Methods for Integrating Instructional Technology

Lee Davidson  Associate Professor of Teacher Education
Office: Bell Hall 014A, Andrews University, Berrien Springs, MI 49104-0114
Office Hours: by appointment
Phone: 471-6364
E-mail (probably the BEST way to contact me): davidsor@andrews.edu

Description
Teaching with the Internet is an introduction to the concepts, practices, and issues of Internet use in the K-12 curriculum. Emphasis is on the development of basic competencies in the instructional use of the Internet and plans for including the Internet in curriculum delivery.

Course Procedures:
1. No food or drink (except water) in the classroom.
2. You are expected to attend class and to participate in its learning activities. By the time the last bell has rung, you should be in your seat ready for class to begin. An official attendance record will be taken of each class period. Whenever the number of absences exceeds 20% of the total course appointments, you may receive a failing grade. Merely being absent from campus does not exempt the student from this policy. Absences recorded because of late registration, suspension, and early/late vacation leaves are not excused. The class work missed may be made up only if the teacher allows. Three tardies are equal to one absence. Late assignments are not accepted unless previous arrangements are made.
   Excused Absences. Excuses for absences due to illness are granted by the teacher. Proof of illness is required. Residence-hall students are required to see a nurse on the first day of any illness which interferes with class attendance. Non-residence-hall students should show written verification of illness obtained from their own physician. Excuses for absences not due to illness are issued directly from the dean’s office. Excused absences do not remove the student’s responsibility to complete all requirements of a course. Class work is made up by permission of the teacher.
3. All cell phones, pagers and Walkman-like units must be turned off during the class period!
4. If you qualify for accommodations under the American Disabilities Act, please see the instructor as soon as possible for referral and assistance in arranging such accommodations.
5. Academic dishonesty, including plagiarism, is a serious offence. See the bulletin for policies concerning academic dishonesty.
Readings:
Selected short articles will be assigned, read, and discussed in class.
Three articles of your choice, accessed from the web or appropriate journals (at least 1),
related to the instructional use of Technology.

Course Knowledge Base:
Perhaps the use of technology to enhance learning could be traced back to the
invention of paper and pen or the invention of chalk and blackboards. With the advent of
low-cost personal computers, powerful application software, and the almost limitless
amount of information available via electronic technology, the push for the instructional
use of technology has grown rapidly in recent years.

However, there are legitimate concerns expressed regarding the use of computers
and related technology in the classroom. Some may fear that B. F. Skinner’s view of the
ideal “teaching machine” may come to reality, with students seated in tiny cubicles
slaving away on their individual learning “programs” (Skinner, 1986). Others envision
hours of time spent on drill and kill software which develops only basic levels of
thinking. A third concern could be the use of computers to the exclusion of other equally
viable learning technologies. And what of “new” software that claims to promote higher
order thinking? Some critics point to the lack of evidence to support these claims
(Salpeter, 1998b). Perhaps the greatest concern is that of TIME. Adapting technology to
fit curriculum and adapting curriculum to fit technology are both time consuming.

While the Apple Classrooms of Tomorrow (Salpeter, 1998a) project did produce
an initial body of research on the instructional use of computers, in general there is
limited evidence on the successful use of computers for promoting the development of
higher order thinking and reasoning skills. But the potential inherent in instructional
technology o(or perhaps the excitement of being on the “cutting edge”) seems to drive
educators in pursuit of efficient, effective—perhaps even powerful—integration of
technology and curriculum.

School of Education Conceptual Framework
The programs in the Andrews University School of Education are based on the ideas
contained in the following phrases:

To educate is to redeem &
Harmonious Development for Service.

Shaped by these concepts, the faculty has identified six knowledge base areas which are
vital for every graduate of the School of Education. They are as follows:

1. **Worldview (WV)** – addresses appreciation of the perspectives of others
and development of a personal philosophy from which action and service
arise.

2. **Human Growth and Change (HGC)** – addresses principles of group
behavior and the use of these principles to effect positive change for
individuals and organizations.
3. **Groups, Leaders, and Change (GLC)** – addresses principles of group behavior and the use of these principles to effect positive change for individuals and organizations.

4. **Communication and Technology (CT)** – addresses oral, written, intrapersonal and interpersonal communication as the essence of human behavior and technology as it enables, supports and enhances human interaction and learning.

5. **Research and Evaluation (RE)** – addresses valuing and conduction disciplined inquiry for decision making.

6. **Personal and Professional Growth (PPG)** – addresses commitment to holistic personal and professional growth.

These six areas contain the knowledge, practices, skills, attitudes, and dispositions we consider vital to the development of caring, committed, competent teachers. This course addresses these knowledge bases within the context of educational technology.

References to these knowledge bases are found in the statement of course goals. The references will help you see where this course fits into your personal growth in these six areas.

**Course Goals:**
Learners will:

1. Know basic terminology (CT)
2. Identify the general categories of educational technology hardware resources: stand-alone computer, network, centralized processor, and related device/system.
3. Identify the general categories of educational technology software resources: instructional software, software tool, multimedia, distance learning, or a virtual reality environment.
4. Gain expertise in navigating the Internet (CT)
5. Use correct terminology to identify features and capabilities of word processing, spreadsheet, and database software tool programs.
6. Demonstrate awareness of privacy and safety issues on the Internet (CT)
7. Develop an understanding of International Society for Technology in Education’s (ISTE) National Educational Technology Standards (NETS) for Students (GLC, CT)
8. Develop plans for including the technology in instruction (GLC,CT)
9. Locate and evaluate quality Internet sites for teacher/student use (GLC, CT, RE, PPG)
10. Develop basic resource web sites for student use (GLC,CT)
11. Develop activities to accompany web sites.

**Course Topics**
- Getting around on the Internet & World Wide Web
- Principles for integrating the technology
- Basic Web page development
- Web Events
Assignments:
You will be demonstrating your competence in the seminar’s learning objectives through
the following assignments:
✓ In-class assignments
✓ Three reading reports related to the educational use of the technology.
✓ Four lesson plans (your ORIGINAL work) which demonstrate integration of the
technology and ISTE’s NETS for students
✓ Web site development
✓ Creation of a student resource website to accompany your original lessons
which includes a minimum of 15 annotated web sites.
✓ Creation of another instructional web site using a format other than hotlist.
✓ Develop a pencil-paper activities using higher order thinking skills that use
information found on the WWW.

Evaluation:
Grading is based on the following scale:
95-100    A
90-94     A-
87-89     B+
83-86     B
80-82     B-
77-79     C+
73-76     C
70-72     C-
60-69     D
0-59      F

Suggested Reading:

Bibliography: