERN RELATIONS K-2</td>
<td>All students will: communicate observed patterns.</td>
<td>F3</td>
</tr>
<tr>
<td>PATTERNS OF CHANGE/STATISTICS K-2</td>
<td>All students will: communicate how things change or stay the same by looking at information collected.</td>
<td>F3</td>
</tr>
<tr>
<td>PATTERNS OF CHANGE/ALGEBRA K-2</td>
<td>All students will: use number sentences to discover that a pattern of change occurs.</td>
<td>F3c</td>
</tr>
<tr>
<td>PATTERNS OF CHANGE/GEOMETRY K-2</td>
<td>All students will: communicate their observations about the ways geometric shapes appear to change when size or spatial relationship is changed.</td>
<td>F3c</td>
</tr>
</tbody>
</table>
Utah

Documents Utilized

*Elementary Core Curriculum Standards, Levels 4-6* (1991)

Background

In 1989, legislative leaders determined that the state need to develop content standards for students. In 1991, the work of 11 action teams was presented to the state board of education and legislature. The teams articulated a state core curriculum and methods of assessment. Standards have been developed for the arts, language arts, mathematics, reading, science, and social studies in each grade from K-12. The state core is mandatory for districts, but the assessment standards are voluntary.

### VISUAL ARTS

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F3g</td>
<td>The students will develop skills vital to making art by identifying cast shadows, showing facial expressions in drawing, creating simple clay forms, mixing colors, changing and comparing values, and comparing size relationships of common objects or living things (Participant).</td>
</tr>
<tr>
<td>01</td>
<td>Identify and draw shadows cast by people and objects (any representation of shadows is acceptable).</td>
</tr>
<tr>
<td>02</td>
<td>Demonstrate that a given object is larger, smaller, or the same size as another object, i.e., tree to house, or head to body.</td>
</tr>
<tr>
<td>03</td>
<td>Create clay forms with the parts fused together, e.g., animals, plants, airplanes.</td>
</tr>
<tr>
<td>04</td>
<td>Draw faces that show happiness, sadness, or other expressions.</td>
</tr>
<tr>
<td>05</td>
<td>Mix two primary colors to get a secondary color.</td>
</tr>
<tr>
<td>06</td>
<td>Add black or white to a color to change its value.</td>
</tr>
<tr>
<td>07</td>
<td>Arrange objects or swatches of color in order of lightest to darkest.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F3g</td>
<td>The students will develop observation skills vital to looking at and discussing aesthetic form by telling how colors may be mixed and how the value of a color may be altered (Observer/Listener).</td>
</tr>
<tr>
<td>01</td>
<td>Look at an art print and tell what colors the artist mixed to paint a particular object in that picture.</td>
</tr>
<tr>
<td>02</td>
<td>Point to an example of a color in an art print that was darkened with black; a color that was lightened with white.</td>
</tr>
<tr>
<td>03</td>
<td>Select five objects in an art print and point to each of them in order of lightest to darkest.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F3g</td>
<td>Explain the effects that cultures, climate, economics, and the availability of materials have on the design of buildings.</td>
</tr>
<tr>
<td>02</td>
<td>Point out examples of repetition used in works of art (color, shape, texture, etc.).</td>
</tr>
<tr>
<td>03</td>
<td>Discuss characteristics of the work or style of Hicks, Homer, Klee, Pollock, and Remington.</td>
</tr>
</tbody>
</table>

### MUSIC

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F3g</td>
<td>The students will develop vocal techniques and skills related to singing a variety of songs in a comfortable range (Participant).</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
</tr>
<tr>
<td>F3g</td>
<td>Sing with an awareness of pitch, using a voice that is natural and produced without strain within a comfortable range.</td>
</tr>
<tr>
<td>F3g</td>
<td>Sing a variety of songs including action songs, folk songs, and singing games.</td>
</tr>
<tr>
<td>F3g</td>
<td>Sing tonal patterns in echo to the teacher.</td>
</tr>
</tbody>
</table>

**1510-O2**

- The students will develop techniques and skills related to playing simple percussion and melodic instruments (Participant).
  - Perform rhythmic patterns in 2s and 3s by clapping, stepping, or playing percussion instruments in echo to the teacher.
  - Play simple percussion and melodic instruments and demonstrate how sounds are produced on each one.

**1510-O3**

- The students will develop listening techniques and skills involved in identifying rhythm, melody, dynamics, form, and musical instruments (Observer/Listener, Critic).
  - Identify the beat in familiar songs.
  - Discriminate between loud-soft, fast-slow, long-short, and sound-silence in a musical context.
  - Identify when a melody moves up or down or stays the same.
  - Identify melodic or rhythmic phrases as being the same or different.
  - Identify violin, flute, trumpet, trombone, snare drum, piano, and guitar.
  - Become familiar with at least one composition of each of the following composers:
    - Sergei Prokofiev (Example: “March from the Love for Three Oranges”)
    - Franz Joseph Haydn (Example: “Theme and Variations from Surprise Symphony”)
    - Peter Ilyitch Tchaikovsky (Example: “Nutcracker Suite”)

**1510-O4**

- The students will identify and use some musical symbols and terms (Participant, Critic).
  - Identify and understand music symbols, terms, and signs which include piano (p), pianissimo (pp), forte (f), fortissimo (f), beat, composer, rest, and melody.
  - Interpret pictures, geometric shapes, or other symbols into sounds.

**1510-O5**

- The students will create simple movement, rhythmic, and melodic patterns (Participant, Observer/Listener).
  - Show through movement the mood (sad/happy), rhythm (even/uneven), melody (high/low), and tempo (fast-slow) of a simple piece of music.
  - Create simple and rhythmic and melodic patterns using the voice or musical instruments.

**DRAMA**

**4010-O8**

- The students will learn about and experience the techniques of drama (DRAMA: Participant, Observer/Listener, Critic).
  - Improvise experiences with each of the five senses to interpret various environments, e.g., seashore, woods, city street.
  - Memorize and recite short selections.
  - Participate in choral speaking.
  - Demonstrate different ways the body and its parts can move such as pushing/pulling, reaching/bending, lifting/dropping, etc.
  - Use the face, voice, and body to express emotions, e.g., happiness, surprise, fear.
  - Role-play a simple character through actions.
  - Demonstrate appropriate behavior when viewing and listening to a performance.
  - Use simple props for stories or plays.
<table>
<thead>
<tr>
<th>DANCE</th>
<th>INFORMATION TECHNOLOGY STUDIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>7510-05</td>
<td>The students will continue to express feelings by observing and participating in introductory rhythm and dance movements that include time, space, energy, and shape (DANCE: Participant, Observer/Listener, Critic).</td>
</tr>
<tr>
<td>01</td>
<td>Clap and move, accenting the first beat of every measure in 4/4 time.</td>
</tr>
<tr>
<td>02</td>
<td>Clap and move to simple rhythmic patterns based on such things as phrases or whole sentences.</td>
</tr>
<tr>
<td>03</td>
<td>Create symmetrical (in which the two sides look alike) and asymmetrical (in which the two sides do not look alike) shapes with the body.</td>
</tr>
<tr>
<td>04</td>
<td>Through movement, explore over/under, above/below, near/far, in front/behind, inside/outside, and around/through.</td>
</tr>
<tr>
<td>05</td>
<td>Move through space in various directions, e.g., walking, running, leaping, hopping, jumping, skipping, galloping, and sliding.</td>
</tr>
<tr>
<td>06</td>
<td>Improvise a sequence of energy (motion) changes, i.e., moving from lyrical (floating, gliding) to percussive (sharp, quick).</td>
</tr>
<tr>
<td>07</td>
<td>Perform traditional and creative singing games and dances or create simple group dances using basic locomotor steps (games and dances might include “Bear Growl,” “Statue Games,” “Jolly is the Miller,” “Muffin Man,” etc.).</td>
</tr>
<tr>
<td>08</td>
<td>Express the feelings generated after observing a dance (live, film, or video), i.e., mood, patterns, and movement.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>2010-01</td>
<td>The students will use each component of a computer (technology) system correctly.</td>
</tr>
<tr>
<td>01</td>
<td>Demonstrate proper start-up and termination procedures for a software package.</td>
</tr>
<tr>
<td>02</td>
<td>Identify major hardware components of specific technologies being used in the classroom/lab.</td>
</tr>
<tr>
<td>03</td>
<td>Demonstrate the proper handling of diskettes.</td>
</tr>
<tr>
<td>04</td>
<td>Identify potential abuses to and proper care of hardware.</td>
</tr>
<tr>
<td>2010-02</td>
<td>The students will demonstrate proper keyboarding techniques.</td>
</tr>
<tr>
<td>01</td>
<td>Identify which keys are specific to the right-hand and left-hand sides of the keyboard.</td>
</tr>
<tr>
<td>02</td>
<td>Enter simple words using “hunt and peck” method while maintaining right-hand and left-hand keyboard orientation.</td>
</tr>
<tr>
<td>03</td>
<td>Use specialized computer keys such as ESCAPE, CONTROL, and basic FUNCTION keys. (Function keys include ALT and “F#” keys on MS-DOS computers, open-apple, closed-apple, and option keys on Apple computers.)</td>
</tr>
<tr>
<td>2010-03</td>
<td>The students will understand the major social and ethical issues in the field of information technology.</td>
</tr>
<tr>
<td>01</td>
<td>Demonstrate appropriate conduct during technology work periods.</td>
</tr>
<tr>
<td>2010-04</td>
<td>The students will use application software to accomplish a variety of tasks.</td>
</tr>
<tr>
<td>2010-05</td>
<td>The students will use technology to develop problem-solving skills.</td>
</tr>
<tr>
<td>01</td>
<td>Use appropriate grade level simulation and problem-solving software.</td>
</tr>
<tr>
<td>02</td>
<td>Relate computer use to real life, problem-solving situations at the level of the student’s understanding.</td>
</tr>
<tr>
<td>03</td>
<td>Put in proper sequence the given steps of a familiar procedure (can be a non-computer procedure).</td>
</tr>
</tbody>
</table>
# LANGUAGE ARTS

