## Idaho Department of Education Public Schools Agenda

## **STATE BOARD OF EDUCATION**

## March 11-12, 2004

## **Boise State University, Boise**

- A. Request for Letters of Authorization, Bob West
- **B.** Nampa School District Presentation, Jay Hummel
- C. Adoption of Electronic Curricular Materials, Bob West (Dan Prinzing)
- **D.** Nominations for Curricular Materials Selection Committee, Bob West (Dan Prinzing)
- E. State Technology Plan, Dawn Wilson
- F. Standards for Grade 8, Dawn Wilson
- G. Superintendent's Report, Marilyn Howard

## A. SUBJECT:

## Letters of Authorization

## **BACKGROUND:**

At its January 15-16, 2004, meeting, the Professional Standards Commission approved Letters of Authorization for recommendation to the State Board of Education for its final approval.

Pertinent to the Letters of Authorization, State Board of Education Rule IDAPA 08.02.02.070.01 states that, "The final recommendation of the Commission will be submitted to the State Board of Education by the Superintendent of Public Instruction."

## **RECOMMENDATIONS:**

The State Department of Education recommends that the State Board of Education give final approval for the Letters of Authorization that have been submitted as approved by the Professional Standards Commission at its January 15-16, 2004, meeting.

## **BOARD ACTION:**

The State Board carried to approve/disapprove/table the requests for Letters of Authorization as submitted by the Professional Standards Commission. It was moved by \_\_\_\_\_\_, seconded by

\_\_\_\_\_, and carried.

## **ATTACHMENTS:**

1. Approval list for Letters of Authorization

## Professional Standards Commission January 15-16, 2004 Letter of Authorization Requests

|          | REQUESTS               |      |               | The district's request is for a: |                               | 1st yr, 2nd yr |
|----------|------------------------|------|---------------|----------------------------------|-------------------------------|----------------|
| FTE      | NAME                   | DIST | DISTRICT NAME | CERTIFICATE                      | ENDORSEMENT                   | or 3rd yr      |
| 1        | Belliston, Jeremy L.   | 411  | Twin Falls    | Standard Exceptional Child       | Generalist                    | 3              |
| 1        | Blake, Jack            | 101  | Boundary Co.  | Standard Elementary              | all subjects                  | 2              |
| 1        | Compton, Debby Jo      | 412  | Buhl          | Standard Exceptional Child       | Generalist                    | 3              |
| 1        | Friend, Heidi          | 136  | Melba         | Standard Exceptional Child       | Generalist                    | 1              |
| 1        | Greenleaf, Kelsey      | 221  | Emmett        | Standard Exceptional Child       | Generalist                    | 2              |
| 1        | Hall, Clifford         | 411  | Twin Falls    | Standard Elementary              | all subjects                  | 1              |
| 1        | Jones, Jeremiah        | 137  | Parma         | Standard Secondary               | Standard Mathematics          | 1              |
| 1        | Larsen, Vicki E.       | 411  | Twin Falls    | already has certificate          | Reading                       | 3              |
| 1        | Lileks, David A.       | 2    | Meridian      | Standard Exceptional Child       | Generalist                    | 1              |
| 1        | McCarthy, Stormi       | 412  | Buhl          | EC/ECSE Blended                  | birth thru grade 3            | 1              |
| 1        | Olson, Ann C.          | 72   | Basin         | Standard Elementary              | all subjects                  | 1              |
| 1        | Ravet, Lori E.         | 287  | Troy          | Pupil Personnel Services         | School Counselor              | 1              |
| 1        | Runningwolf, Michael   | 139  | Vallivue      | Standard Exceptional Child       | Generalist                    | 1              |
| 1        | Smith, Joan            | 292  | South Lemhi   | Standard Secondary               | English                       | 3              |
| 1        | Underwood, Julie A.    | 221  | Emmett        | Standard Exceptional Child       | Generalist                    | 2              |
| 1        | Williams, Kelsey       | 136  | Melba         | Standard Exceptional Child       | Generalist                    | 1              |
| 1        | Woodruff, Elizabeth T. | 72   | Basin         | Administrator                    | Director of Special Education | 1              |
|          |                        |      |               |                                  |                               |                |
|          |                        |      |               |                                  |                               |                |
|          |                        |      |               |                                  |                               |                |
|          |                        |      |               |                                  |                               |                |
|          |                        |      |               |                                  |                               |                |
|          |                        |      |               |                                  |                               |                |
|          |                        |      |               |                                  |                               |                |
|          |                        |      |               |                                  |                               |                |
|          |                        |      |               |                                  |                               |                |
|          |                        |      |               |                                  |                               |                |
|          |                        |      |               |                                  |                               |                |
|          |                        |      |               |                                  |                               |                |
|          |                        |      |               |                                  |                               |                |
|          |                        |      |               |                                  |                               |                |
|          |                        |      |               |                                  |                               |                |
|          |                        |      |               |                                  |                               |                |
|          |                        |      |               |                                  |                               |                |
|          |                        |      |               |                                  |                               |                |
|          |                        |      |               |                                  |                               |                |
|          |                        |      |               |                                  |                               |                |
|          |                        |      |               |                                  |                               |                |
| <b> </b> |                        |      |               |                                  |                               |                |
|          |                        |      |               |                                  |                               | †              |
|          |                        |      |               |                                  |                               | †              |
|          | Total Now Paguasta     |      |               |                                  |                               |                |

17 Total New Requests

## **B. SUBJECT:**

Nampa School District Presentation, Letters of Authorization

## C. SUBJECT:

## Adoption of Curricular Materials and Related Instructional Materials as Recommended by the Curricular Materials Selection Committee

## **BACKGROUND:**

The Administrative Rules of the State Board of Education, IDAPA 08.02.03.112 describes the adoption process for curricular materials. Materials are adopted for a period of five (5) years and multiple adoptions are made in each subject area.

Idaho Code 33-118A defines curricular materials as "textbook and instructional media including software, audio/visual media and Internet resources."

The Curricular Materials Selection Committee is charged with the responsibility to screen, evaluate, and recommend curricular materials for adoption by the State Board of Education.

## **<u>RECOMMENDATION:</u>**

The State Department of Education recommends the adoption of curricular materials as outlined in the attached 2003-2004 Electronic Curricular Materials Listing.

## **BOARD ACTION:**

The State Board of Education carried to approve/disapprove/table the request by/for adoption of curricular materials and related instructional materials as recommended by the Curricular Materials Selection Committee as submitted. Moved by \_\_\_\_\_\_, seconded by \_\_\_\_\_\_, and carried.

## **ATTACHMENTS:**

1. 2003-2004 Electronic Curricular Materials Listings

|                               |                   | Math                            |           |                |                              |
|-------------------------------|-------------------|---------------------------------|-----------|----------------|------------------------------|
| Publisher                     | Title of Material | Author                          | Copyright | Grade<br>Level | R = Resource<br>*Correlation |
| AutoSkill                     | Academy of Math   | AutoSkill International<br>Inc. | 2002-2003 | K              | R                            |
| American<br>Education<br>Corp | Mathematics I     | AEC Staff                       | 2001      | 1              | R                            |
| AutoSkill                     | Academy of Math   | AutoSkill International<br>Inc. | 2002-2003 | 1              | R                            |
| American<br>Education<br>Corp | Mathematics II    | AEC Staff                       | 2001      | 2              | R                            |
| AutoSkill                     | Academy of Math   | AutoSkill International<br>Inc. | 2002-2003 | 2              | R                            |
| American<br>Education<br>Corp | Mathematics III   | AEC Staff                       | 2001      | 3              | R                            |
| AutoSkill                     | Academy of Math   | AutoSkill International<br>Inc. | 2002-2003 | 3              | R                            |
| American<br>Education<br>Corp | Mathematics IV    | AEC Staff                       | 2001      | 4              | R                            |
| AutoSkill                     | Academy of Math   | AutoSkill International<br>Inc. | 2002-2003 | 4              | R                            |
| American<br>Education<br>Corp | Mathematics V     | AEC Staff                       | 2001      | 5              | R                            |
| AutoSkill                     | Academy of Math   | AutoSkill International<br>Inc. | 2002-2003 | 5              | R                            |
| American<br>Education<br>Corp | Mathematics VI    | AEC Staff                       | 2001      | 6              | R                            |
| AutoSkill                     | Academy of Math   | AutoSkill International<br>Inc. | 2002-2003 | 6              | R                            |
| American<br>Education<br>Corp | Mathematics VII   | AEC Staff                       | 2001      | 7              | R                            |
| AutoSkill                     | Academy of Math   | AutoSkill International<br>Inc. | 2002-2003 | 7              | R                            |
| American<br>Education<br>Corp | Mathematics VIII  | AEC Staff                       | 2001      | 8              | R                            |
| AutoSkill                     | Academy of Math   | AutoSkill International<br>Inc. | 2002-2003 | 8              | R                            |
|                               |                   | General                         |           |                |                              |
| American<br>Education<br>Corp | Real World Math   | AEC Staff                       | 2001      | 9-12           | R                            |

|                               |                    | Pre-Algebra  |      |       |   |  |  |  |
|-------------------------------|--------------------|--------------|------|-------|---|--|--|--|
|                               | i i c-ragebi a     |              |      |       |   |  |  |  |
| American<br>Education<br>Corp | Pre-Algebra        | AEC Staff    | 2001 | 7-9   | R |  |  |  |
|                               |                    | Algebra      |      |       |   |  |  |  |
| American<br>Education<br>Corp | Algebra I, Part 1  | AEC Staff    | 2001 | 8-10  | R |  |  |  |
| American<br>Education<br>Corp | Algebra I, Part 2  | AEC Staff    | 2001 | 8-10  | R |  |  |  |
|                               |                    | Geometry     |      |       |   |  |  |  |
| American<br>Education<br>Corp | Geometry           | AEC Staff    | 2001 | 9-11  | R |  |  |  |
|                               |                    | Algebra II   |      |       |   |  |  |  |
| American<br>Education<br>Corp | Algebra II, Part 1 | AEC Staff    | 2001 | 10-12 | R |  |  |  |
| American<br>Education<br>Corp | Algebra II, Part 2 | AEC Staff    | 2001 | 10-12 | R |  |  |  |
|                               |                    | Trigonometry |      |       |   |  |  |  |
| American<br>Education<br>Corp | Trigonometry       | AEC Staff    | 2001 | 11-12 | R |  |  |  |
| Calculus                      |                    |              |      |       |   |  |  |  |
| American<br>Education<br>Corp | Calculus I         | AEC Staff    | 2001 | 12    | R |  |  |  |
| American<br>Education<br>Corp | Calculus II        | AEC Staff    | 2001 | 12    | R |  |  |  |

## January 2004 Review Recommendations

Approved for "Reading First" – Grades K-12

| Research Based Reading       |                    |                                    |           |                |              |  |
|------------------------------|--------------------|------------------------------------|-----------|----------------|--------------|--|
| Publisher                    | Title of Material  | Author                             | Copyright | Grade<br>Level | *Correlation |  |
| AutoSkill Academy of Reading |                    | AutoSkill International<br>Inc.    | 2002-2003 | К              | See Footnote |  |
| AutoSkill                    | Academy of Reading | AutoSkill International<br>Inc.    | 2002-2003 | 1              | See Footnote |  |
| AutoSkill                    | Academy of Reading | AutoSkill International<br>Inc.    | 2002-2003 | 2              | See Footnote |  |
| AutoSkill                    | Academy of Reading | AutoSkill International<br>Inc.    | 2002-2003 | 3              | See Footnote |  |
| AutoSkill                    | Academy of Reading | AutoSkill<br>International<br>Inc. | 2002-2003 | 4              | See Footnote |  |
| AutoSkill                    | Academy of Reading | AutoSkill<br>International<br>Inc. | 2002-2003 | 5              | See Footnote |  |
| AutoSkill                    | Academy of Reading | AutoSkill<br>International<br>Inc. | 2002-2003 | 6              | See Footnote |  |
| AutoSkill                    | Academy of Reading | AutoSkill<br>International<br>Inc. | 2002-2003 | 7              | See Footnote |  |
| AutoSkill                    | Academy of Reading | AutoSkill<br>International<br>Inc. | 2002-2003 | 8              | See Footnote |  |
| AutoSkill                    | Academy of Reading | AutoSkill<br>International<br>Inc. | 2002-2003 | 9              | See Footnote |  |
| AutoSkill                    | Academy of Reading | AutoSkill<br>International<br>Inc. | 2002-2003 | 10             | See Footnote |  |
| AutoSkill                    | Academy of Reading | AutoSkill<br>International<br>Inc. | 2002-2003 | 11             | See Footnote |  |
| AutoSkill                    | Academy of Reading | AutoSkill<br>International<br>Inc. | 2002-2003 | 12             | See Footnote |  |

|                               |                           | Social Studies |           |                |                              |
|-------------------------------|---------------------------|----------------|-----------|----------------|------------------------------|
| Publisher                     | Title of Material         | Author         | Copyright | Grade<br>Level | R = Resource<br>*Correlation |
| American<br>Education<br>Corp | Social Science I          | AEC Staff      | 2002      | 1              | R                            |
| American<br>Education<br>Corp | Social Science II         | AEC Staff      | 2002      | 2              | R                            |
| American<br>Education<br>Corp | Social Science III        | AEC Staff      | 2002      | 3              | R                            |
| American<br>Education<br>Corp | Social Science IV         | AEC Staff      | 2002      | 4              | R                            |
| American<br>Education<br>Corp | Social Science V          | AEC Staff      | 2002      | 5              | R                            |
| American<br>Education<br>Corp | Civics                    | AEC Staff      | 2002      | 6-7            | R                            |
| American<br>Education<br>Corp | History of America I      | AEC Staff      | 2002      | 6-8            | R                            |
| American<br>Education<br>Corp | History of America II     | AEC Staff      | 2002      | 6-8            | R                            |
| American<br>Education<br>Corp | U.S. Geography            | AEC Staff      | 2001      | 6-7            | R                            |
| American<br>Education<br>Corp | Mid-Level Social Sciences | AEC Staff      | 2002      | 7-8            | R                            |
| American<br>Education<br>Corp | History of the World I    | AEC Staff      | 2002      | 8-10           | R                            |
| American<br>Education<br>Corp | History of the World II   | AEC Staff      | 2002      | 8-10           | R                            |
| American<br>Education<br>Corp | World Geography           | AEC Staff      | 2001      | 8-9            | R                            |
| American<br>Education<br>Corp | Government                | AEC Staff      | 2001      | 9-12           | R                            |
|                               |                           | Economics      |           |                |                              |
| American<br>Education<br>Corp | Economics                 | AEC Staff      | 2001      | 9-12           | R                            |

| Publisher Title of Material |                            | Author    | Copyright | Grade Level | R = Resource<br>*Correlation |  |
|-----------------------------|----------------------------|-----------|-----------|-------------|------------------------------|--|
| Language Arts, Part II      |                            |           |           |             |                              |  |
| American<br>Education Corp  | Language Usage I           | AEC Staff | 2001      | 1           | R                            |  |
| American<br>Education Corp  | Language Usage II          | AEC Staff | 2001      | 2           | R                            |  |
| American<br>Education Corp  | Language Usage III         | AEC Staff | 2001      | 3           | R                            |  |
| American<br>Education Corp  | Language Usage IV          | AEC Staff | 2001      | 4           | R                            |  |
| American<br>Education Corp  | Language Usage V           | AEC Staff | 2001      | 5           | R                            |  |
| American<br>Education Corp  | Language Usage VI          | AEC Staff | 2001      | 6           | R                            |  |
| American<br>Education Corp  | Language Usage VII         | AEC Staff | 2001      | 7           | R                            |  |
| American<br>Education Corp  | Language Usage VIII        | AEC Staff | 2001      | 8           | R                            |  |
| American<br>Education Corp  | Language Usage – Secondary | AEC Staff | 2001      | 9-12        | R                            |  |
| American<br>Education Corp  | Writing I                  | AEC Staff | 2002      | 1           | R                            |  |
| American<br>Education Corp  | Writing II                 | AEC Staff | 2002      | 2           | R                            |  |
| American<br>Education Corp  | Writing III                | AEC Staff | 2002      | 3           | R                            |  |
| American<br>Education Corp  | Writing IV                 | AEC Staff | 2002      | 4           | R                            |  |
| American<br>Education Corp  | Writing V                  | AEC Staff | 2002      | 5           | R                            |  |
| American<br>Education Corp  | Writing VI                 | AEC Staff | 2002      | 6           | R                            |  |
| American<br>Education Corp  | Writing VII                | AEC Staff | 2002      | 7           | R                            |  |
| American<br>Education Corp  | Writing VIII               | AEC Staff | 2002      | 8           | R                            |  |
| American<br>Education Corp  | Writing IX                 | AEC Staff | 2002      | 9           | R                            |  |
| American<br>Education Corp  | Writing X                  | AEC Staff | 2002      | 10          | R                            |  |
| American<br>Education Corp  | Writing XI                 | AEC Staff | 2002      | 11          | R                            |  |
| American<br>Education Corp  | Writing XII                | AEC Staff | 2002      | 12          | R                            |  |

## January 2004 Review Recommendations

## **D. SUBJECT**:

## Appointments to the Idaho State Curricular Materials Selection Committee

## **BACKGROUND:**

The Administrative Rules of the Idaho Board of Education, IDAPA 08.02.03.112, describe the membership of the Idaho State Curricular Materials Selection Committee. Membership on the Committee is for a term of five (5) years with the exception of the representatives from the State Department of Education and the Division of Professional-Technical Education. Their terms are for one (1) year.

