Learning in a Digital Age

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What makes someone “tech savvy?”

• ICT Literacy*
  • “Using digital technology communications tools, and/or networks to access, manage, integrate, evaluate, and create information in order to function in a knowledge society.” *ETS, 2007*

• Digital Citizenship
  • Digital Access, Etiquette, Security, and Rights & Responsibilities *(Ribble/ISTE, 2013)*

*Information and Communication Technologies
No problem, my students are “digital natives!”
The Myths ...

• “Today's students think and process information fundamentally differently from their predecessors.” (Prensky, 2001)

• “The brains of wisdom seekers of the future will be fundamentally different, in organization and in structure, than our brains are today.” (Prensky, 2009)
More Myths… Grown Up Digital (Tapscott, 2008)

“‘Net Geners’ are the new scrutinizers. Given the large number of information sources on the Web, not to mention unreliable information - spam, phishers, inaccuracies, hoaxes, scams, and misrepresentations - today's youth have the ability to distinguish fact from fiction... The Net Generation knows to be skeptical whenever they're online.”
And even more! The Impending Demise of the University (Tapscott, 2009)

“Growing up digital has changed the way their minds work in a manner that will help them handle the challenges of the digital age. They're used to multitasking, and have learned to handle the information overload.”
The Realities

• Our students are tech-savvy primarily in task-specific ways

• The majority engage in relatively basic activities with technology tools

• They exhibit great confidence in their abilities, with little correlation to their actual technological skill level
More Realities...

• They have unrealistic expectations of and extraordinary confidence in search engines

• They lack critical thinking skills that would enable them to be “scrutinizers”

• The more technology experience they have, the less skeptical they are about online resources

• They (i.e., humans) cannot multitask effectively
21st Century Skills

- Hands-on Digital Tool Usage
- Conceptual Knowledge
- Intellectual Capabilities
Hands-on Tool Usage
(Know-How)

• Students should be able to use (well):
  • Communication Tools
  • Word Processors
  • Spreadsheets
  • Databases
  • Internet Search Engines
Integrating Hands-on Skills into Coursework

- Require students to submit work in digital formats
- Ensure that students are aware of institutional resources for learning about technology tools
- Utilize a variety of technologies for instruction
  - Use online communication tools
  - Provide course content online
  - Assess learner progress with online tools
Conceptual Knowledge
(*Know-What*)

• Students should understand:

  • Basic concepts related to digital technology
  • Network structures and data organization
  • Societal issues related to technology
  • What technology cannot do for us
Integrating Conceptual Issues

• Explore how technology has enabled advances in your discipline

• Expect students to develop communication protocols

• Discuss the organization of information in scholarly resources you utilize

• Examine the limitations of relying too heavily on technological tools
Intellectual Capabilities
(Know-Why)

- Students should be able to:
  - Collaborate with others in virtual environments
  - Articulate their thinking cogently when engaging in online interactions
  - Identify how information they find online may be influenced by political, commercial, or social/cultural forces
More *Know-Why*

- Students should be able to:
  - Reflect on how their online behavior aligns with ethical norms and safe practices regarding privacy rights, intellectual property, data security, etc.
  - Evaluate information and information sources for credibility
Credibility

• Increased need for self-sufficiency requires evaluation skills
• Assessment of credibility is frequently based on peripheral information or website features, especially when we are unfamiliar with the content area
• Attributing authority (or trustworthiness) to an “endorser”
• Reliance on “likes” may reinforce misconceptions and group-think
Developing Intellectual Strategies

• Model for students the evaluation of resources and hold students accountable for resource evaluation in their work
• Encourage/Require students to create digital content objects (becoming “prosumers”)
• Require students to collaborate with others in online environments
• Discuss ethical issues relevant to using technology in your discipline
“We're smitten with technology. And we're afraid, like young lovers, that too much talking might spoil the romance. But it's time to talk.”

Sherry Turkle, “Connected but Alone”