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>F3 Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>4010-01</td>
<td>The students will listen to verbal information and demonstrate literal understanding (LISTENING).</td>
<td>F3, F3d</td>
</tr>
<tr>
<td>01</td>
<td>Listen to the person who is speaking.</td>
<td>F1, F3d</td>
</tr>
<tr>
<td>02</td>
<td>Listen to information without interrupting.</td>
<td>F1b</td>
</tr>
<tr>
<td>03</td>
<td>Follow two- and three-step directions.</td>
<td>F3</td>
</tr>
<tr>
<td>04</td>
<td>Recall specific information.</td>
<td>F3a</td>
</tr>
<tr>
<td>05</td>
<td>Recall information in sequence.</td>
<td>F3</td>
</tr>
<tr>
<td>06</td>
<td>Demonstrate comprehension of literary selections read aloud.</td>
<td></td>
</tr>
<tr>
<td>4010-02</td>
<td>The students will share their thoughts in speech, using vocabulary appropriate to age and situation (SPEAKING).</td>
<td>F1a</td>
</tr>
<tr>
<td>01</td>
<td>Enunciate sounds so they can be understood.</td>
<td>F1</td>
</tr>
<tr>
<td>02</td>
<td>Speak with the appropriate volume for the situation.</td>
<td>F3f</td>
</tr>
<tr>
<td>03</td>
<td>Recite their address correctly.</td>
<td>F3</td>
</tr>
<tr>
<td>04</td>
<td>Sing songs and recite selected poems from memory.</td>
<td>F1</td>
</tr>
<tr>
<td>05</td>
<td>Tell how things look, feel, sound, taste, and smell.</td>
<td></td>
</tr>
<tr>
<td>06</td>
<td>Answer questions accurately.</td>
<td>F1</td>
</tr>
<tr>
<td>07</td>
<td>Ask questions to meet their needs.</td>
<td>F1, G1b</td>
</tr>
<tr>
<td>08</td>
<td>Explain simple processes, activities, and experiences.</td>
<td>F1</td>
</tr>
<tr>
<td>09</td>
<td>Stay on the topic when telling information or talking to others.</td>
<td></td>
</tr>
<tr>
<td>4010-03</td>
<td>The students will use phonics and sight recognition to decode words. The will begin to develop comprehension skills (READING).</td>
<td>F3a</td>
</tr>
<tr>
<td>01</td>
<td>Identify left-to-right, top-to-bottom, and front-to-back orientation as related to print.</td>
<td>F3a</td>
</tr>
<tr>
<td>02</td>
<td>Know consonant sounds, blends, and digraphs in all positions.</td>
<td>F3a</td>
</tr>
<tr>
<td>03</td>
<td>Know short and long vowel sounds as they appear in the reading scope and sequence.</td>
<td>F3a</td>
</tr>
<tr>
<td>04</td>
<td>Recognize appropriate phonograms (word families).</td>
<td>F3a</td>
</tr>
<tr>
<td>05</td>
<td>Use structural analysis to read contractions, compound words, singular and plural forms of words, and possessives on the students' level.</td>
<td>F3a</td>
</tr>
<tr>
<td>06</td>
<td>Read sight words and basal vocabulary as they appear in the reading program.</td>
<td>F3a</td>
</tr>
<tr>
<td>07</td>
<td>Comprehend word and sentence meaning in context.</td>
<td>F3a</td>
</tr>
<tr>
<td>08</td>
<td>Identify antonyms and synonyms on the students' instructional level.</td>
<td>F3a</td>
</tr>
<tr>
<td>09</td>
<td>Discriminate between a statement and a question.</td>
<td>F3a</td>
</tr>
<tr>
<td>10</td>
<td>Recognize alphabetical order by first letter.</td>
<td>F3a</td>
</tr>
<tr>
<td>4010-04</td>
<td>The students will respond to stories and poetry they read themselves or that are read to them (LITERATURE).</td>
<td>F3</td>
</tr>
<tr>
<td>01</td>
<td>Read or listen to self-selected materials.</td>
<td>F3, F3d</td>
</tr>
<tr>
<td>02</td>
<td>Retell sequence of events in stories they have read.</td>
<td>F1, F3</td>
</tr>
<tr>
<td>03</td>
<td>Tell which selections are real and which are make-believe.</td>
<td>F3</td>
</tr>
<tr>
<td>04</td>
<td>Answer questions relating to details in a story.</td>
<td>F3</td>
</tr>
<tr>
<td>05</td>
<td>Experience a variety of literary forms.</td>
<td>F3</td>
</tr>
<tr>
<td>4010-05</td>
<td>The students will develop skills in the correct spelling of words (SPELLING).</td>
<td>F3a</td>
</tr>
<tr>
<td>01</td>
<td>Develop visual and auditory memory of words.</td>
<td>F3a</td>
</tr>
<tr>
<td>02</td>
<td>Identify simple patterns needed to spell words, e.g., CVC, CVCe.</td>
<td>F3a</td>
</tr>
<tr>
<td>03</td>
<td>Spell a first-grade, basic word list.</td>
<td>F3a</td>
</tr>
<tr>
<td>04</td>
<td>Write words from dictation.</td>
<td>F3</td>
</tr>
<tr>
<td>05</td>
<td>Understanding meaning of assigned spelling words.</td>
<td>F3</td>
</tr>
<tr>
<td><strong>Utah</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
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<td></td>
</tr>
<tr>
<td><strong>4010-06</strong> The students will print legibly (PENMANSHIP).</td>
<td><strong>NEECODE</strong></td>
<td></td>
</tr>
<tr>
<td>01 Write manuscript letters and numbers.</td>
<td>F3</td>
<td></td>
</tr>
<tr>
<td>02 Space letters and words correctly on lines.</td>
<td>F3</td>
<td></td>
</tr>
<tr>
<td>03 Write first and last name.</td>
<td>F3</td>
<td></td>
</tr>
<tr>
<td>04 Demonstrate neatness in written work.</td>
<td>F3</td>
<td></td>
</tr>
<tr>
<td><strong>4010-07</strong> The students will express ideas and experiences in written form (WRITTEN COMPOSITION).</td>
<td>F3</td>
<td></td>
</tr>
<tr>
<td>01 Develop ideas for writing.</td>
<td>F3</td>
<td></td>
</tr>
<tr>
<td>02 Write personal experiences, stories, etc.</td>
<td>F3</td>
<td></td>
</tr>
<tr>
<td>03 Share written work with others.</td>
<td>F3</td>
<td></td>
</tr>
</tbody>
</table>