## **DISCUSSION:**

Currently there are four (4) openings on the Committee. The three (3) open positions being recommended for appointment at this time are: one (1) Parent Representative; one (1) Idaho Public School Secondary Classroom Teacher; and one (1) Idaho Public School Elementary Classroom Teacher. All recommendations are for a complete five-year term.

This leaves one (1) opening for a Parent Representative not filled.

## **RECOMMENDATION:**

The Department of Education recommends the appointment of <u>Dr. William</u> <u>K. Medlin</u>, Moscow, Idaho to fill a *Parent Representative* opening for a fiveyear term.

The Department of Education recommends the appointment of <u>Nick Smith</u>, Dean of Students, Bliss Schools to fill the *Idaho Public School Secondary Classroom Teacher* opening for a five-year term.

The Department of Education recommends the appointment of <u>Judith A.</u> <u>Walling</u>, Eagle Middle School, Grade 6, Boise, Idaho to fill the *Idaho Public School Elementary Classroom Teacher* opening for a five-year term.

## **BOARD ACTION:**

The State Board of Education carried to approve/disapprove/table the request for three appointments to the Idaho State Curricular Materials Selection Committee as submitted. Moved by \_\_\_\_\_\_, seconded by \_\_\_\_\_\_, and carried.

## **ATTACHMENTS:**

- 1. Dr. William K. Medlin, Letter of Interest and Resume
- 2. Nick Smith, Resume
- 3. Judith A. Walling, Letter of Interest and Resume

## Note: These materials were not received in electronic form. For copies or more information, contact Deanie Grant, 208-332-6974.

## **E. SUBJECT:**

## **Review and Approval of K-12 State Technology Plan**

## **BACKGROUND:**

Idaho Code 33-4805 states that one of the responsibilities of the Idaho Council for Technology in Learning (ICTL) is to "develop and maintain a statewide education technology plan to provide seamless education in Idaho." It also states that the plan shall be subject to review and approval by the State Board of Education (SBE). The pursuit of a seamless education system is aligned with the vision of the State Board of Education strategic plan.

As part of the No Child Left Behind federal legislation signed in January of 2002, every state that receives Title II-D - Enhancing Education Through Technology Funds, must have an approved technology plan on file with the United States Department of Education.

## **DISCUSSION:**

In April of 2001, the ICTL directed the State Department of Education (SDE) to begin coordinating the revision of the existing K-12 state technology plan written in 1996 titled – *Connections: A Statewide Plan for Technology in Idaho Public Schools.* 

To develop the plan, in 2001, various stakeholders including businessmen, parents, school district personnel, and the governor's office were interviewed. In 2002, educational stakeholders from across the state were brought together to develop a first draft by reviewing national level, OSBE, and SDE goals. This first draft was distributed and discussed at regional meetings. Comments received from around the state were considered as the task force met a second time and a second draft was developed. The second draft was distributed statewide and discussed at regional meetings as well as presented to the Board. In 2003, comments received from around the state were considered as the task force met a third time and a third draft was developed. The third draft was distributed statewide and discussed at regional meetings at the task force met a third time and a third draft was developed. The third draft was distributed statewide and discussed at regional meetings. The ICTL approved this draft in December 2003, and it is now being brought to the Board for approval.

*Connections 2004: A Statewide Plan for Technology in Idaho* is aligned with the higher education plan already approved by the Board.

## **RECOMMENDATIONS:**

The ICTL in conjunction with the State Department of Education recommends that the State Board of Education approve *Connections 2004: A Statewide Plan for Technology*.

## **BOARD ACTION:**

The State Board of Education approved/disapproved/tabled the State Department of Education's request to approve *Connections 2004: A Statewide Plan for Technology.* Moved by \_\_\_\_\_\_, seconded by \_\_\_\_\_\_, and carried.

## **ATTACHMENTS:**

1. Connections 2004: A Statewide Plan for Technology in Idaho



# Statewide Plan for Technology in Idaho

Published by: Dr. Marilyn Howard State Superintendent of Public Instruction Idaho State Department of Education 2004



## PREAMBLE



| Executive Summary                      |
|--|
| Vision2                                |
| Mission2                               |
| Statewide Technology Goals             |
| ntegration4                            |
| Technological Literacy                 |
| Professional Development               |
| Collaboration                          |
| Technology Systems                     |
| Assessment, Evaluation and Publication |
| Appendices                             |

## Executive Summary

#### Overview

The Statewide Plan for Technology in Idaho is based on six goals that reflect the essence of the No Child Left Behind Act of 2001. No Child Left Behind (NCLB) emphasizes the importance of the education students receive to ensure their participation and productivity in a future steeped in technological advancement.

#### No Child Left Behind

The No Child Left Behind (NCLB) Act of 2001 is based on four fundamental aspirations: stronger accountability for results, increased flexibility and local control, expanded options for parents, and an emphasis on teaching methods that have been proven to work. The Act's basic premise is to bridge the educational gap experienced by minority and disadvantaged students.

#### Statewide Technology Goals

The Statewide Technology Goals echo the spirit of the No Child Left Behind Act of 2001. The goals focus on (Technology) Integration, Technological Literacy, Professional Development, Collaboration, Technology Systems and Assessment, Evaluation and Publication. These goals are aimed at providing the means necessary for the educational success of each student.

#### Appendices

Idaho Council for Technology in Learning Advisory Team No Child Left Behind Federal Content Requirements Related State (Office of the State Board of Education - OSBE) and Federal (NCLB) Goals Glossary

#### Format

Within this document, objectives, actions and performance measures were established for each of the six goal areas. As resources and priorities vary throughout the state, it is anticipated that action items will be implemented differently by school districts. As well, different levels of responsibility (State and District) are included and are indicated by the following notation:

S – State

D – District

## VISION

Idaho envisions a model of education that ensures all students have the knowledge and skills to be successful life long learners. Idaho schools are places where students are motivated to learn by integrating technology into quality instruction. Families communities and educators collaborate to prepare knowledgeable citizens for the future.

## MISSION

Idaho promotes a thorough system of education that models effective design, implementation and evaluation of educational technology to support student achievement.

## STATEWIDE TECHNOLOGY GOALS

#### Integration

Improve the quality, effectiveness and relevance of instruction and learning by integrating technology with curriculum.

#### **Technology Literacy**

Assist every student to become technologically literate.

#### **Professional Development**

Promote professional development in technology use that enhances the educational process.

#### Collaboration

Promote the collaboration of schools, libraries, community members, state agencies, organizations, business and industry, post-secondary institutions, and public virtual learning environments to meet the needs of all learners.

#### **Technology Systems**

Create and maintain compatible and secure technology systems that enhance the efficient operation of schools.

#### Assessment, Evaluation and Publication

Assess, evaluate and publicize the effects of technology use by educators and students toward student learning and achievement.

## INTEGRATION

Improve the quality, effectiveness and relevance of instruction and learning by integrating technology with curriculum.

#### Narrative

Technology is everywhere and imbedded in everything. Digitized white boards, wireless communications, electronic note pads, Personal Digital Assistants (PDAs), electronic chip ignitions, Global Positioning Systems (GPS), Internet video streaming, Word Processor software, Spreadsheet software, Presentation software, Student Data Management software, Curriculum Management software, and the list goes on and on. Technological knowledge is therefore, an important element in the success of students, educators and administrators. Integration of technology with curriculum is such a fundamental step; it is the precept on which the other five goals are based.

#### **Objective A**

Include technology integration sample applications and content knowledge and skills in the Idaho State Achievement Standards and Courses of Study.

#### Actions

- S Integrate and align State technology standards with State content standards for students.
- S Integrate State assessments for students' progress in meeting technology standards into, and align with, the State assessment of students' progress in meeting content standards.
- S Include suggested activities for technology integration in Courses of Study guides.

#### **Performance Measures**

- □ S State technology standards are integrated into and aligned with State content standards for students.
- □ S State assessments for student's progress in meeting technology standards are integrated into and aligned with State assessment of students' progress in meeting content standards.
- □ S Courses of Study guides include suggested activities for technology integration.

#### Data Preparation and Reporting

- S Status of integration and alignment progress (based on rubric)
- S Resulting effects of integration and alignment activities on student achievement (based on rubric)
- $\Rightarrow$  S Number and description of updated Course of Study guides.

#### See Appendix D for Federal Content Requirements

See Appendix E for Related State (OSBE) and Federal (NCLB) Goals

#### **Objective B**

Identify innovative strategies and research-based best practices for integrating technology with curriculum and instruction.

#### Actions

- S, D Develop and maintain resources apprising all K-12 personnel with innovative teaching/learning strategies supported by research-based instructional methods and practices. (e.g. web site, press releases, newsletter)
- O S, D Provide on-line access to technology-infused lesson plans, classroom examples, and other digital resources aligned to State Achievement Standards through vehicles such as state web sites and ISIMS, to increase educator's understanding of how to incorporate technology most appropriately and effectively into instruction.

- S, D Collect and distribute examples of local best practices.
- S Promote a statewide curriculum management system to support technology integration for student academic achievement.

#### **Performance Measures**

- □ S, D K-12 personnel are continually apprised with innovative teaching and learning strategies supported by research-based instructional methods and practices, by means of web site, press releases, newsletter, etc.
- S, D On-line access of resources designed to increase an educator's understanding of how to incorporate technology most appropriately and effectively into instruction is available (e.g. technology-infused lesson plans, classroom examples, and other digital resources aligned to the Idaho State Achievement Standards through vehicles such as state web sites and ISIMS).
- □ S, D Best practices from local entities are collected, and distributed, via the Internet, etc.
- □ S A statewide curriculum management system to support technology integration for student academic achievement is either a "work-in-process" or is implemented.

#### **Data Preparation and Reporting**

- S, D Quantify the usage of the latest i.e. innovative in teaching/learning strategies supported by research-based instructional methods and practices by comparing circulated resources to accessed resources.
- S, D Survey educators to ascertain their assessment of their understanding, and the ease regarding how to: appropriately and effectively incorporate technology into instruction.
- $\stackrel{\scriptstyle \prec}{
  ightarrow}$  S Status of statewide curriculum management system implementation.

#### See Appendix D for Federal Content Requirements

See Appendix E for Related State (OSBE) and Federal (NCLB) Goals

#### **Objective C**

Promote the development of district curricula that incorporate innovative strategies and best practices for integrating technology with learning objectives.

#### Actions

- S, D Integrate and align State technology standards into and with local curriculum guides for students.
- S, D Integrate and align State assessments for students' progress in meeting technology standards into and with local assessments of students' progress in meeting curriculum standards.
- S, D Include suggested activities to incorporate innovative strategies and best practices for integrating technology with Local curriculum guides.

#### **Performance Measures**

- **D** S, D State technology standards are integrated into and aligned with local curriculum guides for students.
- □ S, D State assessments for student's progress in meeting technology standards are integrated into and aligned with local assessments of students' progress in meeting curriculum standards.
- S, D Local curriculum guides and technology are integrated based on suggested innovative strategies and best practices.

#### **Data Preparation and Reporting**

- $\stackrel{\sim}{\sim}$  S, D Status of integration and alignment progress (based on rubric).
- $\stackrel{\sim}{\sim}$  S, D Resulting effects of integration and alignment activities on student achievement (based on rubric).
- ☆ S, D Number and description of updated local curriculum guides.

#### **INTEGRATION**

See Appendix D for Federal Content Requirements See Appendix E for Related State (OSBE) and Federal (NCLB) Goals

## TECHNOLOGICAL LITERACY

Assist every student to become technologically literate.

#### Narrative

As the future workforce of our generation, our children will be required to know the basics of many computerized processes and systems to be successful in their respective endeavors. As educators, it is incumbent upon us to provide the basic skills necessary to function effectively in an ever-advancing technological world.

#### **Objective A**

Ensure delivery of technology education that is in conformance with Idaho Student Information Technology Standards and International Society for Technology in Education (ISTE) Standards for Students.

#### Actions

- S Align Idaho Student Information Technology Standards (ISITS) and respective benchmarks with International Society for Technology in Education (ISTE) standards for students.
- S Promote sound understanding of the nature and operation of technology systems as appropriate per grade level as outlined in the Idaho Student Information Technology Standards (ISITS).

#### **Performance Measures**

- □ S Idaho Student Information Technology Standards (ISITS) are aligned with International Society for Technology in Education (ISTE) Student Standards.
- □ S Include Idaho Student Information Technology Standards (ISITS) within the Courses of Study.

#### **Data Preparation and Reporting**

S - Results of Students' demonstration of proficiency in the use of technology as appropriate to grade level benchmark(s) as outlined in International Society for Technology in Education (ISTE) and Idaho Student Information Technology Standards (ISITS), in the categories of:

Basic operations and concepts; Social, ethical, and human issues; Technology productivity tools; Technology communications tools; Technology research tools; Technology problem-solving and decision-making tools.

See Appendix D for Federal Content Requirements See Appendix E for Related State (OSBE) and Federal (NCLB) Goals

#### **Objective B**

Support learners with special needs and varied linguistic, cultural, ethnic and socio-economic backgrounds.

