

Standards for Students

Grade PK-2 Standards

Students will:

1. Use input devices (e.g. mouse, keyboard) and output devices (e.g. monitor, printer) to successfully operate computers and other technologies.
2. Use a variety of media and technology resources (e.g. internet, CD Rom) for directed and independent learning activities across the curriculum.
3. Communicate about technology using developmentally appropriate and accurate terminology.
4. Use developmentally appropriate multimedia resources (e.g. interactive books, educational software, elementary multimedia encyclopedias) to support learning.
5. Work cooperatively and collaboratively with peers, family members and others when using technology in the classroom.
6. Demonstrate Christian ethics when using technology.
7. Create developmentally appropriate multimedia products with support from teachers, family members, or student partners.
8. Use technology resources (e.g. puzzles, logical thinking programs, writing tools, digital cameras, drawing tools) for problem solving, communication and illustration of thoughts, ideas and stories.

Grade 3-5 Standards

Students will:

1. Use keyboards and other common input and output devices (including adaptive devices when necessary) efficiently and effectively.
2. Discuss common uses of technology in the daily life of a Christian and the advantages and disadvantages those uses provide.
3. Discuss basic issues related to a responsible Christian's use of technology, internet, and information; describe personal consequences of inappropriate use.
4. Use technology to support personal productivity, remediate skill deficits and facilitate learning throughout the curriculum.
5. Use technology tools to create educational projects for audiences inside and outside the classroom.
6. Use internet resources efficiently and effectively to pursue educational objectives.
7. Use technology resources for problem-solving, self-directed learning, and extended learning activities.

8. Determine when technology is useful and select the appropriate tool and technology resources to address a variety of tasks and problems.
9. Evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources.

Grade 6-8 Standards

Students will:

1. Demonstrate an ability to do basic troubleshooting. Examples: check all cabling, turned on, drives closed; restart computer and / or program.
2. Demonstrate knowledge of current changes in technology and the effect of those changes on society.
Examples: purchase made online vs. going to the store. No sales tax charged on online purchases-effects economy. DVDs vs. video.
3. Demonstrate legal, ethical, and Christian behaviors while using information and technology and discuss consequences of misuse. Examples: using appropriate websites and appropriate documentation.
4. Use content-specific tools, software, simulations, and Internet resources to support learning and research.
5. Apply productivity / multimedia software and hardware to support personal productivity, group collaboration, and learning throughout the curriculum.
6. Design, develop, publish and present products using technology resources that demonstrate and communicate curriculum concepts to audiences inside and outside the classroom.
7. Work with peers, experts, and others to investigate curriculum-related issues, and information, and to develop solutions using technology resources and collaborative tools.
8. Select and use appropriate tools and technology resources to accomplish a variety of tasks and solve problems.
9. Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness and bias of electronic information sources concerning real-world problems.

ISTE National Educational Technology Standards and Performance Indicators for Teachers

I. TECHNOLOGY OPERATIONS AND CONCEPTS

Teachers demonstrate a sound understanding of technology operations and concepts. Teachers:

- A. Demonstrate introductory knowledge, skills, and understanding of concepts related to technology (as described in the ISTE National Educational Technology Standards for Students).
- B. Demonstrate continual growth in technology knowledge and skills to stay abreast of current and emerging technologies.

II. PLANNING AND DESIGNING LEARNING ENVIRONMENTS AND EXPERIENCES.

Teachers plan and design effective learning environments and experiences supported by technology. Teachers:

- A. Design developmentally appropriate learning opportunities that apply technology-enhanced instructional strategies to support the diverse needs of learners.
- B. Apply current research on teaching and learning with technology when planning learning environments and experiences.
- C. Identify and locate technology resources and evaluate them for accuracy and suitability.
- D. Plan for the management of technology resources within the context of learning activities.
- E. Plan strategies to manage student learning in a technology-enhanced environment.

III. TEACHING, LEARNING, AND THE CURRICULUM

Teachers implement curriculum plans that include methods and strategies for applying technology to maximize student learning. Teachers:

- A. Facilitate technology-enhanced experiences that address content standards and student technology standards.
- B. Use technology to support learner-centered strategies that address the diverse needs of students.
- C. Apply technology to develop students' higher order skills and creativity
- D. Manage student-learning activities in a technology-enhanced environment.

IV. ASSESMENT AND EVALUATION

Teachers apply technology to facilitate a variety of effective assessment and evaluation of strategies. Teachers:

- A. Apply technology in assessing student learning of subject matter using a variety of assessment techniques.
- B. Use technology resources to collect and analyze data, interpret results, and communicate findings to improve instructional practice and maximize student learning.
- C. Apply multiple methods of evaluation to determine students' appropriate use of technology resources for learning, communication, and productivity.

V. PRODUCTIVITY AND PROFESSIONAL PRACTICE

Teachers use technology to enhance their productivity and professional practice. Teachers:

- A. Use technology resources to engage in ongoing professional development and lifelong learning.
- B. Continually evaluate and reflect on professional practice to make informed decisions regarding the use of technology in support of student learning.
- C. Apply technology to increase productivity.
- D. Use technology to communicate and collaborate with peers, parents, and the larger community in order to nurture student learning.

VI. SOCIAL, ETHICAL, LEGAL, AND HUMAN ISSUES

Teachers understand the social, ethical, legal, and human issues surrounding the use of technology in PK-12 schools and apply that understanding in practice. Teachers:

- A. Model and teach legal and ethical practice related to technology use.
- B. Apply technology resources to enable and empower learners with diverse backgrounds, characteristics, and abilities.
- C. Identify and use technology resources that affirm diversity.
- D. Promote safe and healthy use of technology resources.
- E. Facilitate equitable access to technology resources for all students.

Professional Development

One of the areas that is vital to a successful technology program is professional development. In order to successfully integrate technology into your school's curriculum there must be an organized commitment of time and financial resources so that teachers can effectively use technology in their classrooms. Each teacher should be directly involved in technology integration; technology coordinators and computer teachers are there to help but the classroom teacher must be involved.

The committee generated the following thoughts and ideas concerning professional development:

1. Having a person on staff who can support technology and act as a resource person is very important. This person should have release time from the classroom.
2. Teachers are much more likely to use technology when technical problems can be solved in a timely manner.
3. Include funds for technology inservice in your budget every year. Title V funds and Eisenhower grants can also be used for technology training.
4. Check with your public school district to see if they have technology workshops that teachers can go to at no charge.
5. When Lutheran schools belong to the Cooperating School Districts they can take advantage of CSD workshops and attendance at the Midwest Education and Technology Conference at no additional expense.
6. Technology skills should be taught in the context of using them in the classroom. It is fine to know how to use Powerpoint or HyperStudio, but how will they be used with your students?
7. Consider getting a sub to release teachers during the day so that they can meet individually with the technology coordinator.
8. Administrators should encourage teachers to use technology in their classrooms and meet with them to set goals and evaluate their progress.
9. Consider sending representatives from your school to a technology conference every year and to the National Educational Computing Conference every several years.
10. When planning inservice opportunities be sure to consider the various skill levels of your staff.

A common mistake that schools make is to purchase hardware and software but spend very little time on staff development. Making technology staff development a priority is an important part of a school's technology program.