**LIBRARY MEDIA**

| **4601-01** The students will identify and locate books within the areas of the library media center. |  |
| 01 Identify and locate books and other materials within the area of the library media center. | F3 |
| 02 Understand the function of the circulation area. | F3 |
| **4601-02** The students will select and use library books and other materials in the library media center. |  |
| 01 Use checkout procedures to borrow library media materials. | F3 |
| 02 Demonstrate how to use and care for books. | F3 |
| 03 Define and use the following terms: title, author, illustrator, and illustrations. | F3 |
| **4601-03** The students will evaluate information and resources. |  |
| 01 Evaluate books to see if they can be read independently. | F3 |
| 02 Tell which selections are real and which are make-believe. | F3 |
| **4601-04** The students will appreciate and respond to children’s literature. |  |
| 01 Listen to selections from literature and folklore with emphasis on those books receiving Caldecott honor and medal awards. | F3 |
| 02 Read picture, easy fiction, and nonfiction books. | F3 |
| 03 View audiovisual presentations of children’s literature. | F3 |
| 04 Respond to literature presentations, e.g., draw a picture, sing a song, make simple puppets, participate in role-playing. | F3 |
| 05 Recite additional nursery rhymes. | F3 |

**MATHEMATICS**

<p>| <strong>5010-01</strong> The students will apply mathematical concepts and skills to solve problems they encounter in daily living. | <strong>NEECODE</strong> |
| 01 Develop and apply problem-solving approaches to investigate and understand mathematical content. | F2, F3c |
| 02 Formulate problems from everyday and mathematical situations. | F3c |
| 03 Develop and apply strategies to solve a wide variety of problems. | F2, F3c |
| 04 Verify and interpret results with respect to the original problem. | F2a, F3c |
| 05 Acquire confidence in using mathematics meaningfully. | F3c, G2b |
| <strong>5010-02</strong> The students will show understanding and application of mathematical concepts and justification of solutions to problems by communicating in oral, pictorial, and/or written form. |  |
| 01 Relate physical materials, pictures, and ideograms to mathematical ideas. | F3c |</p>
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F3c</td>
<td>Reflect on and clarify thinking about mathematical ideas and situations.</td>
</tr>
<tr>
<td>F3c</td>
<td>Relate everyday language to mathematical language and symbols.</td>
</tr>
<tr>
<td>F3c</td>
<td>Represent, discuss, read, write, and listen to mathematical ideas as a vital part of learning and using mathematics.</td>
</tr>
<tr>
<td>P2, F3c</td>
<td>The students will explain and justify logical reasoning SKILLS AND STRATEGIES when working through (learning) a mathematical concept or solving a problem.</td>
</tr>
<tr>
<td>F3c</td>
<td>Draw conclusions about mathematics.</td>
</tr>
<tr>
<td>F3c</td>
<td>Apply models, known facts, properties, and relationships to explain their thinking.</td>
</tr>
<tr>
<td>F3c</td>
<td>Justify their answers and solutions processes.</td>
</tr>
<tr>
<td>F2, F3c</td>
<td>Develop patterns and establish relationships in order to analyze mathematical situations.</td>
</tr>
<tr>
<td>F3c</td>
<td>Recognize the interrelatedness of mathematical concepts (mathematics makes sense).</td>
</tr>
<tr>
<td>F3c</td>
<td>The students will recognize the interrelatedness of mathematical concepts within the field of mathematics as well as throughout other disciplines, especially as they apply to daily living.</td>
</tr>
<tr>
<td>F3c</td>
<td>Link conceptual and procedural knowledge.</td>
</tr>
<tr>
<td>F3c</td>
<td>Relate various representations of concepts or procedures to one another.</td>
</tr>
<tr>
<td>F3c</td>
<td>Recognize relationships among different topics in mathematics.</td>
</tr>
<tr>
<td>F3c</td>
<td>Employ mathematics in other curricular areas.</td>
</tr>
<tr>
<td>F3c</td>
<td>Employ mathematics in their daily lives.</td>
</tr>
<tr>
<td>F, F3c</td>
<td>The students will employ estimation strategies in order to demonstrate flexibility in working with numbers and measurement as they relate to the students' everyday lives.</td>
</tr>
<tr>
<td>F3c</td>
<td>Explore and develop estimation strategies.</td>
</tr>
<tr>
<td>F3c</td>
<td>Recognize when it is appropriate to estimate.</td>
</tr>
<tr>
<td>F3c</td>
<td>Determine the reasonableness of results.</td>
</tr>
<tr>
<td>F3c</td>
<td>Apply estimation strategies in working with quantities, measurement, computation, and problem solving.</td>
</tr>
<tr>
<td>F, F3c</td>
<td>The students will demonstrate an understanding of numbers (number sense) as they apply to the students' everyday world.</td>
</tr>
<tr>
<td>F3c</td>
<td>Construct number meanings through real-world experiences and the use of physical materials.</td>
</tr>
<tr>
<td>F3c</td>
<td>Demonstrate an understanding of our numeration system by relating patterning, counting, grouping, and place-value concepts.</td>
</tr>
<tr>
<td>F3c</td>
<td>Develop number sense and interpret the multiple uses of numbers encountered in the real world.</td>
</tr>
<tr>
<td>F3c</td>
<td>The students will relate combinations of numbers to other numbers by establishing relationships among operations and by acquiring insights into the effects of performing an operation on a pair or set of numbers.</td>
</tr>
<tr>
<td>F3c</td>
<td>Develop meaning for the operations by modeling and discussing a rich variety of problem situations.</td>
</tr>
<tr>
<td>F3c</td>
<td>Recognize and employ a wide variety of problem structure that can represent a single operation.</td>
</tr>
<tr>
<td>F3c</td>
<td>Relate the mathematical language and symbolism of operations to problem situations and informal language.</td>
</tr>
<tr>
<td>F3c</td>
<td>Develop operation sense.</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5010-08</td>
<td>The students will demonstrate ability in computational techniques through the use of paper and pencil, mental math, estimation, and technology to solve problems.</td>
</tr>
<tr>
<td>01</td>
<td>Model, explain, and develop reasonable proficiency with basic facts and algorithms.</td>
</tr>
<tr>
<td>02</td>
<td>Employ a variety of mental computation and estimation techniques.</td>
</tr>
<tr>
<td>03</td>
<td>Demonstrate the ability to use calculators in appropriate computation situations.</td>
</tr>
<tr>
<td>04</td>
<td>Select and use computation techniques appropriate to specific problems and determine whether the results are reasonable.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5010-09</td>
<td>The students will use geometry to explore the relationship of objects in the world in which we live.</td>
</tr>
<tr>
<td>01</td>
<td>Describe, model, draw, and classify shapes.</td>
</tr>
<tr>
<td>02</td>
<td>Investigate and predict the results of combining, subdividing, and changing shapes.</td>
</tr>
<tr>
<td>03</td>
<td>Develop spatial sense.</td>
</tr>
<tr>
<td>04</td>
<td>Relate geometric ideas to number and measurement ideas.</td>
</tr>
<tr>
<td>05</td>
<td>Recognize and appreciate geometry in the world.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5010-10</td>
<td>The students will understand that measurement is the comparing of objects with nonstandard and standard units such as U.S. Common and metric.</td>
</tr>
<tr>
<td>01</td>
<td>Understand the attributes of length, capacity, weight, area, volume, time, temperature, and angle.</td>
</tr>
<tr>
<td>02</td>
<td>Develop the process of measuring and concepts related to units of measurement.</td>
</tr>
<tr>
<td>03</td>
<td>Make and use estimates of measurement.</td>
</tr>
<tr>
<td>04</td>
<td>Make and use measurements in problem and everyday situations.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5010-11</td>
<td>The students will collect, organize, describe, display, and interpret data while making decisions and predictions based on that data.</td>
</tr>
<tr>
<td>01</td>
<td>Collect, organize, and describe data.</td>
</tr>
<tr>
<td>02</td>
<td>Construct, read, and interpret displays of data.</td>
</tr>
<tr>
<td>03</td>
<td>Formulate and solve problems that involve collecting and analyzing data.</td>
</tr>
<tr>
<td>04</td>
<td>Explore concepts of chance.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5010-12</td>
<td>The students will use knowledge of fractions and decimals to describe real-world phenomena and apply it to problems.</td>
</tr>
<tr>
<td>01</td>
<td>Develop concepts of fractions, mixed numbers, and decimals.</td>
</tr>
<tr>
<td>02</td>
<td>Develop number sense for fractions and decimals.</td>
</tr>
<tr>
<td>03</td>
<td>Relate fractions to decimals and find equivalent fractions through the use of models.</td>
</tr>
<tr>
<td>04</td>
<td>Apply fractions and decimals to problem situations.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5010-13</td>
<td>The students will identify and work with patterns to understand how mathematics applies to the real world.</td>
</tr>
<tr>
<td>01</td>
<td>Recognize, describe, extend, and create a wide variety of patterns.</td>
</tr>
<tr>
<td>02</td>
<td>Represent and describe mathematical relationships.</td>
</tr>
<tr>
<td>03</td>
<td>Explore the use of variables and open sentences to express relationship.</td>
</tr>
</tbody>
</table>