#### Actions

- S, D Promote and provide support toward the use of assistive technologies for special needs students.
- S, D Identify the education delivery needs of learners with varied linguistic, cultural, ethnic and socioeconomic backgrounds.
- S, D Provide optional education delivery methods to meet the needs of learners with varied linguistic, cultural, ethnic and socio-economic backgrounds.

#### Performance Measures

- □ S, D Special needs students are meeting, and or exceeding, technological literacy standards, using assistive technologies when necessary.
- □ S, D Education delivery needs of learners with varied linguistic, cultural, ethnic and socio-economic backgrounds have been identified.
- □ S, D Optional education delivery methods to meet the needs of learners with varied linguistic, cultural, ethnic and socio-economic backgrounds are implemented.

#### **Data Preparation and Reporting**

- S, D Provide a description of the assistive technologies available to special needs students and the percentage of special needs students meeting and or exceeding technological literacy standards.
- S, D Education delivery needs of learners with varied linguistic, cultural, ethnic and socioeconomic backgrounds have been identified.
- S, D Optional education delivery methods to meet the needs of learners with varied linguistic, cultural, ethnic and socio-economic backgrounds are implemented.

See Appendix D for Federal Content Requirements See Appendix E for Related State (OSBE) and Federal (NCLB) Goals

#### **Objective C**

Develop programs that prepare students for both entry-level jobs and postsecondary technical and academic opportunities in the field of technology.

#### Actions

• S - Assist the post-secondary institutions in the development and alignment of Professional Technical Education (PTE) programs.

#### **Performance Measures**

S – Professional Technical Education (PTE) programs are developed, aligned and articulated with postsecondary institutions.

#### **Data Preparation and Reporting**

S - Collect data on the number of Professional Technical Education (PTE) programs available and on the percentage of students participating in those programs.

See Appendix D for Federal Content Requirements See Appendix E for Related State (OSBE) and Federal (NCLB) Goals

## PROFESSIONAL DEVELOPMENT

Promote professional development in technology use that enhances the educational process.

#### Narrative

To achieve technology integration and technological literacy, we must look to professional development in technology use. Educators and administrators must be well versed in the application and applicability of technology in the classroom. The focus of professional development for educators and administrators must be that of how to use technology and when to use technology to ensure the education received by students will foster achievement and success.

#### **Objective A**

Encourage districts to develop policies and procedures that support the ongoing improvement of technology literacy and technology integration.

#### Actions

- S Establish standards or implement ISTE standards regarding the professional development of educators on the subject of technology literacy and the process of technology integration in the schools.
- S Provide guidelines for the development of district policies and procedures that address the professional development of educators on the subject of technology literacy and the subsequent process of technology integration in the schools.
- S Establish timelines for districts to report the status of their respective planning and development activities regarding the improvement of teaching and administration on the subjects of technology literacy and technology integration.

#### Performance Measures

- □ S Standards are established regarding the professional development of educators on the subjects of technology literacy and the process of technology integration in the schools.
- D District policies and procedures that address the professional development of educators on the subjects of technology literacy and the process of technology in their respective schools are developed.
- S Timelines for districts to report the status of their respective planning and development activities regarding the improvement of teaching and administration on the subjects of technology literacy and technology integration are established.

#### **Data Preparation and Reporting**

- $\stackrel{\frown}{\sim}$  S Provide a copy of the established standards.
- $\Rightarrow$  S, D Report the districts that:

Have not yet started;

Are in progress;

Have completed but not implemented;

Have implemented;

Of those districts with implemented policies and procedures, include an assessment of progress regarding the impact the professional development policies and procedures have made on educators, using a rubric profile.

S - Provide the established reporting timelines for districts to report the status and progress of their respective planning, development and implementation activities.

See Appendix D for Federal Content Requirements See Appendix E for Related State (OSBE) and Federal (NCLB) Goals

#### **Objective B**

Identify and disseminate technology-based instructional practices.

#### Actions

- S Develop database of technology-based instructional practices as a resource to other educators.
- S Develop accessible delivery method of technology-based instructional practices as a resource to all educators.
- S Develop method to track results of sharing technology-based instructional practices as compared with overall student achievement over a designated period.
- S Write evaluation criteria to assess and make recommendations toward the improvement of technologybased instructional practices and the maximization of student learning and achievement.
- S Provide resources for data collection, analysis, interpretation, application and subsequent communication.

#### Performance Measures

- □ S Development of a database of technology-based instructional practices as a resource to all educators.
- □ S Development of accessible delivery method of technology-based instructional practices as a resource to all educators.
- □ S Development of method to track results of sharing technology-based instructional practices as compared with overall student achievement over a designated period.
- □ S Evaluation criteria to assess and make recommendations toward the improvement of technology-based instructional practices and the maximization of student learning and achievement is available.
- S Data, regarding the impact technology-based instructional practices are having on student learning and achievement, are collected, analyzed and interpreted. Assessments and recommendations are made and are communicated.

#### **Data Preparation and Reporting**

- S Status and progress of technology-based instructional practices database development and implementation.
- S Status and progress of technology-based instructional practices database access, to include districts that are using this resource and of those districts, how many have found it useful.
- ☆ S Report comparison results of those educators applying the information provided in the technology-based instructional practices database with their respective students' achievement levels annually for the duration of this technology plan period. This assumes a baseline of statistical data (prior to the implementation of the technology-based instructional practices database) will need to be included for comparison purposes.
- S Provide documentation on the evaluation criteria to assess and make recommendations toward the improvement of technology-based instructional practices and the maximization of student learning and achievement is available.
- S Report interpreted results and those assessments and recommendations made based on evaluation criteria designed to identify instructional improvement and maximization of student learning and achievement.

See Appendix D for Federal Content Requirements See Appendix E for Related State (OSBE) and Federal (NCLB) Goals

#### **Objective C**

Develop policies and procedures that improve district productivity and administrative processes.

#### Actions

- S Develop policy that defines professional development to include administrators, technology coordinators, teachers, counselors, support staff, program faculty and state level leaders.
- S Develop policy that emphasizes effective technology usage across the curriculum and in student assessment.
- S Develop procedures to address unusual challenges, such as urban and rural settings and impoverished communities within districts.
- S Develop policy and procedures that support aid for increased lead time for planning activities and exemplary technology usage in professional development e.g. virtual communities-of-practice.
- S Develop policy and procedures that provide for technical training programs at all levels of professional development.

#### **Performance Measures**

- □ S Policy defines professional development to include administrators, technology coordinators, teachers, counselors, support staff, program faculty and state level leaders.
- □ S Policy emphasizes effective technology usage across the curriculum and in student assessment.
- S Procedures address unusual challenges, such as urban and rural settings and impoverished communities within districts.
- □ S Policy and procedures support aid for increased lead-time for planning activities and exemplary technology usage in professional development.
- S Policy and procedures provide for technical training programs at all levels of professional development which result in regional technology centers, quality reviews and the adoption of digital resource(s) guidelines.

#### **Data Preparation and Reporting**

- S Provide status and progress of the professional development definition policy. When completed, provide the policy in its entirety.
- S Provide status and progress of the effective technology use policy. When completed, provide the policy in its entirety.
- S Provide status and progress of the "unusual challenges" policy. When completed, provide the policy in its entirety.
- S Provide status and progress of the support policy. When completed, provide the policy in its entirety.
- S Provide status and progress of the technical training program policy and procedures. When completed, provide the policy in its entirety.

See Appendix D for Federal Content Requirements See Appendix E for Related State (OSBE) and Federal (NCLB) Goals

#### COLLABORATION

Promote the collaboration of schools, libraries, community members, state agencies, organizations, business and industry, post-secondary institutions, and public virtual learning environments to meet the needs of all learners.

#### Narrative

Collaboration is an effective way to employ resources toward the achievement of any goal, in this case, five goals: Integration, Technological Literacy, Professional Development, Technology Systems and Assessment, Evaluation and Publication. By collaborating with the education community at large, as well as public, private and virtual entities, we leverage skills, best practices and the synergism created by a whole host of contributors working together.

#### **Objective A**

Create an environment that fosters meaningful collaboration between School Districts and Libraries (e.g. public, state, and universities).

#### Actions

- S, D Provide Districts with guidance necessary to involve a librarian in their respective technology planning process.
- S, D Provide technical support and or resources to connect libraries and schools via Telecommunications systems.
- S, D Promote utilization of shared services among the libraries.

#### **Performance Measures**

- **G** S, D Number of districts that have a librarian on their respective district planning teams.
- **S**, D Number of schools and libraries that are members of a regional library network.
- □ S, D Number of districts that share services e.g.:

Inter-Library loans are transacted,

Districts use LiLI,

Districts use shared catalogs and participate in virtual reference services.

#### **Data Preparation and Reporting**

Number and description of:

- $\stackrel{\sim}{\sim}$  S, D Districts with a librarian on their respective district planning team.
- $\stackrel{\sim}{\sim}$  S, D Schools, and libraries, which are members of a regional library network.
- S, D Inter-Library loan transactions, districts using LiLI, and districts using shared catalogs and participating in virtual reference services.

See Appendix D for Federal Content Requirements See Appendix E for Related State (OSBE) and Federal (NCLB) Goals

#### **Objective B**

Create an environment that fosters meaningful collaboration between School Districts and Community members (e.g. parents, patrons, citizens)

#### Actions

• S, D - Encourage Districts to involve a community member in their technology plan process.

#### COLLABORATION

- O S, D Provide guidance to Districts on offering after school program (i.e. community technology centers)
- O S, D Promote District offering of Adult Literacy service programs (GED, LEP)
- S, D Provide technical resources necessary to offer accessibility to special needs community members.

#### **Performance Measures**

- **G** S, D Number of Districts that have a community member on their respective district planning teams.
- **G** S, D Number of Districts that offer after-school programs for community members.
- **S**, D Number of Districts that offer adult literacy service programs.
- **G** S, D Number of Districts that serve special needs community members.

#### **Data Preparation and Reporting**

Number and description of:

- $\stackrel{\sim}{\sim}$  S, D Districts that have a community member on their respective district planning teams.
- $\stackrel{\checkmark}{\sim}$  S, D Districts that offer after-school programs for community members.
- $\stackrel{\frown}{\sim}$  S, D Districts that offer adult literacy service programs.
- $\checkmark$  S, D Districts that serve special needs members.

See Appendix D for Federal Content Requirements See Appendix E for Related State (OSBE) and Federal (NCLB) Goals

#### **Objective C**

Create an environment that fosters meaningful collaboration between School Districts, and State and Local Agencies (e.g. PTE, SDE, OSBE, Vo-Rehab, IF&G, H&W, Corrections, Federal, Legislature, City, County Law Enforcement)

#### Actions

- O S, D Guide Districts on how to involve other state and local entities in their technology planning process.
- S, D Provide the technical environment to allow data to be shared among Districts and, state and local entities.
- S, D Provide options for districts to offer teacher incentives, for those teachers that initiate collaborative activities with other districts, as well as state and local agencies.

#### **Performance Measures**

- □ S, D Number of Districts that involve other state and local entities in their technology plan process.
- □ S, D Number of Districts that share data with state and local entities.
- S, D Number of Districts that provide options and offer teacher incentives, for those teachers that initiate collaborative activities with other districts, as well as state and local entities.

#### **Data Preparation and Reporting**

Number and description of:

- $\stackrel{\text{tr}}{\sim}$  S, D Districts involving other state and local agencies in their technology plan.
- $\stackrel{\frown}{\sim}$  S, D District, State and Local Entities that share data.
- S, D Districts providing incentives, financial or otherwise, to teachers who collaborate with other districts, as well as state and local entities.

See Appendix D for Federal Content Requirements See Appendix E for Related State (OSBE) and Federal (NCLB) Goals

#### **Objective D**

Create an environment that fosters meaningful collaboration between School Districts and Organizations (e.g. PTA, service clubs, fraternities)

#### Actions

- S, D Encourage Districts to involve service clubs in their technology planning process.
- S, D Support Districts to collaborate with service clubs for fund raising and support to provide technologyfocused.

Scholarships;

Instructional aides for special needs students;

Assistive Technology issues/grants.

• S, D - Provide guidelines for Districts to work with service clubs to foster mentoring relationships between technology-oriented service club members and students.

#### **Performance Measures**

- □ S, D Number of Districts that involve service clubs in their technology planning process.
- □ S, D Number of Districts that work in partnership with service clubs for fund raising and support to provide technology-focused:

Scholarships;

Instructional aides for special needs students;

Assistive Technology issues/grants.

S, D - Number of Districts that work with service clubs to foster mentoring relationships between technology-oriented service club members and students.

#### **Data Preparation and Reporting**

Number and description of:

- $\stackrel{\sim}{\sim}$  S, D Districts that have involved service clubs in their technology plan process.
- $\stackrel{\sim}{\sim}$  S, D Financial contributions in support of technology by service organizations.
- S, D Examples of mentoring relationships, in terms of, objectives and activities between technology-oriented mentors and students.

See Appendix D for Federal Content Requirements See Appendix E for Related State (OSBE) and Federal (NCLB) Goals

#### **Objective E**

Create an environment that fosters meaningful collaboration between School Districts and, Business and Industry (e.g. industry, foundations, Chambers of Commerce)

#### Actions

- S, D Encourage Districts to involve business and industry in their technology planning process.
- S, D Support Districts to collaborate with business and industry for fund raising and support to provide technology-focused:

Scholarships;

Instructional aides for special needs students.;

Assistive Technology issues/grants.

• S, D - Provide guidelines for Districts to work with business and industry to foster mentoring relationships between technology-oriented constituents and student.

#### **Performance Measures**

- □ S, D Number of Districts that involve business and industry in their technology planning process.
- S, D Number of Districts that work in partnership with business and industry for fund raising and support to provide technology-focused:

Scholarships;

Instructional aides for special needs students;

Assistive Technology issues/grants.

□ S, D - Number of Districts that work with business and industry to foster mentoring relationships between technology-oriented constituents and students.

#### **Data Preparation and Reporting**

Number and description of:

- $\stackrel{\sim}{\sim}$  S, D Districts, which have involved business and industry in their technology, plan process.
- $\stackrel{\sim}{\sim}$  S, D Financial contributions raised in support of technology by business and industry.
- S, D Examples of mentoring relationships, in terms of, objectives and activities between technology-oriented mentors and students.

See Appendix D for Federal Content Requirements See Appendix E for Related State (OSBE) and Federal (NCLB) Goals

#### **Objective F**

Create an environment that fosters meaningful collaboration between School Districts and Postsecondary institutions (e.g. public and private colleges, universities, technical schools)

#### Actions

- O S, D Encourage Districts to involve post-secondary institutions in their technology planning process.
- S, D Support Districts to collaborate with post-secondary institutions to provide technology-focused:

Teacher prep/in-service/pre-service;

Professional development and evaluation;

Graduate work;

Grant writing

Libraries

• S, D - Provide guidelines for Districts to work with post-secondary institutions to elicit facilitation and hosting activities between technology-oriented educators and students.

#### **Performance Measures**

- □ S, D Number of Districts that involve post-secondary institutions in their technology planning process.
- S, D Number of Districts that collaborate with post-secondary institutions to provide technology-focused: Teacher prep/in-service/pre-service;

Professional development and evaluation;

Graduate work;

Grant writing

Libraries

S, D - Number of Districts that work with post-secondary institutions to elicit facilitation and hosting activities between technology-oriented educators and students.

