

Approaches to the Curriculum Integration of the Computer/Technology Standards for Grades 9-12

Curriculum integration is the use of technology to support and enhance learning and teaching in the daily course of studying academic content. (International Society for Technology in Education, 2000) Successful curriculum integration of technology occurs when technology expectations are written into curriculum guides. The guides identify expectations and the needed learning experiences that require the use of new technologies.

Various approaches and scenarios are available for using technology to facilitate learning. These methods promote technology as a tool for learning rather than being taught in isolation. The following approaches are provided as illustrations of this process. The approach taken by your school division will depend upon local needs.

Divisionwide Approach

1. Convene a team consisting of library media, technology, and instructional specialists/coordinators to:
 - identify student learning needs;
 - pinpoint student technology skills;
 - examine curriculum objectives that can be met most effectively through the use of technology; and
 - determine at which grade levels and content areas the integration of Computer/Technology Standards of Learning and the curriculum can take place.
2. Examine the division inventory of resources, both hardware and software, that are available for supporting the infusion of technology in the curriculum. This information is useful for implementation and planning purposes.
3. Identify in-service/training opportunities for teachers to develop integration strategies.
4. Other strategies for implementation may include sharing lesson plans, best practices, opportunities for collaboration, and mentors.

Building-Level Approach

1. At the building level, the team consists of each department chair, technology specialist, and library media specialist. The team's goal should be to:
 - identify specific student learning needs;
 - pinpoint student technology skills;
 - to examine curriculum objectives that can best be met through the use of technology;
 - identify curriculum areas where traditional teaching methodologies have produced the desired results; and
 - determine at which grade levels and content areas the specific integration of Computer/Technology Standards of Learning and the curriculum can take place.
2. The team examines the building inventory of technology resources, both hardware and software, that are available for supporting the infusion of technology in the curriculum. This information is useful for implementation and planning purposes.

3. Each department identifies the technology resources, both hardware and software, that support the integration of Computer/Technology Standards into teaching strategies.
4. Identify in-service/training opportunities for content area teachers to develop integration strategies.
5. Other strategies for implementation may include sharing lesson plans, best practices, opportunities for collaboration, and mentors.

Individual Teacher Approach

Each teacher:

- reviews teaching methodologies that are currently employed;
- assesses his/her own skill level in integrating technology;
- reviews his/her content area to determine where technology can be used as a tool to accomplish specific objectives;
- seeks opportunities to collaborate with the library media specialist and the technology resource staff to identify areas where technology may enhance instruction with emphasis in areas where traditional methodologies have not achieved the desired results;
- determines ways to employ teaching strategies which facilitate technology integration;
- identifies the technology resources, both hardware and software, that support the integration of Computer/Technology Standards into teaching strategies; and
- participates in staff development opportunities for skill development, attends professional conferences that focus on new technology techniques, and volunteers to mentor others.

These approaches are presented as examples. Some school divisions have developed a K-12 scope and sequence approach to technology integration; others have identified content areas and concepts or student skill deficiencies as opportunities to use various technologies to support learning.

Please feel free to contact Charlie Makela, at (804) 786-9412, or any staff member in the Office of Instructional Media and Training staff at (804) 225-2855 if you need consultation or assistance with the integration of the Computer/Technology Standards for Grades 9-12.