### RESPONSIBLE HEALTH LIFESTYLES/HEALTH EDUCATION LEVEL 1

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7010-01</td>
<td>The students will develop and practice health life skills including a positive self-image in their relationships with family and friends.</td>
</tr>
<tr>
<td>01</td>
<td>Identify and describe different feelings.</td>
</tr>
<tr>
<td>02</td>
<td>Recognize contributions of self and others, e.g., sharing, cooperation, etc.</td>
</tr>
<tr>
<td>03</td>
<td>Recognize the importance and consequences of family/school rules.</td>
</tr>
<tr>
<td>04</td>
<td>Describe how individuals might help one another.</td>
</tr>
<tr>
<td>05</td>
<td>Describe what they like about themselves.</td>
</tr>
</tbody>
</table>
The students will develop a knowledge and understanding of growth and development. 
01 Identify personal growth and change, e.g., height, weight, size of head, length of arms, size of feet.
02 List similarities and differences of individuals with regard to size, shape, length of arms, size of feet

The students will identify ways they can be responsible for their own health. 
01 Identify the basic food groups and list several foods within each group.
02 Identify nutritious foods that are appropriate for breakfast and plan three well-balanced breakfast meals.
03 Explain how the foods people eat affect how they feel mentally and physically.
04 Explain the importance of daily exercise.
05 Tell why regular sleep and rest contribute to one's health and well-being.
06 Tell why cleanliness, grooming, posture, and body mechanics are important.
07 Have a general understanding of what may be found in the mouth.
08 Identify ways drugs, alcohol, and tobacco may be harmful to the body.

The students will begin to understand the role of community and the environment in health. 
01 Describe ways that the environment affects health, e.g., water, air, and garbage.
02 Define the word "pollution" and describe various kinds.
03 Discuss the health services provided by schools and community, i.e., doctors, dentists, nurses, and pharmacists.

The students will begin to explain ways they can be responsible for their own personal safety and the safety of others. 
01 Identify safety procedures in walking to and from school.
02 Describe what to do when approached by a stranger whether in person or on the telephone.
03 Discuss the role of police officers and other safety helpers.
04 Explain rules for safety in the home, on the playground, and at school.
05 Identify basic safety rules for riding a bicycle.

The students will demonstrate locomotor and non-locomotor movements with an understanding of personal and general space. 
01 Move in general space without infringing on the personal space of others.
02 Identify body parts and surfaces in a movement task.
03 Move in space changing to various levels (low, medium, high) on command.
04 Explore and experience locomotor movements (walking, running, jumping, hopping, leaping, skipping, galloping, and sliding) at (a) slow and fast speeds; (b) in different directions.
05 Bend, stretch, and twist different parts of the body (legs, arms, trunk, etc.) while standing, sitting, and lying down.
06 Explore a variety of movements involving maneuvering weight (pushing, pulling, lifting, etc.) with an object.
07 Using the body, make the shape of a letter or number from zero to nine.

The students will continue to develop health related and motor fitness involving jumping, lifting, walking, balancing, running, swinging, hopping, etc. 
01 Jump forward, backward, and sideward over a line or rope on the floor several times.
02 Swing one arm at a time in different directions and at different levels.
<table>
<thead>
<tr>
<th>Utah</th>
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</thead>
<tbody>
<tr>
<td><strong>03</strong> Combine the movement of two arms in the same direction and in opposite directions.</td>
</tr>
<tr>
<td><strong>04</strong> Pull the body from a lying position to a standing position using some assistance such as a climbing rope, wand, or a partner.</td>
</tr>
<tr>
<td><strong>05</strong> Support body weight on hands from a sitting position for several seconds.</td>
</tr>
<tr>
<td><strong>06</strong> With arms crossed on chest, hands on shoulders, perform several curl-ups with knees bent and feet on floor.</td>
</tr>
<tr>
<td><strong>07</strong> Sustain a variety of locomotor movements going forward, backward, and sideward.</td>
</tr>
<tr>
<td><strong>08</strong> Hop on one foot several times without losing balance, repeat on other foot.</td>
</tr>
<tr>
<td><strong>09</strong> Walk the length of a low balance beam without falling off.</td>
</tr>
<tr>
<td><strong>10</strong> Jump from a two-foot height and land on a mat, grass or sand without falling down.</td>
</tr>
<tr>
<td><strong>11</strong> Standing on both feet, with eyes closed, balance for ten seconds.</td>
</tr>
<tr>
<td><strong>12</strong> Run in place for one minute.</td>
</tr>
<tr>
<td><strong>13</strong> Walk 600 yards at a brisk pace.</td>
</tr>
<tr>
<td><strong>14</strong> Run as fast as possible for 30 yards.</td>
</tr>
</tbody>
</table>

7510-03  The students will follow simple rules and directions displaying respect for personal and general space.  
**01** Participate in a variety of play activities requiring cooperation.  
**02** Listen to and follow simple directions.  
**03** Play by the rules in games and activities of low organization.  
**04** Contribute to safety by respecting the personal space of others.

7510-04  The students will continue individual exploration of manipulative skills using a variety of objects.  
**01** Roll, bounce, throw, catch, strike, and kick objects such as yarn, fleece, sponge, and playground balls.  
**02** Explore a variety of movements using objects such as bean bags, yarn balls, hula hoops, wands, ropes, and different sized balls.  
**03** Use carpet squares, mats, boxes, and benches in exploratory movements.

**SCIENCE LEVEL 1**

3010-01  Students will describe the characteristics and uses of air.  
**01** Observe and measure the characteristics of air:  
  - Measure the temperature of air.  
  - Determine, through observation, that air takes up space.  
  - Describe air in their own words.  
**02** Demonstrate the effects of air on plants and animals.  
  - Provide evidence that people need air.  
  - Predict what will happen to plants if air is too cold or too hot.  
  - Compare how different animals get air.  
  - Explain in their own words that plants and animals need air to live.  
**03** Explain the effects and uses of wind on people.  
  - Explain in their own words that wind is moving air.  
  - Provide examples of the destructive effects of wind on structures.  
  - Construct a device that uses moving air (wind) to function.  
  - Give examples of the ways people use wind.