#### **Data Preparation and Reporting**

Number and description of:

- $\stackrel{\sim}{\sim}$  S, D Districts that have involved post-secondary institutions in their technology plan process.
- S, D Districts that have collaborated with post-secondary institutions to provide technologyfocused teacher education and professional development, graduate work, grant writing and libraries.
- S, D Examples of facilitation and hosting activities between technology-oriented educators and students.

See Appendix D for Federal Content Requirements See Appendix E for Related State (OSBE) and Federal (NCLB) Goals

#### **Objective G**

Create an environment that fosters meaningful collaboration between School Districts and with Public virtual learning environments (e.g. Idaho Digital Learning Academy, ARTEC).

#### Actions

- S, D Encourage Districts to involve representatives of public virtual learning environments in their technology planning process.
- S, D Support Districts to collaborate with public virtual learning environments representatives to provide accessible\* technology-focused education:

Distance learning;

Coursework;

School to work programs;

 S, D - Provide guidelines for Districts to work with post-secondary institutions to facilitate a standard data collection process of student data, to ensure proper tracking of educational accomplishments via a public virtual learning environment.

\*In this context, the word "accessible" means, "to employ assistive technologies to ensure virtual learning environments are accessible to special needs students".

#### **Performance Measures**

- □ S, D Number of Districts that involve representatives of public virtual learning environments in their technology planning process.
- □ S, D Number of Districts that collaborate with public virtual learning environments representatives to provide accessible\* technology-focused education:

Distance learning;

Coursework;

School to Work (ARTEC)

#### COLLABORATION

□ S, D - Number of Districts that work with post-secondary institutions to facilitate a standard data collection process of student data, to ensure proper tracking of educational accomplishments via a public virtual learning environment.

\*In this context, the word "accessible" means, "to employ assistive technologies to ensure virtual learning environments are accessible to special needs students".

#### **Data Preparation and Reporting**

Number and description of:

- S, D Districts that involve representatives of public virtual learning environments in their technology planning process.
- S, D Districts that collaborate with public virtual learning environments representatives to provide \*accessible technology-focused education:

Distance learning;

Coursework;

School to Work (ARTEC)

S, D - Districts that work with representatives of public virtual learning environments to facilitate a standard data collection process of student data. Include data elements needed for proper tracking.

\*In this context, the word "accessible" means, "to employ assistive technologies to ensure virtual learning environments are accessible to special needs students".

See Appendix D for Federal Content Requirements See Appendix E for Related State (OSBE) and Federal (NCLB) Goals

#### **Objective H**

Create an environment that fosters meaningful collaboration between School Districts and "Other" Schools (e.g. Private, charter, home schools)

#### Actions

- S, D Encourage Districts to involve representatives of "Other" schools in their technology planning and assessment process.
- S, D Promote Districts' sharing of student data and best practices and vice versa with "Other" schools, as well as hosting professional development activities.
- S, D Support Districts to collaborate with "Other" schools to provide accessible\* technology-focused education:

Student training;

Technology integration with student achievement;

• S, D - Provide guidelines for Districts to work with "Other" schools to facilitate a standard data collection process of student data, to ensure proper tracking of educational accomplishments via a "Other" Schools.

\*In this context, the word "accessible" means, "to employ assistive technologies to ensure virtual learning environments are accessible to special needs students".

#### **Performance Measures**

□ S, D - Number of Districts that involve representatives of "Other" schools in their technology planning and assessment process.

- □ S, D Number of Districts that share student data and best practices and vice versa with "Other" schools, to include both entities hosting professional development activities.
- □ S, D Number of Districts that collaborate with "Other" schools to provide accessible\* technology-focused education:

Student training;

Technology integration with student achievement;

S, D - Number of Districts that work with "Other" schools to facilitate a standard data collection process of student data, to ensure proper tracking of educational accomplishments via a "Other" Schools.

\*In this context, the word "accessible" means, "to employ assistive technologies to ensure virtual learning environments are accessible to special needs students".

#### **Data Preparation and Reporting**

Number and description of:

- S, D Districts that involve representatives of "Other" schools in their technology planning and assessment process.
- S, D Districts' that share student data and best practices and vice versa with "Other" schools, as well as the Districts that host professional development activities.
- S, D Districts that collaborate with "Other" schools to provide \*accessible technology-focused education:
   Student training;
   Technology integration with student achievement;
- S, D Districts that work with "Other" schools to facilitate a standard data collection process of student data, to ensure proper tracking of educational accomplishments via a "Other" Schools.\*In this context, the word "accessible" means, "to employ assistive technologies to ensure virtual learning environments are accessible to special needs students".

See Appendix D for Federal Content Requirements See Appendix E for Related State (OSBE) and Federal (NCLB) Goals

## Technology Systems

Create and maintain compatible and secure technology systems that enhance the efficient operation of schools.

#### Narrative

Technology systems are the operational backbone of the education process. Technology systems provide the means necessary to communicate, educate, inform, collaborate, share, transfer, access and manage data, processes and applications regarding students, teachers, administrators, curriculum, buildings, districts, etc. Technology systems that foster high productivity and utility are necessary to support effective education and administration; which in turn, promote student academic achievement.

#### **Objective A**

Ensure compatibility of statewide technology systems.

#### Actions

- S Create and maintain data compatibility standards.
- S Create and maintain hardware and software compatibility standards.
- S Develop standards for technology acquisition e.g. firmware, middleware, hardware and software.
- S Develop access standards for distance and virtual learning resources, to include the employment of assistive technology.
- S Based on CIPA guidelines for Internet access, develop standards for Internet access.
- S Based on section 508 of the Rehabilitation Act, develop standards on the employment and application of assistive technologies.

#### **Performance Measures**

- **S** Data compatibility standards are created and maintained.
- **S** Hardware and software compatibility standards are created and maintained.
- □ S Standards for technology acquisition e.g. firmware, middleware, hardware and software are developed and maintained.
- □ S Access standards for distance and virtual learning resources, to include the employment of assistive technology are developed and maintained.
- □ S Based on CIPA guidelines for Internet access, standards for Internet access are developed and maintained.
- S Based on section 508 of the Rehabilitation Act, standards for the employment and application of assistive technologies are developed and maintained.

#### **Data Preparation and Reporting**

- S Provide status and progress of the data compatibility standards. When completed, provide assessment accordingly.
- S Provide status and progress of the hardware and software compatibility standards. When completed, provide assessment accordingly.
- S Provide status and progress of the technology acquisition e.g. firmware, middleware, hardware and software compatibility standards. When completed, provide assessment accordingly.
- S Provide status and progress of the distance and virtual learning resources access standards. When completed, provide assessment accordingly.
- S Provide status and progress of the standards for Internet access. When completed, provide assessment accordingly.
- S Provide status and progress of the standards for assistive technology employment and application, when completed, provide assessment accordingly.

### See Appendix D for Federal Content Requirements See Appendix E for Related State (OSBE) and Federal (NCLB) Goals

### **Objective B**

Provide a statewide network infrastructure (routers, bridges, repeaters, optical fiber, cable, wireless, WiFi, etc.) that supports inter-connectivity and intra-connectivity.

### Actions

- S Participate in the creation and implementation of a state of Idaho-based communications network that will provide statewide connectivity for all public entities (e.g. IDANET).
- S Participate in the creation and implementation of a University-based network that will provide statewide connectivity for schools and private entities (e.g. EDUNET)
- S, D To facilitate the creation of EDUNET and for general standardization and consolidation to ensure cost-savings, survey technology use in terms of:

Service and or product: cost, vendor, description, application;

Which respective ports are blocked;

Who controls the respective network;

What firewall products are in use; etc.

#### **Performance Measures**

- **S** A statewide communications network is created and implemented.
- **S** A statewide university-based connectivity network is created and implemented.
- **S**, D Statewide technology use is surveyed and documented accordingly.

#### **Data Preparation and Reporting**

- ☆ S Report the status and progress of the creation and implementation of IDANET. When completed, provide a description of the services provided, note any areas of the state of Idaho that not able to connect to IDANET, note the number of entities connected to IDANET, include information about total implementation costs and projected annual maintenance costs.
- ☆ S Report the status and progress of the creation and implementation of EDUNET. When completed, provide a description of the services provided, note any areas of the state of Idaho that are not able to connect to EDUNET, note the number of entities, private and public, connected to EDUNET, include information about total implementation costs and projected annual maintenance costs, as well as usage revenues from private users.
- S, D Report the status and progress of the survey. If complete, report the results of the survey by technology use category, including the supporting data e.g. service or product: cost, vendor, description, application; blocked ports, network controls, firewalls, etc.

See Appendix D for Federal Content Requirements See Appendix E for Related State (OSBE) and Federal (NCLB) Goals

### **Objective C**

Provide statewide curriculum management and student data management systems.

#### Actions

- S Provide a curriculum management system to align curriculum with state standards, local curriculum, etc.
- S Provide a statewide student data management system.

### Performance Measures

- S A curriculum management system to align curriculum with state standards, local curriculum, etc. is implemented
- **S** A statewide student data management system is implemented.

### **Data Preparation and Reporting**

- S Report status and progress of the curriculum management system implementation process. When implementation is complete, provide an evaluation of the effectiveness and level of utility of the system implemented.
- S Report status and progress of the student data management system implementation process. When implementation is complete, provide an evaluation of the effectiveness and level of utility of the system implemented.

See Appendix D for Federal Content Requirements See Appendix E for Related State (OSBE) and Federal (NCLB) Goals

### **Objective D**

Secure the use of technology to prevent unauthorized access and to promote safe access.

### Actions

- S, D Promote regular updates in virus protection/firewall software.
- S, D Promote the utilization of Internet firewalls (2-way), proxy servers and blocking software.
- S, D Promote best practices to ensure the security of district computer networks that address the:

Prevention of unauthorized access to business and student record;

Maintenance of confidentiality of information;

Employment of hardware and software security measures;

Use of login scripts, etc.

- O S, D Restriction of Internet sites deemed unsuitable by CIPA guidelines
- S, D Comply with CIPA legislation i.e. promote CIPA awareness of legislation and federal requirements.

### **Performance Measures**

- **S**, D Number of districts that use Virus protection/firewall software/hardware.
- S, D Number of districts that use an Internet firewalls (2-way), proxy servers and blocking software.
- □ S, D Best practices are applied by the districts and the state to ensure the security of district computer networks, to include:

Prevention of unauthorized access to business and student record;

Maintenance of confidentiality of information;

Employment of hardware and software security measures;

Use of login scripts, etc.

□ S, D - Number of districts that restrict Internet sites deemed unsuitable by CIPA guidelines and number of districts that have CIPA certification.

### **Data Preparation and Reporting**

- S, D Provide date/time/procedural information on the scheduled updates to virus protection/firewall software.
- S, D Provide descriptive information of the types of Internet firewalls (2-way), proxy servers and blocking software promoted by the state and employed by the districts and the state.
- S, D Provide a synopsis of the best practices used by the state and the districts that ensure the security of district computer networks address the:

Prevention of unauthorized access to business and student record;

Maintenance of confidentiality of information;

Employment of hardware and software security measures;

Use of login scripts, etc.

S, D - Provide the number of districts that restrict Internet sites deemed unsuitable by CIPA guidelines and number of districts that have CIPA certification.

See Appendix D for Federal Content Requirements See Appendix E for Related State (OSBE) and Federal (NCLB) Goals

### **Objective E**

Provide cost-effective means to acquire, maintain and access technology e.g. software, hardware, networks, etc.

#### Actions

- S Create, maintain and disseminate a select vendor list, to include Internet links, when available.
- S Create and maintain a select product list, to include Internet links, when available.

### Performance Measures

- □ S A select vendor list is created, maintained and disseminated, including Internet links, when available.
- S A select product list is created, maintained and disseminated, including Internet links, when available.

#### **Data Preparation and Reporting**

- S Create, maintain and disseminate a select vendor list, to include Internet links, when available.
- $\stackrel{\sim}{\sim}$  S Create and maintain a select (or brand) product, to include Internet links, when available.

See Appendix D for Federal Content Requirements See Appendix E for Related State (OSBE) and Federal (NCLB) Goals

#### **Objective F**

Provide network administration services, maintenance and support.

### Actions

- S, D Provide support to rural and remote districts' networking and telecommunications infrastructures.
- S, D Provide guidelines for appropriate courses and other learning opportunities for students to engage in the: installation, maintenance and support of technology.

#### Performance Measures

- □ S, D Resources to support rural and remote districts' networking and telecommunications infrastructures are provided
- □ S, D Guidelines for appropriate courses and other learning opportunities for students to engage in the: installation, maintenance and support of technology, are provided.

### **Data Preparation and Reporting**

- $\stackrel{\Lambda}{\sim}$  S, D Report the number of districts using the resources. Include the context of the support provided.
- S, D Report the number of districts employing student "tech support" and provide the respective courses and learning opportunities. Include the districts not employing student "tech support" and provide justification accordingly.

See Appendix D for Federal Content Requirements See Appendix E for Related State (OSBE) and Federal (NCLB) Goals

# Assessment, Evaluation and Publication

Assess, evaluate and publicize the effects of technology use by educators and students toward student learning and achievement.

### Narrative

The cycle of performance, assessment, evaluation and publication is the way in which we effectively measure actual against targeted performance i.e. compare the "action" with the "performance measure" and determine the level of success. An evaluation will tell us if we tasked ourselves with the correct actions in terms of addressing the essence of the respective goal and objectives. Publicizing our results will provide a forum of input and commentary necessary to ensure we acknowledge trend changes in technology, education and business and allows us to refine the Statewide Plan for Technology in Idaho accordingly.

## **Objective A**

Provide an annual assessment and evaluation of the use of technology to enhance student learning and achievement.

### Actions

- S Develop a three-year K-12 statewide technology plan and assess the results annually.
- S Develop metrics to evaluate the use of the statewide K-12 technology plan on enhancing student learning and achievement, using the report information provided for each goal and respective objectives.

### Performance Measures

- □ S Three-year statewide technology plan is developed and the results of which are reviewed annually.
- S Metrics are developed that evaluate the use of the statewide K-12 technology plan on enhancing student learning and achievement, using the report information provided for each goal and respective objectives.

### **Data Preparation and Reporting**

- S Provide status and progress on the development and modification of the three-year statewide K-12 technology plan. When completed, provide an assessment of the action plans developed, the resources assigned and the status of the deliverables of each action plan.
- S Provide an evaluation of the statewide technology plan in terms of its impact on student learning and student achievement.

See Appendix D for Federal Content Requirements See Appendix E for Related State (OSBE) and Federal (NCLB) Goals

### **Objective B**

Publicize the use of technology to enhance student learning and achievement.

### Actions

- $\odot$  S Publish the results of the annual assessment performed on the statewide K-12 technology plan .
- S Receive feedback and commentary from public forums to ensure public participation and involvement.

### Performance Measures

□ S - Results of the annual assessment of the statewide K-12 technology plan are published.

S - Feedback and commentary received from public forums are evaluated and applied as enhancements to the statewide K-12 technology plan.

### **Data Preparation and Reporting**

- S Provide the communication methods used to disseminate the results of the statewide K-12 technology plan and include the intended audience.
- S Categorize the public commentary and note where and how it was applied to the statewide K-12 technology plan.

