Technology and Information Literacy Standards
Standards Development Project
2010-11

District Strategic Plan

Achievement Strategy
21st Century Teaching and Learning
We will focus upon core content, learning skills, and instructional tools in order to promote high rigor and achievement for all learners, as we prepare students for success in the 21st century.

Curriculum Review and Innovation
We will embed 21st Century Skills and Power Standards within the curriculum review process, and explore opportunities for curriculum alignment and integration.

Technology Strategic Plan

Technology Integration and Multi-Media
We will integrate information technologies into curriculum, instruction, and assessment in order to stimulate learning, collaboration, communication, and personal growth.

Action Step:
We will establish student standards and will identify knowledge and skills in the area of technology, based on grade-level expectations.

Technology-Infused Curriculum and Instruction Strategy
We will integrate information technologies into curriculum, instruction, and assessment to stimulate learning, collaboration, communication, and creativity in order to achieve intellectual and personal growth.

—May 2010

Secondary Program Study

Technology Application Recommendations

* Embed technology standards within content areas in grade K-8. These will be developed beginning in 2010.
* Assess students at the end of 8th or beginning of 9th grade on technology application proficiency. For those not proficient, a menu of options will be created.

Standards Development Process

* Form Hopkins TILS Task Force—Fall 2010
  - 6 elementary library media specialists, 2 secondary
  - Two curriculum coordinators
  - Media Coordinator and Tech Standards Coordinator
* Task Force will review standards suggested for each level—Fall/Winter 2010
  - Minnesota Standards in Information and Technology Literacy (MEMO and MDE)
  - National Educational Technology Standards (ISTE NETS)
  - Standards for the 21st Century Learner (AASL)
  - Other districts’ standards
### Standards Development Process

- Task Force will draft Hopkins standards for each level and framework for implementation, embedding them in existing grade-level projects wherever possible—Winter 2010.
- Draft will be shared with grade-level teachers for feedback and modification—Winter 2010-11.
- Task Force will prepare final standards along with assessment rubrics and staff development plan—Winter/Spring 2011.
- Staff development begins—Spring/Summer 2011.
- Standards implementation begins—Fall 2011.

### Technological Literacy


"As technology floods the rest of our lives, one of the chief habits a student needs to acquire is technological literacy... the latest in a series of proficiencies children should accumulate in school. Students begin with mastering the alphabet and numbers, then transition into critical thinking, logic, and absorption of the scientific method. Technological literacy is something different: proficiency with the larger system of our invented world... We don't need expertise with every invention; that is not only impossible, it's not very useful. Rather, we need to be literate in the complexities of technology in general, as if it were second nature."

### Minnesota Statutes 2007, 120B.023

- "The commissioner of education must revise and appropriately embed technology and information literacy standards consistent with recommendations from school media specialists..."

### MEMO Standards Refresh Project

- **June–December 2009**
- Goals of the project—
  - Update MEMO Guidelines for Standards in Information and Technological Literacy developed in 2004 that were based on 1998 ISTE, 1998 AASL, various research process models, etc.
  - Reflect 21st century skills
  - Provide bridge between K-12 and higher-education expectations for students.

- Revised MEMO Standards reflect—
  - 2007 ISTE standards (NETS)
    - using technology creatively & collaboratively
    - problem solving
    - research process model
  - 2007 AASL Standards for the 21st Century Learner
    - research process is embedded theme
  - Framework for 21st Century Learning
    - include information, media, and technology skills
MEMO Info & Tech Literacy Standards

Standards and benchmarks for four levels of learners:

- Grades K–2
- Grades 3–5
- Grades 6–8
- Grades 9–12

Four major strands within each group of standards:

- Inquiry, Research, and Problem Solving
- Expanding Literacies
- Technology Use
- Ethical Participation in a Global Society

Strand 1: Inquiry, Research, and Problem Solving—

- The student will learn a continuous cycle of questioning, gathering, synthesizing, evaluating, and using information individually and collaboratively to create new knowledge and apply it to real situations
  - I. Question
  - II. Gather
  - III. Draw conclusions and offer solutions
  - IV. Communicate
  - V. Evaluate

Strand 2: Expanding Literacies—

- Read, view, listen, and communicate in any format for a variety of purposes
  - I. Foundational Knowledge/Skills
  - II. Collaboration
  - III. Creativity
  - IV. Reflection/Evaluation

Strand 3: Technology Use and Concepts

- Explore multiple technologies, evaluate their suitability for the desired educational or personal task, and apply the tools needed
  - I. Use of Technology
  - II. Technology Concepts

Strand 4: Ethical Participation in a Global Society—

- The student will participate productively in the global learning community and demonstrate safe, ethical, legal, and responsible behavior in the use of information
  - I. Foundational Knowledge/Skills
  - II. Collaboration
  - III. Creativity
  - IV. Reflection/Evaluation