3010-02  Students will describe the characteristics and uses of water.  
**01** Observe and measure the characteristics of water.  
  - Compare temperatures of water.  
  - Demonstrate in some way that water has weight.  
  - Use senses and then describe in their own words how water feels, looks, or tastes.
<table>
<thead>
<tr>
<th>3010-03</th>
<th>Students will compare the liquid, solid, and gas states of water.</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>Describe the relationships between the three states of water.</td>
</tr>
<tr>
<td>02</td>
<td>Predict changes that will occur when ice or liquid water is heated or cooled, or water vapor is cooled.</td>
</tr>
<tr>
<td>03</td>
<td>Determine the freezing point of water.</td>
</tr>
<tr>
<td>01</td>
<td>Compare the physical properties of ice, liquid water, and water vapor.</td>
</tr>
<tr>
<td>01</td>
<td>Describe in their own words the similarities and differences between ice, liquid water, and water vapor.</td>
</tr>
<tr>
<td>01</td>
<td>Compare the physical properties of ice, liquid water, and water vapor.</td>
</tr>
<tr>
<td>01</td>
<td>Describe different ways that water, in all three states, is present or is used in the natural and designed world.</td>
</tr>
<tr>
<td>01</td>
<td>Contrast the behavior of ice with the behavior of water when placed in containers of various shapes.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3010-04</th>
<th>Students will observe and categorize plants and plant parts according to similarities and differences.</th>
</tr>
</thead>
<tbody>
<tr>
<td>03</td>
<td>Categorize leaves, flowers, or seeds from a variety of plants and compare their characteristics.</td>
</tr>
<tr>
<td>03</td>
<td>Develop and use ways of grouping leaves, flowers, or seeds.</td>
</tr>
<tr>
<td>03</td>
<td>Justify choices for grouping.</td>
</tr>
<tr>
<td>03</td>
<td>Add a new leaf, flower, or seed to an existing group.</td>
</tr>
<tr>
<td>03</td>
<td>Compare and record different ways to group plants.</td>
</tr>
<tr>
<td>02</td>
<td>Observe and describe basic functions of plant parts in relation to the needs of the plant.</td>
</tr>
<tr>
<td>01</td>
<td>Investigate and report conditions that affect plant growth.</td>
</tr>
<tr>
<td>01</td>
<td>Experiment to identify conditions that influence plant growth, e.g., amount of water, light, and type of soil.</td>
</tr>
<tr>
<td>01</td>
<td>Draw a picture that reflects conditions for plant growth.</td>
</tr>
<tr>
<td>01</td>
<td>Observe and describe basic functions of plant parts in relation to the needs of the plant.</td>
</tr>
<tr>
<td>01</td>
<td>Draw a plant.</td>
</tr>
<tr>
<td>01</td>
<td>Explain the function of plant parts, i.e., stem, root, leaf, flower, seed, in their own words.</td>
</tr>
<tr>
<td>01</td>
<td>Describe how seeds change as they germinate.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3010-05</th>
<th>Students will observe and describe the basic components of weather as related to the activities of plants, animals, and people.</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>Observe and record daily changes and seasonal patterns in the weather.</td>
</tr>
<tr>
<td>02</td>
<td>Observe and describe the basic components of weather.</td>
</tr>
<tr>
<td>02</td>
<td>Record characteristics of weather observed.</td>
</tr>
<tr>
<td>02</td>
<td>Graph daily differences in weather conditions.</td>
</tr>
<tr>
<td>02</td>
<td>Investigate the effect of weather on the daily life of plants, animals, and people.</td>
</tr>
<tr>
<td>02</td>
<td>Describe changes in appearance and behavior of plants and animals.</td>
</tr>
<tr>
<td>02</td>
<td>Compare and contrast activities of people and animals in your community during different weather conditions.</td>
</tr>
<tr>
<td>02</td>
<td>Show how people and animals adapt to changes in the weather, e.g., draw a picture, write a report, make a collage, etc.</td>
</tr>
<tr>
<td>01</td>
<td>Compare plants according to different ways they are used at home and at school.</td>
</tr>
<tr>
<td>01</td>
<td>Observe and describe common uses of plants.</td>
</tr>
<tr>
<td>01</td>
<td>Group several plants according to how people use them.</td>
</tr>
<tr>
<td>01</td>
<td>Compare and record different ways to classify plants.</td>
</tr>
</tbody>
</table>

| 01 | Observe and record daily changes and seasonal patterns in the weather. |
| 01 | Observe and describe the basic components of weather. |
| 01 | Record characteristics of weather observed. |
| 01 | Graph daily differences in weather conditions. |
## SOCIAL STUDIES LEVEL 1

**6010-01**  The students will practice a variety of listening, speaking, writing, and reading skills in completing social studies activities.
- **01** Identify a logical sequence for tasks.
- **02** Categorize items of information that are similar from those that are different.
- **03** Predict simple conclusions to theories or situations.
- **04** Recall facts from stories or reports.
- **05** Describe possible solutions to problems in the family, school, or neighborhood.
- **06** Participate in group activities and demonstrate respect for basic values of all people.

**6010-02**  The students will understand that the family, school, and neighborhood provide basic needs and learning experiences.
- **01** Identify examples of how individuals learn from the family, school, and neighborhood (301-303).
- **02** Show ways in which families provide the basic needs of love, food, shelter, clothing, companionship, and protection to their members (301-202).
- **03** Compare similarities and differences among families, schools, and neighborhoods (301-201).
- **04** Show that every individual has dignity and worth and is unique (301-102).

**6010-03**  The students will understand that where people live influences how they live.
- **01** Identify the geographic features, climatic conditions, and natural resources of the local area (301-401).
- **02** Demonstrate how geographic features, climatic conditions, and natural resources influence how they live (301-402).
- **03** Name natural and man-made changes in their environment, i.e., lakes, volcanoes, reservoirs, highways (301.403).

**6010-04**  The students will understand beginning geographic concepts.
- **01** Identify map symbols which represent real things (301-802).
- **02** Identify the meaning of symbols on simple picture maps (301-811).
- **03** Identify the directions of north and south in relation to the North and South poles (301-806).
- **04** Name the days of the week in order, special dates on the calendar, and certain physical characteristics of months and seasons (301-809).
- **05** Construct a simple map of the classroom (301-810).

**6010-05**  The students will understand that individuals have unlimited wants but limited resources.
- **01** Define scarcity and identify items that are scarce in the classroom (304-601).
- **02** Define and identify wants and needs (300-603).
- **03** Identify resources that are used to make the things we need or want (300-601).
- **04** Identify the purpose of money as something which is used to purchase things.
- **05** Define private property as things we own.
- **06** Discuss the value of work as a way to achieve personal satisfaction and earn money (300-604).

**6010-06**  The students will understand that individuals need rules to govern group behavior.
- **01** Make classroom rules with other class members (301-703).
- **02** Identify the reasons for authority and rules (301-704).
- **03** Show how rules help promote fair treatment of all people (301-705).
- **04** Explain how orderly classrooms depend upon cooperation (301-706).
- **05** Participate in patriotic activities, except when against religious beliefs (301-707, 8, 9).
- **06** Identify acts of honesty, morality, courtesy, and good citizenship/character in classmates, teachers, and other adults.
Washington

Documents Utilized

*Subgroup on Learning, Outcomes, and Assessment--Recommendations to the Governor's Council on Education Reform and Funding (June 1992)*
*Ready to Learn - Final Recommendations (June 1992)*

Background

The Subgoup on Learning, Outcomes, and Assessment, as part of the Governor's Council on Education Reform and Funding, developed a set of recommendations for the Legislature in 1992 that included the specification of a set of student learning goals and demonstrated outcomes. The state is developing content standards in two phases. Goal 1 includes the basics of communication, mathematics, reading, and writing. Goal 2 includes the arts, health and fitness, science, and social studies. Standards describe student learning at three levels that roughly coincide with elementary, middle, and high school. Developmental indicators are used to illustrate mastery. Prototype tasks and sample scoring guides will accompany the standards. The standards will be mandatory for districts by the year 2000 and will be tied to statewide assessments.