See Appendix D for Federal Content Requirements See Appendix E for Related State (OSBE) and Federal (NCLB) Goals

#### **APPENDICES**

# Appendices

| Appendix A: | Idaho Council for Technology in Learning      |
|-------------|---|
| Appendix B: | Advisory Team                                 |
| Appendix C: | No Child Left Behind                          |
| Appendix D: | Federal Content Requirements                  |
| Appendix E: | Related State (OSBE) and Federal (NCLB) Goals |
| Appendix F: | Glossary                                      |

### IDAHO COUNCIL FOR TECHNOLOGY IN IDAHO

Melvin Richardson, Senator, **ICTL Chair** Bill Leaf, Cascade School District, ICTL Sub Chair, Public Education Information Committee (**PEITC**) Chair Ann Joslin, Idaho State Library, Higher Education Information Technology (**HEITC**) Chair Allen Andersen, Representative Bert Marley, Senator Charles Ruch, Boise University President Elizabeth Criner, Veritas Advisors Gary Stivers, Office of the State Board of Education Executive Director Karen Vauk, Executive Director and Manager of Community and Academic Relations, Micron Technology Marilyn Howard, Superintendent of Public Instruction Paula Conley, Public Education Information Technology Committee Member Vern Newby, Local School Board Member

## HIGHER EDUCATION INFORMATION TECHNOLOGY COMMITTEE

Ann Joslin, Idaho State Library, **HEITC Chair** Carmen Rahm, Lewis-Clark State College Christine Brady, Idaho State Historical Society Dave O'Neill, Boise State University Gens Johnson, KUID Idaho Public Television Glenn Wilde, University of Idaho Monti Pittman, Idaho Division of Professional Technical Education Nancy Szofran, Office of the State Board of Education, Randy Bow, Idaho School for the Deaf and the Blind Terry Lay, Idaho State University

### **PUBLIC EDUCATION INFORMATION TECHNOLOGY COMMITTEE**

Bill Leaf, Cascade School District, **Chair**, Sub Chair ICTL Carolyn Mauer, State Department of Education, ICTL Subcommittee Advisor Christopher Gibson, Jerome School District Deb McGrath, Kuna Middle School Karen Ganske, Nampa Librarian Paula Conley, Coeur d'Alene School District, ICTL Board Member Pete Black, Pocatello School District 25 Ray Mikelson, Lake City High School Vickie Chandler, Vocational Education Public School Teacher

#### ADVISORY TEAM

In developing this draft document, two-day meetings were held in Boise on three different occasions. In addition to the meetings, participants continued discussions and revisions of the draft documents on-line. The following individuals had the opportunity to provide input during the planning and development meetings held in November 2002, March 2003, May 2003 and August 2003.

### Advisors

Angel Ramos, Idaho School for the Deaf and the Blind Ann Joslin, Idaho State Library Betsy Goeltz, Blackfoot School District Bill Leaf, Cascade School District Bill Rasmussen, Pocatello School District Bob England, Pocatello School District Bob Sobotta Jr., Lewis-Clark State College Bob Sobotta, Roman Catholic Diocese of Boise Carol Williams, Soda Springs School District Carolyn Thorsen, Boise State University Christopher Gibson, Jerome School District Cliff Green, Idaho School Boards Association Cliff Swanson, Troy School District Craig Lannigan, Lewiston School District Dale Johnson, Avery School District Dave Mecham, Firth School District Dave O'Neill, Boise State University Deb McGrath, Kuna School District Donna Vakili, Idaho Digital Learning Academy Dorothy Sammons, Idaho State University Duane Peck, Kuna Jt. School District Duane Uhlenkott, Highland School District Eddie Kennedy, University of Idaho Gary Graves, Northwest Regional Educational Lab Gary Mayton, Lewis and Clark State College Glenn Wilde, University of Idaho Heidi Rogers, University of Idaho Jean Bengfort, Coeur d'Alene School District Jeff Young, Marsing School District Jim Lewis, Blaine Co. School District Jim Marconi, Boise School District Johana Doyle, Moscow School District John Garner, Kimberly School District Jon Wilkerson, Post Falls School District Karen Ganske, Nampa Library Karen Vauk, Micron Technology Inc. Karrie Whitehead, Idaho Charter School Network Kendall Gjevre, St. Maries School District Linda Maughan, Twin Falls School Districts

#### APPENDIX B

Mel Wiseman, Highland Jt School District Monti Pittman, Professional Technical Education Nancy Szofran, Office of the State Board of Education Pam Reidlen, Kamiah School District Paula Conley, Coeur d'Alene School District Pate Black, Pocatello School District Randy Bow, Idaho School for the Deaf and the Blind Ray Mikelson, Coeur d'Alene School District Ron Seiler, University of Idaho Sheryl Bishop, Effective Solutions, Inc. Tom Loucks, St. Peter and Paul School Vickie Chandler, Bruneau-Grandview School District Wendy Johnson, J.A. & Kathryn Albertsons Foundation Wiley Dobbs, Twin Falls School District

# Idaho State Department of Education Staff

Carolyn Mauer, Idaho State Department of Education Dan Hawkins, Idaho State Department of Education Dawn Wilson, Idaho State Department of Education Mark Kuskie, Idaho State Department of Education Rich Mincer, Idaho State Department of Education Sherawn Reberry, Idaho State Department of Education

### NO CHILD LEFT BEHIND

#### From the "No Child Left Behind" overview:

On Jan. 8, 2002, President Bush signed into law the No Child Left Behind Act of 2001 (NCLB). This new law represents his education reform plan and contains the most sweeping changes to the Elementary and Secondary Education Act (ESEA) since it was enacted in 1965. It changes the federal government's role in kindergarten-through-grade-12 education by asking America's schools to describe their success in terms of what each student accomplishes. The act contains the President's four basic education reform principles: stronger accountability for results, increased flexibility and local control, expanded options for parents, and an emphasis on teaching methods that have been proven to work.

An "accountable" education system involves several critical steps:

- States create their own standards for what a child should know and learn for all grades. Standards must be developed in math and reading immediately. Standards must also be developed for science by the 2005-06 school year.
- With standards in place, states must test every student's progress toward those standards by using tests that are aligned with the standards. Beginning in the 2002-03 school year, schools must administer tests in each of three grade spans: grades 3-5, grades 6-9, and grades 10-12 in all schools. Beginning in the 2005-06 school year, tests must be administered every year in grades 3 through 8 in math and reading. Beginning in the 2007-08 school year, science achievement must also be tested.
- Each state, school district and school will be expected to make adequate yearly progress toward meeting state standards. This progress will be measured for all students by sorting test results for students who are economically disadvantaged, from racial or ethnic minority groups, have disabilities, or have limited English proficiency.
- School and district performance will be publicly reported in district and state report cards. Individual school results will be on the district report cards.
- If the district or school continually fails to make adequate progress toward the standards, then they will be held accountable.

The U.S. Department of Education wants to be a partner with states and school districts, and a resource for families and community members. If you have additional questions about No Child Left Behind, we encourage you to visit this website frequently. Also, visit www.ed.gov for more detailed information about the legislation.



Web Source: www.nochildleftbehind.gov/next/overview/index.html

#### APPENDIX D

### FEDERAL CONTENT REQUIREMENTS

#### Integration

#### **OBJECTIVE A**

- Integration of technology with curricula and instruction
- Strategies for improving academic achievement, technology integration
- Technical assistance
- Technology resources and systems

### OBJECTIVE B

- Innovative delivery strategies
- Integration of technology with curricula and instruction
- Professional and curricular development
- Strategies for improving academic achievement, technology integration
- Technical assistance
- Technology resources and systems

#### OBJECTIVE C

- Integration of technology with curricula and instruction
- Strategies for improving academic achievement, technology integration
- Technical assistance
- Technology resources and systems

## Technological Literacy

### **OBJECTIVE A**

- Innovate delivery strategies
- Integration of technology with curricula and instruction
- Strategies for improving academic achievement, technology integration

#### **OBJECTIVE B**

- Innovative delivery strategies
- Strategies for improving academic achievement, technology integration
- Technical assistance
- Technology resources and systems

#### OBJECTIVE C

- Innovative delivery strategies
- Strategies for improving academic achievement, technology integration
- Technical assistance
- Technology resources and systems

### **Professional Development**

#### **OBJECTIVE A**

- Strategies for improving academic achievement, technology integration
- Integration of technology with curricula and instruction

#### **OBJECTIVE B**

- Public and private support § Strategies for parental involvement
- Strategies for improving academic achievement, technology integration

### Collaboration

#### **OBJECTIVE A**

Innovative delivery strategies

#### APPENDIX D

Public and private support

#### **OBJECTIVE B**

- Strategies for improving academic achievement, technology integration
- Integration of technology with curricula and instruction
- Public and private support

### OBJECTIVE C

- Strategies for improving academic achievement, technology integration
- Integration of technology with curricula and instruction
- Public and private support

#### **OBJECTIVE D**

- Strategies for improving academic achievement, technology integration
- Integration of technology with curricula and instruction

#### **OBJECTIVE E**

- Strategies for improving academic achievement, technology integration
- Integration of technology with curricula and instruction

#### **OBJECTIVE F**

- Strategies for improving academic achievement, technology integration
- Integration of technology with curricula and instruction
- Innovative delivery strategies
- Teacher incentives
- Competitive grant evaluation

#### **OBJECTIVE G**

- Strategies for improving academic achievement, technology integration
- Integration of technology with curricula and instruction
- Innovative delivery strategy

#### **OBJECTIVE H**

- Strategies for improving academic achievement, technology integration
- Integration of technology with curricula and instruction

### Technology Systems

#### **OBJECTIVE A**

- Children's Internet Protection Act
- Technology resources and systems
- Innovative delivery strategies
- Steps to increase accessibility

#### **OBJECTIVE B**

- Strategies for improving academic achievement, technology integration
- Innovative delivery strategies
- Steps to increase accessibility

#### **OBJECTIVE C**

- Strategies for improving academic achievement, technology integration
- Innovative delivery strategies
- Steps to increase accessibility

#### OBJECTIVE D

- Children's Internet Protection Act
- Strategies for parental involvement
- Technology resources and systems

#### APPENDIX D

Innovative delivery strategies

### **OBJECTIVE E**

- Technology resources and systems
- Innovative delivery strategies
- Steps to increase accessibility

### OBJECTIVE F

- Strategies for improving academic achievement, technology integration
- Integration of technology with curricula and instruction
- Innovative delivery strategies
- Technology resources and systems

### Assessment, Evaluation and Publication

### **OBJECTIVE A**

- Strategies for improving academic achievement, technology integration
- Technology resources and systems

### OBJECTIVE B

- Public and private support
- Strategies for parental involvement
- Strategies for improving academic achievement, technology integration

#### APPENDIX E

# RELATED STATE (OSBE) AND FEDERAL (NCLB) GOALS

| Integration  |  |  |
|--|--|--|
| OBJECTIVE A  | OBJECTIVE B  | OBJECTIVE C  |
| NCLB   | NCLB   | NCLB   |
| <ol> <li>Academic Achievement</li> <li>Technological Literacy</li> <li>Technology Integration</li> </ol> | <ol> <li>Academic Achievement</li> <li>Technological Literacy</li> <li>Technology Integration</li> </ol> | <ol> <li>Academic Achievement</li> <li>Technological Literacy</li> <li>Technology Integration</li> </ol> |
| OSBE   | OSBE   | OSBE   |
| 1. Quality   | 1. Quality   | 1. Quality   |
| 2. Access  | 3. Relevance   | 3. Relevance   |
| 3. Relevance   | 4. Efficiency  | 4. Efficiency  |
| 4. Efficiency  |  |  |

| Technological Literacy   |  |  |
|--|--|--|
| OBJECTIVE A  | OBJECTIVE B  | OBJECTIVE C  |
| NCLB   | NCLB   | NCLB   |
| <ol> <li>Academic Achievement</li> <li>Technological Literacy</li> <li>Technology Integration</li> </ol> | <ol> <li>Academic Achievement</li> <li>Technological Literacy</li> <li>Technology Integration</li> </ol> | <ol> <li>Academic Achievement</li> <li>Technological Literacy</li> <li>Technology Integration</li> </ol> |
| OSBE   | OSBE   | OSBE   |
| 1. Quality   | 1. Quality   | 1. Quality   |
| 2. Access  | 2. Access  | 3. Relevance   |
| 4. Efficiency  | 3. Relevance   | 4. Efficiency  |

| Professional Development   |  |  |
|--|--|--|
| OBJECTIVE A  | OBJECTIVE B  |  |
| NCLB   | NCLB   |  |
| <ol> <li>Academic Achievement</li> <li>Technological Literacy</li> <li>Technology Integration</li> </ol> | <ol> <li>Academic Achievement</li> <li>Technological Literacy</li> <li>Technology Integration</li> </ol> |  |
| OSBE<br>1. Quality<br>2. Access<br>3. Relevance<br>4. Efficiency   | OSBE<br>1. Quality<br>2. Access<br>3. Relevance<br>4. Efficiency   |  |

| Collaboration  |  |  |
|--|--|--|
| OBJECTIVE A<br>NCLB  | OBJECTIVE B<br>NCLB  | OBJECTIVE C<br>NCLB  |
| <ol> <li>Technological Literacy</li> <li>Technology Integration</li> </ol> | <ol> <li>Academic Achievement</li> <li>Technological Literacy</li> <li>Technology Integration</li> </ol> | <ol> <li>Academic Achievement</li> <li>Technological Literacy</li> <li>Technology Integration</li> </ol> |

### Collaboration

#### **OBJECTIVE A**

#### OSBE

- 2. Access
- 3. Relevance

# 4. Efficiency

## **OBJECTIVE D**

### NCLB

- 1. Academic Achievement
- 2. Technological Literacy
- 3. Technology Integration

### OSBE

- 1. Quality
- 3. Relevance
- 4. Efficiency

### **OBJECTIVE G**

### NCLB

- 2. Technological Literacy
- 3. Technology Integration

### OSBE

- 1. Quality
- 3. Relevance
- 4. Efficiency

# **Technology Systems**

# **OBJECTIVE A**

# NCLB

- 1. Academic Achievement
- 2. Technological Literacy

# 3. Technology Integration

1. Academic Achievement

2. Technological Literacy

3. Technology Integration

#### OSBE

- 1. Quality
- 2. Access
- 3. Relevance
- 4. Efficiency

# OBJECTIVE D

# NCLB

#### OSBE 1. Quality

- 3. Relevance
  - 4. Efficiency

**OBJECTIVE B** 

OSBE

**NCLB** 

1. Quality

3. Relevance

4. Efficiency

**OBJECTIVE E** 

# **OBJECTIVE H**

#### **NCLB**

1. Academic Achievement

1. Academic Achievement

2. Technological Literacy

3. Technology Integration

- 2. Technological Literacy
- 3. Technology Integration

1. Academic Achievement

2. Technological Literacy

3. Technology Integration

3. Technology Integration

### OSBE

- 1. Quality
- 3. Relevance
- 4. Efficiency

**OBJECTIVE B** 

**NCLB** 

OSBE

**NCLB** 

1. Quality

2. Access

3. Relevance

4. Efficiency

**OBJECTIVE E** 

# NCLB

**OBJECTIVE C** 

OSBE

NCLB

OSBE

1. Quality

2. Access

3. Relevance 4. Efficiency

1. Quality

3. Relevance

4. Efficiency

**OBJECTIVE F** 

1. Academic Achievement

2. Technological Literacy

3. Technology Integration

- 1. Academic Achievement
- 2. Technological Literacy
- 3. Technology Integration

