

EDUC 2210 Teacher Technology

Chapter 1

Curriculum Specific Learning

*As you work through this semester, you will be continually asked to reflect on ways you can use your new knowledge:

- a. for your own professional development
- b. using technology as a productivity tool in your classroom
- c. integrate technology and digital media into your instructional strategies, lessons, student-based projects, and student assessments

**check Figure 1-1 on p. 2 for means of transitioning from traditional classroom to “technology rich” classroom.

Computer, Information, and Integration Literacy

*Computers are found in everything from cordless telephones to ATMs to VCRs, to digital cameras.

**Computer Literacy – knowledge and understanding of computers and their uses.

**Information Literacy – knowing how to find, analyze, use, and communicate information.

***Today’s teachers must be able to assess technology resources and plan classroom activities using available technologies – This is integration literacy.

What is a Computer and What Does It Do?

**Data – collection of unorganized facts.

**Information – data that is organized, has meaning and is useful.

*Input – data entered into a computer

*Output – processed results of the use of data

*Storage – data for future use

*Information Processing Cycle – input, process, output, and storage of data

What is Digital Media?

*Digital media is defined as those technologies that allow users to create new forms of interaction, expression, communication, and entertainment in a digital format.

***The goal of multimedia and now digital media is to reproduce as closely as possible the reliability and effectiveness found in face-to-face communications and then emulate that in online environments using computers and other technologies.

Why Use Computer Technology in Education?

**Educators are beginning to recognize that they must teach students using current technologies so that these students will be comfortable in using these technologies.

***Research indicates that technology can support learning in many ways.

- a. Motivational
- b. Capture and hold students’ attention
- c. Provide unique and powerful opportunities for teaching and learning
- d. Skill-building practice, real-world problem solving, interactive learning, discovery learning,
- e. Linking learners to a multitude of instructional strategies

- f. Support communication beyond classroom walls
- g. Promotes higher order thinking skills

International Society for Technology in Education (**ISTE**)

*Non-profit group that promotes the use of technology to support the improvement of teaching and learning

***ISTE has been instrumental in developing the *National Educational Technology Standards* for the National Council for Accreditation of Teacher Education (**NCATE**).

***NETS-T define the fundamental concepts, knowledge, skills, and attitudes for applying technology in K-12 educational settings.

***NETS-S are organized into six important categories: Creativity and Innovation, Communication and Collaboration, Research and Information Fluency, Critical Thinking, Problem Solving and Decision Making, Digital Citizenship, and Technology Operations and Concepts. (Look at standards and substandards on p. 12.)

21st Century Skills

*Partnership working to ensure that students graduating from our schools have the skills needed to be effective workers. Citizens, and leaders in a global economy.

Digital Students

*Hypercommunicators who use multiple tools to communicate

*Multitaskers who do several things at once with ease

*Goal oriented as they pursue multiple goals at the same time

***Today's students are different from students of the past in the way they think, the way they access, absorb, interpret, process, and apply information,

Digital Students: What They Should Know

[NETS-S Standards]

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. (p. 17)

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. (p. 18)

Students apply digital tools to gather, evaluate, and use information. (p. 19)

Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informal decisions using appropriate digital tools and resources. (p. 20)

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. (p. 21)

Students demonstrate a sound understanding of technology concepts, systems, and operations. (p. 23)

An Example of How One School Uses Computers

*Please check Teachers – Community (pp. 27-30)

Using Textbook Electronic Resources

Table of Contents for the Text

<http://oc.course.com/sc/tdc5/index.cfm>

Chapter 1 [Integrating Educational Technology into the Curriculum](#)

Web Information

<http://oc.course.com/sc/tdc5/index.cfm?action=links&chapter=1>

Key Terms (Are you familiar with these technology terms?)

<http://oc.course.com/sc/tdc5/index.cfm?action=terms&isbn=978-1-4239-1180-7&chapter=1>

Check Point (How are you doing?)

<http://oc.course.com/sc/tdc5/index.cfm?action=terms&isbn=978-1-4239-1180-7&chapter=1>

Teaching Today (Resources)

<http://oc.course.com/sc/tdc5/index.cfm?action=terms&isbn=978-1-4239-1180-7&chapter=1>

Education Issues (Issues associated with this chapter)

<http://oc.course.com/sc/tdc5/index.cfm?action=issue&chapter=1>

Integration Corner (How do I integrate technology into my classroom and how do I use technology to integrate different subjects?)

<http://oc.course.com/sc/tdc5/index.cfm?action=integrate&chapter=1>

Software Corner

<http://oc.course.com/sc/tdc5/index.cfm?action=software&chapter=1>

Digital Media Corner

<http://oc.course.com/sc/tdc5/index.cfm?action=digital&chapter=1>

Assistive Technologies Corner (How do I use technology to deal with exceptionalities?)

<http://oc.course.com/sc/tdc5/index.cfm?action=assistive&chapter=1>

In the Lab (Need help with particular software packages such as MS Word?)

<http://oc.course.com/sc/tdc5/index.cfm?action=lab&chapter=1>

Learn it Online (practice test?)

<http://oc.course.com/sc/tdc5/index.cfm?action=learn&chapter=1>