### Washington

#### STUDENT LEARNING GOALS

<table>
<thead>
<tr>
<th>GOAL 1</th>
<th>Communicate effectively and responsibly in a variety of ways and settings.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Demonstrated Outcomes</strong></td>
</tr>
<tr>
<td></td>
<td>Each Student:</td>
</tr>
<tr>
<td></td>
<td>A. gathers information and ideas through listening, observing, participating and reading.</td>
</tr>
<tr>
<td></td>
<td>B. organizes, analyzes, and applies information and ideas.</td>
</tr>
<tr>
<td></td>
<td>C. expresses information, ideas and emotions by using written and oral language and the arts, and by working with materials.</td>
</tr>
<tr>
<td></td>
<td>D. uses appropriate technology to gather, process and express information and ideas.</td>
</tr>
</tbody>
</table>

#### GOAL 2 | Know and apply the core concepts and principles of mathematics; social, physical and life sciences; arts: humanities; and healthful living. |

|        | **Demonstrated Outcomes**                                                 |
|        | Each Student understands and uses:                                        |
|        | A. the mathematical principles, structures and concepts.                  |
|        | B. the scientific principles, structures and concepts.                    |
|        | C. the principles, structures and concepts of social, economic and political systems. |
|        | D. the principles of democratic living, including an awareness of cultural diversity. |
|        | E. the principles, structures and concepts of the arts and humanities.     |
|        | F. the elements of healthful living.                                      |

| A2a, F3a, F3d | F1a, F3b, F1a, F4a | C3, E, F2, F3 | F3c, F3g | F3c, F3 | E, G3 | C3 |
**GOAL 3**  Think critically and creatively and integrate experience and knowledge to form reasoned judgements and solve problems.

**Demonstrated Outcomes**  
Each Student can:

A. engage and apply problem solving by:
   1. identifying problems
   2. formulating alternative solutions and consequences.
   3. analyzing and evaluating information necessary to solve problems.
   4. applying analysis in making informed choices based on information and consequences.
   5. selecting and applying appropriate technology to solve problems.

B. integrate information, ideas, materials and equipment form multiple disciplines to solve problems.

C. make connections between what is already known and new fields of knowledge.

D. make connections that have personal relevance and meaning.

**GOAL 4**  Function as caring and responsible individuals and contributing members of families, work groups, and communities.

**Demonstrated Outcomes**  
Each Student demonstrates:

A. personal attributes of:
   1. honest and ethical behavior
   2. self-directed life long learning
   3. adaptability and flexibility in the face of the known and unknown
   4. resourcefulness and creativity
   5. self-esteem and self-discipline
   6. interpersonal and leadership skills

B. citizenship through:
   1. acceptance of rights and responsibilities of self and others
   2. civic participation and community involvement
   3. a multi-cultural and world view

C. employability through:
   1. ability to seek and obtain employment
   2. motivation and persistence
   3. positive work habits
   4. productive team member skills
West Virginia

Documents Utilized

*West Virginia Programs of Study: Instructional Goals and Objectives--Early Childhood Education K-4 (July 1992)*

*West Virginia Programs of Study: Instructional Goals and Objectives--Middle Childhood Education 5-8 (July 1992)*

Background

West Virginia educational policy articulates instructional goals (developed at K-4, 5-8, and 9-12) that are mandatory. Instructional objectives, developed for each grade from K-12 are recommended. These programs of study describe student learning in the following areas: art, driver’s education, English/language arts, foreign languages, health, mathematics, music, physical education, safety, science, and social studies.

### West Virginia

#### ART PROGRAM OF STUDY

**INSTRUCTIONAL OBJECTIVES**

**LEVEL K**

At this level, children learn to identify and use line, color, shape and texture. Children should be guided in use of painting, sculpture and drawing to develop creative skills, motor skills, art appreciation and making decisions about art. Each child's innate creativity should be fostered; creative work is preferred over prepared models.

The Learner Will:

1. Identify the primary, secondary and neutral colors, i.e., red, yellow, blue; orange, green, violet; white, black, browns.
2. Create art using primary, secondary and neutral colors.
3. Identify common line types, e.g., straight, diagonal, curved, zig-zag, broken.
4. Create art using common line types with a variety of tools and materials.
5. Identify at least five basic drawing shapes, e.g., circle, square, oval, rectangle, triangle.
6. Create art using basic drawing shapes.
7. Touch and create a variety of man-made and natural textures.
8. Create art using a variety of textures, e.g., yarn, sand.
9. Identify sculpture (as distinguished from flat work).
10. Create sculpture(s) with a variety of materials and tools.
11. Verbalize feelings evoked by art--his/her own and others.
12. Create art expressing a personal feeling.
13. Identify art found in his/her environment.
14. Discuss the work artists do.
15. Select his/her own favorite work for display(s).

#### ENGLISH LANGUAGE ARTS PROGRAM OF STUDY

Criteria of Excellence: Instructional Goals and Objectives for English Language Arts (Reading, Writing, Spelling, Handwriting, Speaking, Listening, Viewing)

194
SECTION 5.0 EARLY CHILDHOOD EDUCATION PROGRAM OF STUDY

5.1 Instruction in English language arts at level K-4 should develop effective communication. To achieve this, the program of study should encourage the interactive nature of the English language arts. Students move from prior knowledge and experience through basic skill acquisition toward independence and appreciation.

5.2 Effective communication requires the integration of strategies in reading, writing, spelling, handwriting, speaking, listening, and viewing. Knowledge of, as well as experience with, various literary genres should be encouraged across the curriculum.

HEALTH PROGRAM OF STUDY

SECTION 3 EARLY CHILDHOOD EDUCATION

The goal of the Health Education Program of Study in Early Childhood Education is to prepare students to assume responsibility for their own health and wellness. They need to begin to understand the relationships between certain health and hygiene practices and their own health status, and demonstrate the ability to make sound health choices. The local school district shall, therefore, provide multiple opportunities for students to:

Know and understand the basic hygiene and health practices related to cleanliness, rest and exercise, dental health, and protection from the environment, and how these factors influence disease processes.

Know and understand the relationships between food choices and exercise and health status including weight, fitness and health indicators such as blood cholesterol.

Know the major parts and functions of the different body systems, including the following: digestive, circulatory, respiratory, musculo-skeletal, and nervous.

Understand and practice safety skills and demonstrate basic care for minor injuries.

Understand the differences between drugs used for medicinal purposes and those that are unlawful and recognize the importance of correct medication usage.

Recognize feelings, coping strategies, and personal relationships and how they affect emotions and self-concept.

Recognize types of community health agencies and providers and demonstrate knowledge of consumer health issues.

Understand good touching versus bad touching, and the need for reporting child abuse.

MATHEMATICS PROGRAM OF STUDY

EARLY CHILDHOOD EDUCATION, GRADES K-4

LEVEL K

This area of study emphasizes the use of manipulatives and concrete materials so that kindergarten children explore and develop ideas that are fundamental to the study of mathematics: number, counting, ordering, comparing, classifying, patterning, shape, size, position, numeration, measuring, and problem solving. The emphasis is on experience and individual growth.

The Learner Will:

PROBLEM SOLVING
1. Demonstrate a desire to investigate;
2. Act out problem;
3. Develop a model for a problem.