### OSBE

- 1. Quality
- 3. Relevance
- 4. Efficiency

### **OBJECTIVE F** NCLB

- 1. Academic Achievement
- 2. Technological Literacy
- 3. Technology Integration

# **OBJECTIVE C**

# **APPENDIX E**

35

#### APPENDIX E

| Technology Systems   |  |  |  |
|--|--|--|--|
| OSBE<br>1. Quality<br>2. Access<br>3. Relevance<br>4. Efficiency   | OSBE<br>1. Quality<br>2. Access<br>3. Relevance<br>4. Efficiency   | <b>OSBE</b><br>1. Quality<br>3. Relevance<br>4. Efficiency |  |
| Assessment Evaluation and Publication  |  |  |  |
| OBJECTIVE A  | OBJECTIVE B  |  |  |
| NCLB   | NCLB   |  |  |
| <ol> <li>Academic Achievement</li> <li>Technological Literacy</li> <li>Technology Integration</li> </ol> | <ol> <li>Academic Achievement</li> <li>Technological Literacy</li> <li>Technology Integration</li> </ol> |  |  |
| OSBE   | OSBE   |  |  |

# **OSBE** 1. Quality

| 1. | Quality |
|----|---------|

- Access
   Relevance
- 4. Efficiency
- Access
   Relevance
- 4. Efficiency

|--|

| Assistive Technology                               | Any item, piece of equipment or product system, whether acquired<br>commercially off the shelf, modified, or customized that is used to<br>increase, maintain, or improve the functional capabilities of<br>individuals with disabilities.  |
|--|---|
| Authentication                                     | This is some process of proving the identity of a computer or<br>computer user. For users, it generally involves a user name and<br>password. For computers, they usually pass a code that identifies<br>that they are part of a network.   |
| Bandwidth  | The range of transmission frequencies that a network can use. The greater the band-width, the greater the amount of information that can travel on the network at one time.   |
| Bridge   | A device that connects a one local area network (LAN) to another local area network and that the same protocol.   |
|  | You can envision a bridge as being a device that decides whether a message from your computer to another computer is going remain on the local area network that your computer is connected to, or be sent over to the other local area network if the computer you're sending the message to is connected there. A bridge only knows about the two local area networks that it is connected between. |
| Broadband  | The wide range of transmission frequencies that can be divided into<br>separate channels to allow for the simultaneous transfer of<br>information at different times and at different speeds.   |
| Cable  | Broadband Communications service provided by local cable<br>companies. This service uses existing cable television wiring to<br>connect computers and/or networks to the Internet. The speed of<br>this service ranges between 400Kbps to 27Mbps.   |
|  | The normal bandwidth speeds are between 400Kbps and 800Kbps.  |
| <i>Curriculum<br/>Management<br/>Software (CM)</i> | A collection of software programs and databases that organizes curriculum with it's matching goals, objectives, resources, and standards.   |
| Database   | A collection of data arranged in a logical manner for ease and speed of search and retrieval of information.  |
| <i>Digitized white<br/>boards</i>                  | A device that electronically captures information from input in the<br>form of writing and drawing. These devices are slowly replacing<br>the Blackboard and Whiteboard that once were the focus points of<br>classrooms. Digitized white boards can capture the information<br>written on them and save it on a computer or other storage devices<br>for use later by teachers and students.         |
| Directory Services                                 | A logical structure of objects that provides a unified view and way   |

to manage all objects on a network. Network Administrators can use this technology to manage networks.

- *Electronic note pads* Lightweight, hand-held computer designed for use as a personal organizer for taking notes relying on special hardware and penbased software to enable the recognition of handwritten input which is entered on the surface of a liquid crystal display screen.
- *Filtering* The process of examining each packet of information entering a network and discarding packets that no not meet a predetermined set of criteria.
- *Firewall* A device placed between a private network and the Internet to prevent unwanted network traffic from passing in either direction. Most firewalls generally support packet-filtering, proprietary application filtering, and some proxy functions.
- *Firmware* Software that is embedded onto a piece of hardware of a device, usually in permanent memory, to control the hardware of the device. Generally, firmware can be upgraded to get additional functionality or performance of the device.
- **Global Positioning Systems (GPS)** A means of determining location on the surface of the Earth by using a system of satellites that orbit the Earth broadcasting the time via radio signals based on an internal atomic clock. The device measures the time it took to receive multiple signals from satellites, performs a calculation and determines where it is on the surface of the Earth.
- *Hardware* The physical components of a computer system, such as the circuitry, keyboard, mouse, and display.
- *Inter-connectivity* The overall logical structure and connections of networks and devices at the enterprise level using a common protocol such as TCP/IP.
- *Intra-connectivity* The overall logical structure and connections of networks and devices at the local level using a common protocol such as TCP/IP.
- *Local Area Network* The connection of computers, peripherals, and devices in a limited area, usually less than two miles, that allows users and devices to communicate and share information.
- Login scriptA file usually run when a user logs into a network that sets the<br/>user's environment, connects their network drives to specific<br/>locations to specific servers, and connects specific printers.
- MiddlewareThe software used to connect an application to a network. An<br/>example of a middleware application would be a network directory<br/>service or authentication service.
- NetworkA group of interconnected computers, peripherals and devices<br/>communicating via physical cable, or wireless, capable of

transferring information.

**Optical Fiber** A transmission alternative to copper wire that uses light pulses to transmit information. A single strand of optical fiber can carry thousands of different frequencies simultaneously thus providing an almost unlimited amount of bandwidth. Personal Digital Lightweight, hand-held devices designed for use as a personal organizer with communications capabilities. A typical PDA has no Assistants (PDAs) keyboard, relying instead on special hardware and pen-based computer software to enable the recognition of handwritten input, which is entered on the surface of a liquid crystal display screen. PDAs are used as notepads, appointment schedulers, and wireless communicators for sending and receiving data, faxes, and electronic-mail messages. Presentation Software used to organize and present information in a multimedia software format. Protocol Rules governing transmitting and receiving data between computers and terminals. The use of one computer or device to make requests for another Proxy computer or device, or group of computers or devices over a network. Proxies can be used for Internet security, controlling connections, and be used to pass data between a network and Internet. Proxy servers can speed up access to the Internet by reducing the number of requests and responses. When a computer needs an object from the Internet, it makes a request to a Proxy server for the object along with the address of where to get it. The Proxy server makes the request to the Internet web server, downloads the page and objects, keeps a copy and passes the requested page to the computer. The next computer that makes the same request is then given the copy instead of having to go out to the Internet and re-download it. Repeater A device used to repeat a signal to send it further away or to many more devices. Router A device that connects one network to another network. A routing device can pass information from one network to an adjacent network or contain routing tables to "know" where the other networks are. Software The programs that run on computer hardware that help turn data into information. This can include operating systems, office suites, games, and Web browsers. This is a type of computer program that displays a group of cells (a Spreadsheet software 2D graph pattern) and allows for easy mathematical operations and relationships between the cells. The first major spreadsheet was Lotus 1-2-3. Today's most popular spreadsheet is Microsoft Excel.

#### APPENDIX F

| <i>Student Data<br/>Management<br/>software</i> | A collection of software and databases that collect, store, and provide information about students and their performance within the educational system.   |  |
|---|---|--|
| Telecommunications<br>systems                   | Communication using a combination of medias (wire, fiber, or wireless) in either a data infrastructure such as the Internet or telephone infrastructure - either land-line or mobile.                         |  |
| Video streaming                                 | The technology that allows for the ability to play audio and video as it is being downloaded to the device which is viewing it.   |  |
| Virtual Learning<br>Environments                | An organized system of delivering educational information and<br>materials, and interacting with students located at various<br>geographically separate sites through a variety of technology and<br>mediums. |  |
| Wireless  | Voice, data, or video communications without the use of connecting wires.   |  |
| <i>Word Processor<br/>Software</i>              | Software used to create, edit, and format documents. Common Word Processing software found today are Word, WordPerfect, and Word Star.  |  |

# F. SUBJECT:

Review and Approval of 8<sup>th</sup> Grade Idaho Student Information Technology Standards (ISITS) and Kindergarten – 7<sup>th</sup> Grade Benchmarks

# **BACKGROUND:**

Idaho Code 33-4805 states that one of the responsibilities of the Idaho Council for Technology in Learning (ICTL) is to make recommendations to the State Board of Education on standards for technology-based resources, projects, programs, practices, or products to be adopted or adapted.

As part of the No Child Left Behind federal legislation signed in January of 2002, every state that receives Title II-D - Enhancing Education Through Technology Funds, must define the content knowledge and skills that a technology literate 8<sup>th</sup> grade student would possess.

# **DISCUSSION:**

In April of 2002, the ICTL directed the State Department of Education (SDE) to begin coordinating the development of 8<sup>th</sup> grade Idaho Student Information Technology Standards (ISITS) per federal legislation.

To develop the standards in 2002, various stakeholders including businessmen, parents, and school district personnel were brought together to develop a rough draft. The first draft was developed by reviewing technology standards already created at a national level by the International Society for Technology in Education (ISTE) as well as what other states and school districts within Idaho had produced. There was a strong recommendation by the task force that while federal law mandated states develop 8<sup>th</sup> grade information technology standards, guidance for teachers in Kindergarten – 7<sup>th</sup> grade was also needed. Therefore, Kindergarten – 7<sup>th</sup> grade benchmarks were also created. The first draft was distributed and discussed at regional meetings. Comments received from around the state were considered as the task force met a second time in 2003 and a second draft was developed. The second draft was distributed statewide and discussed at regional meetings. The ICTL approved this draft in December 2003, and it is now being brought to the Board for approval.

# **RECOMMENDATIONS:**

The ICTL and the State Department of Education recommend that the State Board of Education approve the 8<sup>th</sup> grade Idaho Student Information Technology Standards and Kindergarten  $-7^{\text{th}}$  grade Benchmarks.

# **BOARD ACTION:**

The State Board of Education approved/disapproved/tabled the State Department of Education's request to approve the 8<sup>th</sup> grade Idaho Student Information Technology Standards and Kindergarten – 7<sup>th</sup> grade Benchmarks. Moved by \_\_\_\_\_, seconded by \_\_\_\_\_, seconded by \_\_\_\_\_, and carried.

# **ATTACHMENTS:**

8<sup>th</sup> grade Idaho Student Information Technology Standards and 1. Kindergarten – 7<sup>th</sup> Grade Benchmarks

8<sup>th</sup> Grade Idaho Student Information Technology Standards (ISITS) Kindergarten – 7<sup>th</sup> Grade Idaho Information Technology Benchmarks

DRAFT - 12/17/2003



Department of Education asked a statewide team to develop a draft copy of student information technology standards for eighth-grade students. The team consisted of the following:

Jean Bengfort, Coeur d'Alene School District Johana Doyle, Moscow School District Greg Eck, Lakeland School District Bonnie Farmin, Kellogg School District Jim Marconi, Boise School District Pam Reidlen, Kamiah School District Sue Smith, Soda Springs School District Karen Vauk, Micron Technology

The eighth grade was chosen because it is considered to be the culmination of the elementary/middle grades and sets the standard for a student entering his or her high school career. Therefore, the following standards are what we expect an eighth grader to know and be able to do in the area of technology.

This draft document has been approved by the Public Education Information Technology Committee and the Idaho Council for Technology in Learning (ICTL). It will be taken to the Office of the State Board of Education in Spring of 2004 for approval. If you have any questions or comments about the standards and/or content knowledge and skills, please feel free to contact Dawn Wilson at the Idaho State Department of Education via e-mail at <u>dwilson@sde.state.id.us</u> or 208-332-6971.

# 8<sup>th</sup> Grade Idaho Student Information Technology Standards (ISITS) Kindergarten – 7<sup>th</sup> Grade Idaho Information Technology Benchmarks

DRAFT - 12/17/2003

# Technology Foundation Standards for all students

The Technology foundation standards for students are divided into six broad categories that were developed through the National Educational Technology Standards (NETS) project coordinated by the International Society for Technology in Education (ISTE). Standards within each category are to be introduced, reinforced, and mastered by students. These categories provide a framework for linking sample applications. These standards and benchmarks are used as guidelines for planning technology-based activities in which students achieve success in learning, communication, and life skills.

# 1. Basic Operations and Concepts

- a. Students demonstrate a sound understanding of the nature and operation of technology systems.
- b. Students are proficient in the use of technology.

# 2. Social, Ethical, and Human Issues

- a. Students understand the ethical, cultural, and societal issues related to technology.
- b. Students practice responsible use of technology systems, information, and software.
- c. Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.

# 3. Technology Productivity Tools

- a. Students use technology tools to enhance learning , increase productivity, and promote creativity.
- Students use productivity tools to collaborate in constructing technologyenhanced models, preparing publications, and producing other creative works.

# 4. Technology Communications Tools

- a. Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.
- b. Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.

# 5. Technology Research Tools

- a. Students use technology to locate, evaluate, and collect information from a variety of sources.
- b. Students use technology tools to process data and report results.
- c. Students evaluate and select new information resources and technological innovations based on the appropriateness to specific tasks.

# 6. Technology Problem-Solving and Decision-Making Tools

- a. Students use technology resources for solving problems and making informed decisions.
- b. Students employ technology in the development of strategies for solving problems in the real world.

# 8<sup>th</sup> Grade Idaho Student Information Technology Standards (ISITS) Kindergarten – 7th Grade Idaho Information Technology Benchmarks

DRAFT - 12/17/2003

# Idaho Student Information Technology Standards Rationale

Students will live, learn and work in an increasingly complex, technology-driven society. These technology standards are designed to identify foundational skills and processes that students need in order to be productive and successful.

It is essential that computer and technology education be integrated in all grade level content standards. All educators share responsibility for student success.

The eighth grade was chosen because it is considered to be the culmination of the elementary/middle grades and sets the standard for a student entering his or her high school career. Therefore, the following standards are what we expect an eighth grader to know and be able to do in the area of technology.

