

Middle School Technology Program

The technology segment of each child's education here at Gerstell will be integrated into the curriculum using two methods. First, through everyday coursework, where technology will be used to augment existing academic curricula. And second, through the use of technology-specific courses. A major component of the technology program is the development of a general set of guidelines describing technology-literate students at key developmental points in their precollege education. These guidelines reflect the underlying assumption that all students should have the opportunity to develop technology skills that support learning, personal productivity, decision making, and real-life scenarios. These guidelines and associated standards provide a framework for preparing students to be lifelong learners who make informed decisions about the role of technology in their lives and the world around them.

The following performance indicators describe the technology competence students should exhibit by way of demonstration upon completion of Grades 8. (NOTE: The numbers shown in parenthesis reflect those objectives from the National Educational Technology Standards for Students (NETS). [The primary goal of the NETS Project is to enable stakeholders in PreK-12 education to develop national standards for educational uses of technology that facilitate school improvement in the United States.]

1. Apply strategies for identifying and solving routine hardware and software problems that occur during everyday use. (1)
2. Demonstrate knowledge of current changes in information technologies and the effect those changes have on the workplace and society. (2)
3. Exhibit legal and ethical behaviors when using information and technology, and discuss consequences of misuse. (2)
4. Use content-specific tools, software, and simulations (e.g., environmental probes, graphing calculators, exploratory environments, Web tools) to support learning and research. (3, 5)
5. Apply productivity/multimedia tools and peripherals to support personal productivity, group collaboration, and learning throughout the curriculum. (3, 6)
6. Design, develop, publish, and present products (e.g., Web pages, videotapes) using technology resources that demonstrate and communicate curriculum concepts to audiences inside and outside the classroom. (4, 5, 6)
7. Collaborate with peers, experts, and others using telecommunications and collaborative tools to investigate curriculum-related problems, issues, and

information, and to develop solutions or products for audiences inside and outside the classroom. (4, 5)

8. Select and use appropriate tools and technology resources to accomplish a variety of tasks and solve problems. (5, 6)
9. Demonstrate an understanding of concepts underlying hardware, software, and connectivity, and of practical applications to learning and problem solving. (1, 6)
10. Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems. (2, 5, 6)

These guidelines are indicators of achievement at the Middle School level of education. They assume that technology skills are developed by coordinated activities that support learning throughout a student's education. These skills are to be introduced, reinforced, and finally mastered, and thus, integrated into an individual's personal learning and social framework. They represent essential, realistic, and attainable goals for lifelong learning and a productive citizenry. The standards and performance indicators are based on input and feedback from educational technology experts as well as parents, teachers, and curriculum experts. In addition, they reflect information collected from professional literature and local, state, and national documents.