COMMUNICATION
4. Clarify ideas using appropriate math vocabulary;
### West Virginia

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>5.</td>
<td>Verbalize mathematical processes;</td>
</tr>
<tr>
<td>6.</td>
<td>Use manipulatives to show the operations.</td>
</tr>
</tbody>
</table>

**REASONING**

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<tr>
<th></th>
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<tbody>
<tr>
<td>7.</td>
<td>Identify a reasonable answer for a problem.</td>
</tr>
</tbody>
</table>

**CONNECTIONS**

<p>| | |</p>
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<tr>
<th></th>
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<tbody>
<tr>
<td>8.</td>
<td>Link mathematical symbols and shapes to everyday situations, e.g. number of fingers, toes, place in line.</td>
</tr>
</tbody>
</table>

**ESTIMATION**

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<tr>
<td>9.</td>
<td>Make a reasonable estimate which is taller, longer, or heavier.</td>
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**NUMBERS AND NUMBER SENSE**

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<tr>
<td>10.</td>
<td>Estimate and determine quantity by counting objects up to 20;</td>
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<tr>
<td>11.</td>
<td>Count backwards from 10 using objects;</td>
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<tr>
<td>12.</td>
<td>Recognize (at a glance) 2, 3, or 4 objects arranged in varying patterns;</td>
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<tr>
<td>13.</td>
<td>Demonstrate with objects the concepts of equal, not equal, more/less;</td>
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<tr>
<td>14.</td>
<td>Recognize and show meaning of numerals 0-10 out of sequence.</td>
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**CONCEPTS OF WHOLE NUMBER OPERATIONS**

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<tr>
<td>15.</td>
<td>Physically model sums less than 10.</td>
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**GEOMETRY AND SPATIAL SENSE**

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<tr>
<td>16.</td>
<td>Recognize and describe spatial relationships, e.g. inside/outside, top/bottom, before/after, over/under, left/right;</td>
</tr>
<tr>
<td>17.</td>
<td>Classify geometric models according to selected characteristics (size, shape, color, thickness);</td>
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<tr>
<td>18.</td>
<td>Use physical materials to construct, identify, and classify simple geometric shapes.</td>
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**MEASUREMENT**

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<tr>
<td>19.</td>
<td>Order sets of objects by length;</td>
</tr>
<tr>
<td>20.</td>
<td>Develop a nonstandard unit to measure objects;</td>
</tr>
<tr>
<td>21.</td>
<td>Identify the value of pennies and nickels;</td>
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<tr>
<td>22.</td>
<td>Read time to the nearest hour;</td>
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<tr>
<td>23.</td>
<td>Name the days of the week and recognize and describe the seasons of the year.</td>
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**STATISTICS AND PROBABILITY**

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<tbody>
<tr>
<td>24.</td>
<td>Collect and organize data as a group activity;</td>
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<tr>
<td>25.</td>
<td>Construct a pictograph or bar graph using data.</td>
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**FRACTIONS AND DECIMALS**

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<tr>
<td>26.</td>
<td>Introduce breaking a whole into its parts by participating in experiences that demonstrate a need for the use of fractions, e.g. package of crackers, Hershey bar;</td>
</tr>
<tr>
<td>27.</td>
<td>Be able to identify and name halves and wholes using concrete models.</td>
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**PATTERNS AND RELATIONSHIPS**

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<tr>
<td>28.</td>
<td>Verbally compare likenesses and differences;</td>
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<tr>
<td>29.</td>
<td>Sort objects by selected characteristics (color, size, shape);</td>
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<tr>
<td>30.</td>
<td>Develop and justify own rule for classifying a group of objects;</td>
</tr>
<tr>
<td>31.</td>
<td>Observe and explain patterns;</td>
</tr>
<tr>
<td>32.</td>
<td>Create patterns with actions, words, and objects (clapping, jumping, animal sounds, blocks).</td>
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</table>
MUSIC PROGRAM OF STUDY

EARLY CHILDHOOD EDUCATION, GRADES K-4

AREA OF STUDY: CLASSROOM/GENERAL MUSIC
This area of study Classroom/General Music is an Early Childhood and Middle Childhood Education sequence of study which constitutes a body of knowledge to be offered in the public schools of West Virginia. This area of study provides a basic introduction to music for all students through activities in singing, playing classroom rhythm instruments, listening, moving to music, and reading notation.

LEVEL K
This level of study provides an introduction to the basic elements of music: melody, harmony, form, rhythm, tempo, dynamics and timbre through both rote and discovery learning.

The Learner Will:
1. Identify and demonstrate high and low pitches.
2. Demonstrate the contour of a melody.
3. Demonstrate stepwise patterns.
4. Perform skipwise patterns.
5. Perform the melodic patterns sol to mi and mi to sol.
6. Recognize pictorial representation for high and low tones, (e.g., sol and mi).
7. Differentiate between a melody played alone and a melody played with accompaniment.
8. Distinguish between same and different musical phrases and/or sections.
9. Demonstrate the beat of a musical composition.
10. Demonstrate the melodic rhythm of a song.
11. Demonstrate fast and slow tempos.
12. Demonstrate loud and soft dynamics.
13. Recognize the unique quality of his/her own voice.

PHYSICAL EDUCATION PROGRAM OF STUDY

EARLY CHILDHOOD EDUCATION, LEVEL K
This area of study emphasizes development of basic motor skills, flexibility, strength and coordination. Appropriate social interaction, basic knowledge of the body, safety practices, form and style, and participation in low organized games are addressed.

Learning Outcomes--The Learner Will:
1. Perform flexibility and strength exercises.
2. Demonstrate various examples of agility.
3. Demonstrate knowledge of various examples of body profiles.
4. Identify various body parts.
5. Demonstrate balance and posture while performing stationary and movement skills.
6. Demonstrate hand eye and foot eye coordination.
7. Demonstrate basic locomotor skills.
8. Demonstrate non-locomotor skills.
9. Demonstrate manipulative skills.
10. Demonstrate perceptual motor skills.
11. Demonstrate knowledge of the elements of form and style for motor skills and patterns.
12. Participate in low organized games.
13. Perform stunts and tumbling.
SAFETY PROGRAM OF STUDY

LEVEL K
This area of study focuses on the need for knowing and following basic safety practices at home, school, at play, and in traffic situations. Seeking adult help, whom and how to reach them in emergency situations, and certain aspects of fire safety are also emphasized.

Learning Outcomes- The Learner Will:
1. Demonstrate a knowledge of the need for personal and/or housekeeping cleanliness as it relates to safety. 
2. Demonstrate a knowledge of the five senses and how they contribute to one's safety. 
3. Recognize the relationship between appropriate clothing, weather and safety. 
4. Demonstrate an understanding and the need for caution when strangers are encountered. 
5. Demonstrate an understanding and the need for safety with animals. 
6. Understand the importance of reporting an emergency and knowing the parent's/guardian's name, address and telephone numbers. 
7. Know the procedures to follow if lost or separated from parents or friends while in the city or on a trip. 
8. Recognize the right to personal body privacy, the difference between a good touch and a bad touch, and the need prior reporting violations to persons in authority. 
9. Demonstrate an understanding of how many toys and game apparatus may be both enjoyable and potentially hazardous at the same time, and know the value of maintaining toys/games/equipment in good condition. 
10. Demonstrate a knowledge that many homes contain safe and unsafe situations, and that home safety can be generally improved. 
11. Recognize Mr. Yuck and/or a skull and crossbones as labels for poisonous substances. 
12. Demonstrate a knowledge of the hazards of sharp objects such as pencils, scissors, and rulers. 
13. Obey proper walking patterns in the school hallways and on stairs. 
14. Demonstrate a knowledge of acceptable pedestrian safety practices, and obey all traffic signals, signs and pavement markings. 
15. Demonstrate a knowledge of the safest route to and from one's home and bus/school. 
16. Show an awareness of the importance of fastening a safety belt and other safe riding behaviors, whenever a passenger in a motor vehicle. 
17. Demonstrate an understanding of how to wait for a bus, how to safely approach, enter, ride on and exit a bus and bus stop area. 
18. Obey safe practices around fire and heating devices (fireplaces, stoves and heaters), and demonstrate an understanding of the importance of and procedures for leaving a burning building, reporting fires, responding to a fire alarm, and identifying/utilizing primary and alternate escape routes. 
19. Recognize the causes of pollution and how one's safety may be affected. 
20. Recognize and understand the importance of not using any medicine or drug without permission of parent(s)/guardian(s). 
21. Demonstrate an understanding of and the need for water safety. 
22. Understand the need for seeking help for cleaning and/or caring for bleeding cuts, puncture wounds, abrasions, bites and stings. 
23. Recognize the universal sign for choking on food or other objects and immediately seek the help of an adult or older person, as a victim or as an observer, if the situation is encountered.
24. Demonstrate a concern for personal safety and also that of others by following safety practices daily.

**SCIENCE PROGRAM OF STUDY**

**COORDINATED AND THEMATIC SCIENCE, KINDERGARTEN--FOURTH GRADE**

### 1.0 NATURE OF SCIENCE

To develop an understanding of the nature of science.

1.1 Perceive science as the humans’ search for and understanding of the world.
- Ask questions about themselves and their world.
- Recognize the roles of people involved in scientific careers.