# STANDARD 1: Basic Operations and Concepts

| Standard<br>The student will:   | Content Knowledge and Skills:  |
|---|--|
| 1. Demonstrate a sound<br>understanding of the<br>basic nature and<br>operation of technology | <ul> <li>a. Use developmentally appropriate and accurate technology terminology.</li> <li>b. Identify the appropriate technology device to complete a task.</li> </ul> |
| systems.  | <ul> <li>Make informed choices among technology systems,<br/>resources and services.</li> </ul>  |
| 2. Demonstrate proficiency in the use of technology.  | <ul> <li>Demonstrate increasingly sophisticated operation of<br/>technology components.</li> </ul>   |
|   | <ul> <li>Apply strategies for identifying and solving routine<br/>software and hardware problems that occur in<br/>everyday use.</li> </ul>                            |

# STANDARD 2: Social, Ethical, and Human Issues

| Standard<br>The student will  | :      | Content Knowledge and Skills:   |
|---|--------|---|
| 1. Demonstrate an<br>understanding of the<br>ethical, cultural, and | the    | <ul> <li>Demonstrate knowledge of current changes in<br/>technologies and the effect those changes have on the<br/>workplace and society.</li> </ul>  |
| societal issues re<br>technology.                                   |        | <ul> <li>Demonstrate knowledge of legal and ethical issues<br/>when using technology, information sources, and<br/>consequences of misuse.</li> </ul> |
| 2. Practice respons   |        | a. Practice responsible use of technological devices and software.  |
| of technology sys<br>information, and                               | stems, | b. Demonstrate respect for others while using technology.   |
|   |        | c. Exhibit legal and ethical behaviors when using technology and information.   |

# STANDARD 3: Technology Productivity Tools

| Standard<br>The student will:  | Content Knowledge and Skills:   |
|--|---|
| <ol> <li>Use technology tools to<br/>enhance learning,<br/>increase productivity, and<br/>promote creativity.</li> </ol> | <ul> <li>Use formatting capabilities of technology for<br/>communicating and illustrating.</li> </ul> |
|  | <ul> <li>b. Use a variety of technology tools for data collection<br/>and analysis.</li> </ul>        |
|  | <ul> <li>Publish and present information using technology tools.</li> </ul>                           |
|  | <ul> <li>Use technology tools to support analysis and<br/>modeling.</li> </ul>                        |

# STANDARD 4: Technology Communications Tools

| <b>Standard</b><br>The student will:   | Content Knowledge and Skills:   |
|--|---|
| 1. Use telecommunications to<br>collaborate, publish, and<br>interact with peers, experts,<br>and other audiences. | <ul> <li>Use telecommunications efficiently and effectively to<br/>access remote information and communicate with<br/>others in support of facilitated and independent<br/>learning.</li> </ul>                                 |
|  | <ul> <li>b. Use technology tools for individual and collaborative<br/>writing, communication and publishing activities to<br/>create curricular related products for audiences<br/>inside and outside the classroom.</li> </ul> |
|  | c. Collaboratively use telecommunications and online resources.   |

# **STANDARD 5: Technology Research Tools**

| <b>Standard</b> The student will:  | Content Knowledge and Skills:  |
|--|--|
| 1. Use technology to   | a. Locate information from electronic resources.   |
| locate, evaluate, and<br>collect information from<br>a variety of sources. | <ul> <li>Evaluate the accuracy, relevance, appropriateness,<br/>comprehensiveness and bias of electronic<br/>information sources.</li> </ul> |
| 2. Use technology tools to process data and report results.                | <ul> <li>Select appropriate technology tools for data analysis<br/>and reporting.</li> </ul>   |

# **STANDARD 6:**

**Technology Problem-Solving and Decision Making Tools** *Problem solving is inherent in all disciplines. Technology Standard 6 is designed to* provide a cumulative (capstone) experience.

| Standard<br>The student will:  | Content Knowledge and Skills:  |
|--|--|
| 1. Use technology<br>resources for solving<br>problems and making<br>informed decisions. | <ul> <li>Determine when technology is useful, select and<br/>use the appropriate tools, and technology resources<br/>to solve the problem, and report findings.</li> </ul> |

# STANDARD 1: Basic Operations and Concepts

| Standard<br>The student will:  | Content Knowledge and Skills:   |
|--|---|
| 1. Demonstrate a sound<br>understanding of the<br>basic nature and<br>operation of | <ul> <li>a. Use developmentally appropriate and accurate technology terminology.</li> <li>b. Identify the appropriate technology device to complete a task.</li> <li>c. Identify choices among technology systems,</li> </ul> |
| technology systems.  | resources and services.   |
| 2. Demonstrate<br>proficiency in the use<br>of technology.                         | <ul> <li>Demonstrate increasingly sophisticated operation of<br/>technology components.</li> </ul>  |
|  | <ul> <li>Apply strategies for identifying and solving routine<br/>software and hardware problems that occur in<br/>everyday use.</li> </ul>   |

# STANDARD 2: Social, Ethical, and Human Issues

| Standard<br>The student will:  | Content Knowledge and Skills:   |
|--|---|
| 1. Demonstrate an<br>understanding of the<br>ethical, cultural, and<br>societal issues related<br>to technology. | <ul> <li>Demonstrate knowledge of current changes in<br/>technologies and the effect those changes have on<br/>the workplace and society.</li> </ul>  |
|  | <ul> <li>Demonstrate knowledge of legal and ethical issues<br/>when using technology, information sources, and<br/>consequences of misuse.</li> </ul> |
| 2. Practice responsible<br>use of technology<br>systems, information,  | <ul> <li>Practice responsible use of technological devices<br/>and software.</li> </ul>   |
|  | <ul> <li>Demonstrate respect for others while using<br/>technology.</li> </ul>  |
| and software.  | <ul> <li>Exhibit legal and ethical behaviors when using<br/>technology and information.</li> </ul>  |

# STANDARD 3: Technology Productivity Tools

| Standard<br>The student will:  | Content Knowledge and Skills:   |
|--|---|
| <ol> <li>Use technology tools<br/>to enhance learning,<br/>increase productivity,<br/>and promote<br/>creativity.</li> </ol> | <ul> <li>Use formatting capabilities of technology for<br/>communicating and illustrating.</li> </ul> |
|  | <ul> <li>b. Use a variety of technology tools for data collection<br/>and analysis.</li> </ul>        |
|  | <ul> <li>Publish and present information using technology tools.</li> </ul>                           |
|  | <ul> <li>Use technology tools to support analysis and<br/>modeling.</li> </ul>                        |

# STANDARD 4: Technology Communications Tools

| <b>Standard</b><br>The student will:   | Content Knowledge and Skills:   |
|--|---|
| <ol> <li>Use telecommunications<br/>to collaborate, publish,<br/>and interact with peers,<br/>experts, and other<br/>audiences.</li> </ol> | <ul> <li>Use telecommunications efficiently and effectively<br/>to access remote information and communicate<br/>with others in support of facilitated and<br/>independent learning.</li> </ul>                                     |
|  | <ul> <li>b. Use technology tools for individual and<br/>collaborative writing, communication and<br/>publishing activities to create curricular related<br/>products for audiences inside and outside the<br/>classroom.</li> </ul> |
|  | <ul> <li>Collaboratively use telecommunications and<br/>online resources.</li> </ul>  |

# STANDARD 5: Technology Research Tools

| <b>Standard</b><br>The student will:                                       | Content Knowledge and Skills:   |
|--|---|
| 1. Use technology to   | a. Locate information from electronic resources.  |
| locate, evaluate, and<br>collect information from<br>a variety of sources. | <ul> <li>Evaluate the accuracy, relevance,<br/>appropriateness, comprehensiveness and bias of<br/>electronic information sources</li> </ul> |
| 2. Use technology tools to process data and report results.                | <ul> <li>Select appropriate technology tools for data<br/>analysis and reporting.</li> </ul>  |

# **STANDARD 6:**

# Technology Problem-Solving and Decision Making Tools

Problem solving is inherent in all disciplines. Technology Standard 6 is designed to provide a cumulative (capstone) experience.

| <b>Standard</b><br>The student will:   | Content Knowledge and Skills:   |
|--|---|
| <ol> <li>Use technology<br/>resources for solving<br/>problems and making<br/>informed decisions.</li> </ol> | a. Determine when technology is useful, select and use the appropriate tools, and technology resources to solve the problem, and report findings. |

# STANDARD 1: Basic Operations and Concepts

| Standard<br>The student will:  | Content Knowledge and Skills:  |
|--|--|
| 1. Demonstrate a sound<br>understanding of the<br>basic nature and<br>operation of | <ul> <li>a. Use developmentally appropriate and accurate technology terminology.</li> <li>b. Identify the appropriate technology device to complete a task.</li> </ul> |
| technology systems.  | <ul> <li>Explore choices among technology systems,<br/>resources and services.</li> </ul>  |
| 2. Demonstrate<br>proficiency in the use<br>of technology.                         | <ul> <li>Demonstrate increasingly sophisticated operation of<br/>technology components.</li> </ul>   |
|  | <ul> <li>Apply strategies for identifying and solving routine<br/>software and hardware problems that occur in<br/>everyday use.</li> </ul>                            |

# STANDARD 2: Social, Ethical, and Human Issues

| Standard<br>The student will:  | Content Knowledge and Skills:   |
|--|---|
| 1. Demonstrate an<br>understanding of the<br>ethical, cultural, and<br>societal issues related<br>to technology. | <ul> <li>Demonstrate knowledge of current changes in<br/>technologies and the effect those changes have on<br/>the workplace and society.</li> </ul>  |
|  | <ul> <li>Demonstrate knowledge of legal and ethical issues<br/>when using technology, information sources, and<br/>consequences of misuse.</li> </ul> |
| 2. Practice responsible<br>use of technology<br>systems, information,  | <ul> <li>Practice responsible use of technological devices<br/>and software.</li> </ul>   |
|  | <ul> <li>Demonstrate respect for others while using<br/>technology.</li> </ul>  |
| and software.  | <ul> <li>Exhibit legal and ethical behaviors when using<br/>technology and information.</li> </ul>  |

# STANDARD 3: Technology Productivity Tools

| Standard<br>The student will:   | Content Knowledge and Skills:   |
|---|---|
| 1. Use technology tools<br>to enhance learning,<br>increase productivity,<br>and promote<br>creativity. | <ul> <li>Use formatting capabilities of technology for<br/>communicating and illustrating.</li> </ul> |
|   | <ul> <li>b. Use a variety of technology tools for data collection<br/>and analysis.</li> </ul>        |
|   | <ul> <li>Publish and present information using technology tools.</li> </ul>                           |
|   | <ul> <li>Use technology tools to support analysis and<br/>modeling.</li> </ul>                        |

# STANDARD 4: Technology Communications Tools

| <b>Standard</b><br>The student will:   | Content Knowledge and Skills:   |
|--|---|
| <ol> <li>Use telecommunications<br/>to collaborate, publish,<br/>and interact with peers,<br/>experts, and other<br/>audiences.</li> </ol> | <ul> <li>Use telecommunications efficiently and effectively<br/>to access remote information and communicate<br/>with others in support of facilitated and<br/>independent learning.</li> </ul>                                     |
|  | <ul> <li>b. Use technology tools for individual and<br/>collaborative writing, communication and<br/>publishing activities to create curricular related<br/>products for audiences inside and outside the<br/>classroom.</li> </ul> |
|  | c. Collaboratively use telecommunications and online resources.   |

# **STANDARD 5: Technology Research Tools**

| <b>Standard</b><br>The student will:   | Content Knowledge and Skills:   |
|--|---|
| <ol> <li>Use technology to<br/>locate, evaluate, and<br/>collect information from<br/>a variety of sources.</li> </ol> | a. Locate information from electronic resources.  |
|  | <ul> <li>Evaluate the accuracy, relevance,<br/>appropriateness, comprehensiveness and bias of<br/>electronic information sources</li> </ul> |
| 2. Use technology tools to process data and report results.  | <ul> <li>Select appropriate technology tools for data<br/>analysis and reporting.</li> </ul>  |

# **STANDARD 6:**

**Technology Problem-Solving and Decision Making Tools** *Problem solving is inherent in all disciplines. Technology Standard 6 is designed to* provide a cumulative (capstone) experience.

| <b>Standard</b><br>The student will: | Content Knowledge and Skills:                                      |
|--------------------------------------|--|
| <ol> <li>Use technology</li></ol>    | <ul> <li>Determine when technology is useful, select and</li></ul> |
| resources for solving                | use the appropriate tools, and technology                          |
| problems and making                  | resources to solve the problem, and report                         |
| informed decisions.                  | findings.  |

# STANDARD 1: Basic Operations and Concepts

| Standard<br>The student will:  | Content Knowledge and Skills:   |
|--|---|
| <ol> <li>Demonstrate a sound<br/>understanding of the<br/>basic nature and<br/>operation of<br/>technology systems.</li> </ol> | <ul> <li>a. Use developmentally appropriate and accurate<br/>technology terminology.</li> </ul>   |
|  | <ul> <li>Identify the appropriate technology device to<br/>complete a task.</li> </ul>  |
|  | c. N/A  |
| 2. Demonstrate<br>proficiency in the use<br>of technology.   | <ul> <li>Demonstrate increasingly sophisticated operation of<br/>technology components.</li> </ul>  |
|  | <ul> <li>Acquire and apply strategies for identifying and<br/>solving routine software and hardware problems that<br/>occur in everyday use.</li> </ul> |

# STANDARD 2: Social, Ethical, and Human Issues

| Standard<br>The student will:  | Content Knowledge and Skills:  |
|--|--|
| 1. Demonstrate an<br>understanding of the<br>ethical, cultural, and<br>societal issues related<br>to technology. | <ul> <li>Discuss common uses of technology in daily life and<br/>related advantages and disadvantages.</li> </ul>  |
|  | <ul> <li>Discuss basic issues related to responsible use of<br/>technology and information and describe personal<br/>consequences of inappropriate use.</li> </ul> |
| 2. Practice responsible<br>use of technology<br>systems, information,<br>and software.                           | <ul> <li>Practice responsible use of technological devices<br/>and software.</li> </ul>  |
|  | <ul> <li>Demonstrate respect for others while using<br/>technology.</li> </ul>   |
|  | <ul> <li>Exhibit legal and ethical behaviors when using<br/>technology and information.</li> </ul>   |
| <b>Standard</b><br>The student will:   | Content Knowledge and Skills:  |
|--|--|
| <ol> <li>Use technology tools<br/>to enhance learning,<br/>increase productivity,<br/>and promote<br/>creativity.</li> </ol> | a. Use formatting capabilities of technology for<br>communicating and illustrating.            |
|  | <ul> <li>b. Use a variety of technology tools for data collection<br/>and analysis.</li> </ul> |
|  | c. Publish and present information using technology tools.                                     |
|  | <ul> <li>d. Use technology tools to support analysis and modeling.</li> </ul>                  |

| Standard<br>The student will:  | Content Knowledge and Skills:   |
|--|---|
| <ol> <li>Use telecommunications<br/>to collaborate, publish,<br/>and interact with peers,<br/>experts, and other<br/>audiences.</li> </ol> | <ul> <li>Use telecommunications efficiently and effectively<br/>to access remote information and communicate<br/>with others in support of facilitated and<br/>independent learning.</li> </ul>                                     |
|  | <ul> <li>b. Use technology tools for individual and<br/>collaborative writing, communication and<br/>publishing activities to create curricular related<br/>products for audiences inside and outside the<br/>classroom.</li> </ul> |
|  | c. Collaboratively use telecommunications and online resources.   |

| <b>Standard</b><br>The student will:   | Content Knowledge and Skills:   |
|--|---|
| 1. Use technology to<br>locate, evaluate, and<br>collect information from<br>a variety of sources. | a. Locate information from electronic resources.  |
|  | <ul> <li>Evaluate the accuracy, relevance,<br/>appropriateness, comprehensiveness and bias of<br/>electronic information sources</li> </ul> |
| 2. Use technology tools to process data and report results.  | a. N/A  |

## **STANDARD 6:**

| <b>Standard</b><br>The student will:   | Content Knowledge and Skills: |
|--|-------------------------------|
| 1. Use technology<br>resources for solving<br>problems and making<br>informed decisions. | a. N/A                        |

| Standard<br>The student will:                              | Content Knowledge and Skills:   |
|--|---|
| 1. Demonstrate a sound understanding of the                | <ul> <li>a. Use developmentally appropriate and accurate<br/>technology terminology.</li> </ul>   |
| basic nature and<br>operation of                           | <ul> <li>Explore the appropriate technology device to<br/>complete a task.</li> </ul>   |
| technology systems.  | c. N/A  |
| 2. Demonstrate<br>proficiency in the use<br>of technology. | <ul> <li>Demonstrate increasingly sophisticated operation of<br/>technology components.</li> </ul>  |
|  | <ul> <li>Acquire and apply strategies for identifying and<br/>solving routine software and hardware problems that<br/>occur in everyday use.</li> </ul> |

| Standard<br>The student will:  | Content Knowledge and Skills:  |
|--|--|
| 1. Demonstrate an<br>understanding of the<br>ethical, cultural, and<br>societal issues related<br>to technology. | <ul> <li>Discuss common uses of technology in daily life and<br/>related advantages and disadvantages.</li> </ul>  |
|  | <ul> <li>Discuss basic issues related to responsible use of<br/>technology and information and describe personal<br/>consequences of inappropriate use.</li> </ul> |
| 2. Practice responsible  | <ul> <li>Practice responsible use of technological devices<br/>and software.</li> </ul>  |
| use of technology<br>systems, information,   | <ul> <li>Demonstrate respect for others while using<br/>technology.</li> </ul>   |
| and software.  | <ul> <li>Exhibit legal and ethical behaviors when using<br/>technology and information.</li> </ul>   |

| Standard<br>The student will:  | Content Knowledge and Skills:   |
|--|---|
| <ol> <li>Use technology tools<br/>to enhance learning,<br/>increase productivity,<br/>and promote<br/>creativity.</li> </ol> | <ul> <li>Use formatting capabilities of technology for<br/>communicating and illustrating.</li> </ul> |
|  | <ul> <li>b. Use a variety of technology tools for data collection<br/>and analysis.</li> </ul>        |
|  | <ul> <li>Publish and present information using technology tools.</li> </ul>                           |
|  | <ul> <li>Use technology tools to support analysis and<br/>modeling.</li> </ul>                        |

| <b>Standard</b><br>The student will:   | Content Knowledge and Skills:   |
|--|---|
| <ol> <li>Use telecommunications<br/>to collaborate, publish,<br/>and interact with peers,<br/>experts, and other<br/>audiences.</li> </ol> | <ul> <li>Use telecommunications efficiently and effectively<br/>to access remote information and communicate<br/>with others in support of facilitated and<br/>independent learning.</li> </ul>                                     |
|  | <ul> <li>b. Use technology tools for individual and<br/>collaborative writing, communication and<br/>publishing activities to create curricular related<br/>products for audiences inside and outside the<br/>classroom.</li> </ul> |
|  | c. Collaboratively use telecommunications and online resources.   |

| <b>Standard</b> The student will:  | Content Knowledge and Skills:   |
|--|---|
| <ol> <li>Use technology to<br/>locate, evaluate, and<br/>collect information from<br/>a variety of sources.</li> </ol> | a. Locate information from electronic resources.  |
|  | <ul> <li>Evaluate the accuracy, relevance,<br/>appropriateness, comprehensiveness and bias of<br/>electronic information sources</li> </ul> |
| 2. Use technology tools to process data and report results.  | a. N/A  |

## **STANDARD 6:**

| <b>Standard</b><br>The student will:   | Content Knowledge and Skills: |
|--|-------------------------------|
| 1. Use technology<br>resources for solving<br>problems and making<br>informed decisions. | a. N/A                        |

| Standard<br>The student will:                              | Content Knowledge and Skills:   |
|--|---|
| 1. Demonstrate a sound understanding of the                | <ul> <li>Use developmentally appropriate and accurate<br/>technology terminology.</li> </ul>  |
| basic nature and<br>operation of                           | <ul> <li>Explore the appropriate technology device to<br/>complete a task.</li> </ul>   |
| technology systems.  | c. N/A  |
| 2. Demonstrate<br>proficiency in the use<br>of technology. | a. Demonstrate functional operation of technology components.   |
|  | <ul> <li>Acquire and apply strategies for identifying and<br/>solving routine software and hardware problems that<br/>occur in everyday use.</li> </ul> |

| Standard<br>The student will:                                       | Content Knowledge and Skills:  |
|---|--|
| 1. Demonstrate an<br>understanding of the<br>ethical, cultural, and | <ul> <li>Discuss common uses of technology in daily life and<br/>related advantages and disadvantages.</li> </ul>  |
| societal issues related<br>to technology.                           | <ul> <li>Discuss basic issues related to responsible use of<br/>technology and information and describe personal<br/>consequences of inappropriate use.</li> </ul> |
| 2. Practice responsible   | <ul> <li>Practice responsible use of technological devices<br/>and software.</li> </ul>  |
| use of technology<br>systems, information,                          | <ul> <li>Demonstrate respect for others while using<br/>technology.</li> </ul>   |
| and software.   | <ul> <li>Discuss legal and ethical behaviors when using<br/>technology and information.</li> </ul>   |

| <b>Standard</b><br>The student will:   | Content Knowledge and Skills:  |
|--|--|
| <ol> <li>Use technology tools<br/>to enhance learning,<br/>increase productivity,<br/>and promote<br/>creativity.</li> </ol> | <ul> <li>Use prescribed technology writing or drawing tools<br/>for communicating and illustrating.</li> </ul> |
|  | <ul> <li>b. Use prescribed technology tools for data collection<br/>and analysis.</li> </ul>                   |
|  | <ul> <li>Explore prescribed technology for publishing and<br/>presenting information.</li> </ul>               |
|  | d. N/A   |

| <b>Standard</b><br>The student will:   | Content Knowledge and Skills:   |
|--|---|
| <ol> <li>Use telecommunications<br/>to collaborate, publish,<br/>and interact with peers,<br/>experts, and other<br/>audiences.</li> </ol> | <ul> <li>Use telecommunications efficiently and effectively<br/>to access remote information and communicate<br/>with others in support of facilitated and<br/>independent learning.</li> </ul>                                     |
|  | <ul> <li>b. Use technology tools for individual and<br/>collaborative writing, communication and<br/>publishing activities to create curricular related<br/>products for audiences inside and outside the<br/>classroom.</li> </ul> |
|  | c. N/A  |

| <b>Standard</b><br>The student will:   | Content Knowledge and Skills:   |
|--|---|
| <ol> <li>Use technology to<br/>locate, evaluate, and<br/>collect information from<br/>a variety of sources.</li> </ol> | a. Explore electronic information sources.                                |
|  | b. Evaluate the accuracy and relevance of electronic information sources. |
| 2. Use technology tools to process data and report results.  | a. N/A  |

## **STANDARD 6:**

| <b>Standard</b><br>The student will:   | Content Knowledge and Skills: |
|--|-------------------------------|
| 1. Use technology<br>resources for solving<br>problems and making<br>informed decisions. | a. N/A                        |

| Standard<br>The student will:                              | Content Knowledge and Skills:   |
|--|---|
| 1. Demonstrate a sound understanding of the                | <ul> <li>a. Use developmentally appropriate and accurate<br/>technology terminology.</li> </ul>   |
| basic nature and<br>operation of                           | b. N/A  |
| technology systems.  | c. N/A  |
| 2. Demonstrate<br>proficiency in the use<br>of technology. | a. Demonstrate functional operation of technology components.   |
|  | <ul> <li>Explore and acquire and apply strategies for<br/>identifying and solving routine software and<br/>hardware problems that occur in everyday use.</li> </ul> |

| Standard<br>The student will:  | Content Knowledge and Skills:   |
|--|---|
| 1. Demonstrate an<br>understanding of the<br>ethical, cultural, and<br>societal issues related<br>to technology. | a. N/A  |
|  | <ul> <li>Demonstrate an awareness and respect for the<br/>ethical use of technology.</li> </ul> |
| 2. Practice responsible<br>use of technology<br>systems, information,  | <ul> <li>Practice responsible use of technological devices<br/>and software.</li> </ul>         |
|  | <ul> <li>Demonstrate respect for others while using<br/>technology.</li> </ul>                  |
| and software.  | c. N/A  |

| <b>Standard</b><br>The student will:   | Content Knowledge and Skills:  |
|--|--|
| <ol> <li>Use technology tools<br/>to enhance learning,<br/>increase productivity,<br/>and promote<br/>creativity.</li> </ol> | <ul> <li>Use prescribed technology writing or drawing tools<br/>for communicating and illustrating.</li> </ul> |
|  | <ul> <li>Use prescribed technology tools for data collection<br/>and analysis.</li> </ul>                      |
|  | <ul> <li>Explore prescribed technology for publishing and<br/>presenting information.</li> </ul>               |
|  | d. N/A   |

| Standard<br>The student will:  | Content Knowledge and Skills:   |
|--|---|
| <ol> <li>Use telecommunications<br/>to collaborate, publish,<br/>and interact with peers,<br/>experts, and other<br/>audiences.</li> </ol> | a. Gather information and communicate with others using telecommunications, with support from teachers, family members or student partners.   |
|  | <ul> <li>b. Use technology tools for individual and<br/>collaborative writing, communication and<br/>publishing activities to create curricular related<br/>products for audiences inside and outside the<br/>classroom.</li> </ul> |
|  | c. N/A  |

| <b>Standard</b><br>The student will:   | Content Knowledge and Skills:              |
|--|--|
| <ol> <li>Use technology to<br/>locate, evaluate, and<br/>collect information from<br/>a variety of sources.</li> </ol> | a. Explore electronic information sources. |
|  | b. N/A                                     |
| 2. Use technology tools to process data and report results.  | a. N/A                                     |

## **STANDARD 6:**

| <b>Standard</b><br>The student will:   | Content Knowledge and Skills: |
|--|-------------------------------|
| 1. Use technology<br>resources for solving<br>problems and making<br>informed decisions. | a. N/A                        |

| Standard<br>The student will:                              | Content Knowledge and Skills:   |
|--|---|
| 1. Demonstrate a sound understanding of the                | <ul> <li>a. Use developmentally appropriate and accurate<br/>technology terminology.</li> </ul>   |
| basic nature and<br>operation of                           | b. N/A  |
| technology systems.  | c. N/A  |
| 2. Demonstrate<br>proficiency in the use<br>of technology. | a. Demonstrate functional operation of technology components.   |
|  | <ul> <li>Explore and acquire and apply strategies for<br/>identifying and solving routine software and<br/>hardware problems that occur in everyday use.</li> </ul> |

| Standard<br>The student will:  | Content Knowledge and Skills:   |
|--|---|
| 1. Demonstrate an<br>understanding of the<br>ethical, cultural, and<br>societal issues related<br>to technology. | a. N/A  |
|  | <ul> <li>Demonstrate an awareness and respect for the<br/>ethical use of technology.</li> </ul> |
| 2. Practice responsible<br>use of technology<br>systems, information,<br>and software.                           | a. Practice responsible use of technological devices<br>and software.                           |
|  | <ul> <li>Demonstrate respect for others while using<br/>technology.</li> </ul>                  |
|  | c. N/A  |

| Standard<br>The student will:  | Content Knowledge and Skills:  |
|--|--|
| <ol> <li>Use technology tools<br/>to enhance learning,<br/>increase productivity,<br/>and promote<br/>creativity.</li> </ol> | <ul> <li>Use prescribed technology writing or drawing tools<br/>for communicating and illustrating.</li> </ul> |
|  | <ul> <li>b. Use prescribed technology tools for data collection<br/>and analysis.</li> </ul>                   |
|  | <ul> <li>Explore prescribed technology for publishing and<br/>presenting information.</li> </ul>               |
|  | d. N/A   |

| Standard<br>The student will:  | Content Knowledge and Skills:   |
|--|---|
| <ol> <li>Use telecommunications<br/>to collaborate, publish,<br/>and interact with peers,<br/>experts, and other<br/>audiences.</li> </ol> | a. Gather information and communicate with others using telecommunications, with support from teachers, family members or student partners.   |
|  | <ul> <li>b. Use technology tools for individual and<br/>collaborative writing, communication and<br/>publishing activities to create curricular related<br/>products for audiences inside and outside the<br/>classroom.</li> </ul> |
|  | c. N/A  |

| <b>Standard</b><br>The student will:                        | Content Knowledge and Skills:              |
|---|--|
| 1. Use technology to locate, evaluate, and                  | a. Explore electronic information sources. |
| collect information from<br>a variety of sources.           | b. N/A                                     |
| 2. Use technology tools to process data and report results. | c. N/A                                     |

## **STANDARD 6:**

| <b>Standard</b><br>The student will:   | Content Knowledge and Skills: |
|--|-------------------------------|
| 1. Use technology<br>resources for solving<br>problems and making<br>informed decisions. | a. N/A                        |

| Standard<br>The student will:                              | Content Knowledge and Skills:   |
|--|---|
| 1. Demonstrate a sound understanding of the                | <ul> <li>a. Use developmentally appropriate and accurate<br/>technology terminology.</li> </ul>   |
| basic nature and<br>operation of                           | b. N/A  |
| technology systems.  | c. N/A  |
| 2. Demonstrate<br>proficiency in the use<br>of technology. | <ul> <li>Use input and output devices successfully to operate<br/>computers, VCRs, audio tapes and other<br/>technologies.</li> </ul>                               |
|  | <ul> <li>Explore and acquire and apply strategies for<br/>identifying and solving routine software and<br/>hardware problems that occur in everyday use.</li> </ul> |

| Standard<br>The student will:  | Content Knowledge and Skills:   |
|--|---|
| 1. Demonstrate an understanding of the   | a. N/A  |
| ethical, cultural, and<br>societal issues related<br>to technology.                    | <ul> <li>Demonstrate an awareness and respect for the<br/>ethical use of technology.</li> </ul> |
| 2. Practice responsible<br>use of technology<br>systems, information,<br>and software. | <ul> <li>Practice responsible use of technological devices<br/>and software.</li> </ul>         |
|  | <ul> <li>Demonstrate respect for others while using<br/>technology.</li> </ul>                  |
|  | c. N/A  |

| <b>Standard</b><br>The student will:           | Content Knowledge and Skills: |
|--|-------------------------------|
| 1. Use technology tools                        | a. N/A                        |
| to enhance learning,<br>increase productivity, | b. N/A                        |
| and promote<br>creativity.                     | c. N/A                        |
|  | d. N/A                        |

| Standard<br>The student will:  | Content Knowledge and Skills: |
|--|-------------------------------|
| <ol> <li>Use telecommunications<br/>to collaborate, publish,<br/>and interact with peers,<br/>experts, and other<br/>audiences.</li> </ol> | a. N/A                        |
|  | b. N/A                        |
|  | c. N/A                        |

| Standard<br>The student will:  | Content Knowledge and Skills: |
|--|-------------------------------|
| <ol> <li>Use technology to<br/>locate, evaluate, and<br/>collect information from<br/>a variety of sources.</li> </ol> | a. N/A                        |
|  | b. N/A                        |
| 2. Use technology tools to process data and report results.  | c. N/A                        |

## **STANDARD 6:**

| <b>Standard</b><br>The student will:   | Content Knowledge and Skills: |
|--|-------------------------------|
| 1. Use technology<br>resources for solving<br>problems and making<br>informed decisions. | a. N/A                        |

# **<u>G. SUBJECT</u>:**

# Superintendent's Report