1.2 Explore objects and events.
- Describe objects by using the five senses.
- Recognize that change occurs in nature.

1.3 Probe deeply into natural phenomena by communicating and answering questions.
- Use a variety of communication techniques (graphs, pictures, etc.).
- Share discoveries with others.

1.4 Realize that science is never finished.
- Observe changes in the environment.
- Recognize that a solution to one scientific problem often creates new problems.

1.5 Stimulate the joy of discovery about the natural world.
- Develop a positive self-concept through successful involvement in science activities.
- Participate in open-ended experiences.
- Ask questions about the natural world.

### 2.0 SCIENTIFIC ATTITUDES/HABITS OF MIND

To cultivate scientific attitudes and values, to develop an understanding of the limits of science, and to evaluate scientific advances and technological applications as they impact society.

2.1 Demonstrate innate curiosity, initiative, and creativity.
- Ask questions.
- Design simple experiments.

2.2 Be in awe and wonder of the natural world.
- Observe the patterns and variations of nature.
- Interact with natural objects in the environment.

2.3 Listen to and be tolerant of different viewpoints.
- Engage in collaborative activities that lead to group decision making.
- Exhibit a willingness to modify ideas when new information is presented.
- Develop respect for differing opinions.

2.4 Trust what the learner observes.
- Develop a willingness to take risks by trying new tasks and skills.
- Accept results of their own discoveries.

2.5 Continue probing phenomena until questions are resolved.
- Engage in problem-solving activities that have multiple solutions or explanations.
- Recognize that developing solutions to problems requires time and patience.

2.6 Develop respect and responsibility for the environment.
- Recognize the interrelationships of living and non-living things.
- Demonstrate an appreciation of the environment by engaging in conservation practices.
West Virginia

3.0 SCIENTIFIC PROCESSES/THINKING SKILLS

To develop thinking skills and processes for investigating the world, solving problems, and making decisions.

3.1 Participate in inquiry-based, manipulative activities that stimulate and develop thinking skills.
   - Develop skills of observation.
   - Use a variety of classification systems.
   - Collect and record information.
   - Describe trends of data and make predictions based on that data.
   - Draw conclusions.
   - Ask questions and solve problems creatively.

3.2 Use logical reasoning as a basis for decision making.
   - Participate in decision making activities.
   - Explain the basis for decisions.

3.3 Recognize that science includes both individual and cooperative adventures.
   - Work individually and in groups to solve problems.
   - Observe scientists at work through field trips, audiovisual materials and/or current literature.

4.0 LABORATORY INVESTIGATIONS/HANDS-ON LEARNING

To acquire skills for learning through concrete manipulation of the tools and materials of science.

4.1 Use simple scientific instruments and every day materials to investigate the natural world.
   - Observe the natural world using instruments such as a hand lens, microscope, telescope, etc.
   - Make temperature, volume, linear, and mass measurements.
   - Employ materials and equipment to illustrate science concepts such as physical forces, magnetism, electricity, etc.

4.2 Demonstrate safe and proper techniques for handling, manipulating, and caring for science materials.
   - Follow safety procedures when handling and manipulating science equipment and materials.
   - Respect the safety of other students by following procedures and maintaining a clean work area.
   - Treat living organisms humanely.

4.3 Engage in active inquiries, investigations and hands-on activities for a minimum of 50% of the instructional time.
   - Realize that hands-on activities lead to development of scientific concepts.
   - Participate in open-ended investigations.
   - Regularly participate in hands-on activities that develop laboratory skills.

5.0 SCIENCE CONTENT

To integrate the fields of science and establish connections with other discipline areas and daily life experiences.

5.1 Develop an understanding of scientific themes including systems, changes, and models.
5.2 Integrate physical, earth, and life sciences.
5.3 Establish connections across the curriculum.
5.4 Investigate living things.
5.5 Explore the universe and its changes.
5.6 Examine the interrelationship between matter and energy.
### West Virginia

#### KINDERGARTEN CONTENT CONCEPTS

**SYSTEMS**

- **Properties of living things:** plants; animals.
  - Use the five senses. Observe, describe, sort, classify, and record shape, size, color, and texture.
- **Properties of non-living things:**
  - Observe, describe, sort, classify, and record shape, size, color, and texture.
- **Living things and non-living things in the environment:**
  - Observe, investigate, describe, and record.
- **Environment:** weather; seasons; features of the earth; recycling.
  - Explore, observe, investigate, describe, and record.
- **Properties of motion:** ways of moving; direction; speed.
  - Sort, classify, describe, and record.
- **Forms of energy:** heat; light; sound; magnetism.
  - Observe, produce, classify, investigate, describe, and record.

**CHANGES**

- **Change in living things:** plants; animals.
  - Observe, explore, investigate, compare, describe, and record.
- **Change in weather:** seasons; earth.
  - Observe, explore, investigate, compare, describe, and record.
- **Change in and uses of energy:** heat; light; sound.
  - Observe, investigate, describe, record, and apply.

**MODELS**

- **View of the environment** (intuitive).
  - Draw, dramatize, describe, and construct.
- **Awareness of sun and earth; earth and moon.**
  - Draw, dramatize, describe, and construct.

**6.0 SCIENCE HISTORY**

- To develop relationships between scientific milestones and how these milestones influence current scientific thought.
  - **6.1 Study the lives and discoveries of scientists.**
    - Identify past and present scientists and their contributions.
    - Develop a relationship between scientific discoveries and their positive/negative consequences.
    - Realize that scientists come from diverse cultures and backgrounds.
  - **6.2 Recognize that science changes over time.**
    - Examine differences in methods and equipment used by scientists in the past.
    - Trace the evolution of selected science concepts (light, magnetism, electricity, etc.)
    - Acknowledge that new discoveries will evolve over time.

**7.0 SCIENCE, TECHNOLOGY, AND SOCIETY**

- To develop an understanding of the relationship of science and technology in the context of society.
  - **7.1 Use the tools of science effectively and safely.**
    - Use scientific instruments such as microscopes, graduated cylinders, and balances.

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Observe rules of safety relating to the use of science equipment and materials.

7.2 Become aware of scientific careers.
   - Recognize the role of science in all careers.
   - Develop an awareness of scientific careers through speakers, field trips, films, role-playing, books, etc.

7.3 Recognize the use of science in everyday life.
   - Identify ways that science and technology have affected the quality of life in West Virginia and other parts of the earth.
   - Apply selected science concepts to daily events.
   - Engage in activities to help resolve a local science-technology-society issue.

SOCIAL STUDIES PROGRAM OF STUDY, LEVEL KINDERGARTEN

The Learner Will:

A Child's Role In Self And Group Management
1. Recognize situations in which rules and leadership are needed.
2. Accept responsibilities along with rights for responsible citizenship.
3. Use problem solving skills to resolve conflicts by engaging in group planning and decision making.
4. Begin to identify sources of information to answer questions.

A Child's Study Skills
5. Suggest appropriate reference sources to answer specific questions, collect information, and prepare short reports.
6. Collect, organize and present data in physical form (symbols, pictures, charts, tables).
7. Use an age-appropriate social studies vocabulary.

A Child's Place In Time
8. Explore the past through stories of people, pictures, songs, holidays, customs and traditions; and demonstrate respect for patriotic symbols.
9. Construct simple time sequences from past to present, recognizing the changes that occur.

A Child's Place In Space
10. Locate physical objects in space and recognize familiar features of the environment.
11. Recognize simple models which represent physical reality.

A Child's Needs And Wants
12. Identify some resources that are commonly available and others that are scarce in home, class, and community.
13. Evaluate personal needs and wants, and how those needs/wants are supplied.

A Child's Place In Society
14. Demonstrate appropriate behaviors and expectations in different situations.
15. Predict courses of action in specific situations and evaluate likely consequences to determine if actions are responsible or irresponsible.
16. Investigate similarities and differences in various group memberships, including families and roles of members (avoid sexual stereotyping).
17. Build a sense of self and self worth through his/her teacher's encouragement of individuality and uniqueness.
18. Build a sense of empathy toward other times and cultures.