

Preparing Adults for the 21st Century Workplace Cognitive and literacy skills for success in a fast-paced technological age

We invite you to join us in continuing this conversation online via blog:
Skills for the 21st Century: <http://skillsfor21stcentury.wordpress.com/>

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For more information:

National Educational Technology Plan (& Summary) draft released March 5, 2010.

Office of Educational Technology (OET), US Dept of Education

Provides the context and vision for how information and communication technologies can help transform American education.

<http://www.ed.gov/technology/netp-2010>

Educational Technology in Public School Districts: Fall 2008

Office of Educational Technology (OET), US Dept of Education

Report provides national data on the availability and use of educational technology in public school districts during fall 2008.

<http://nces.ed.gov/pubs2010/2010003.pdf>

2020 Forecast: Creating the Future of Learning

Knowledgeworks Foundation

Outlines key forces of change that will shape the landscape of learning over the next decade. The forecast does not predict what will happen, but rather serves as a guide to the as-yet-unwritten future. It is designed to help you see connections among things that once seemed unrelated and to help you consider the changes and challenges that you are facing today within the context of wider patterns of change.

<http://www.futureofed.org/>

2010 Horizon Report

Collaborative effort between the EDUCAUSE Learning Initiative (ELI) and the New Media Consortium (NMC). Each year, the report identifies and describes six areas of emerging technology likely to have a significant impact on teaching, learning, or creative expression in higher education within three adoption horizons: a year or less, two to three years, and four to five years.

<http://www.educause.edu/ELI/2010HorizonReport/195400>

Technological Singularity

Hypothesis that technological progress will become extremely fast, and so make the future unpredictable and qualitatively different from today.

http://en.wikipedia.org/wiki/Technological_singularity

North Carolina Adult Basic Education Technology/Computer Content Standards

January 2010 (Hard Skills focus, soft skills integrated throughout.)

<http://ncbsonline.net/Technology%20Content%20StandardsFinal%201-10.pdf>

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Hard /immediate “need a job now” skills

(based on our survey of workplace and post-secondary recommendations)

- **Basics of:**
 - Knowledge of how to physically interact with current/common technologies
 - Navigation and File Management
 - Internet and E-mail
- **Familiarity with:**
 - Word Processing
 - Spreadsheets
 - Presentations
 - Databases
 - Graphics

Soft/long-term - Long term Employability skills (our Brainstorm)

- **Reading – NOT on paper**
 - Web pages/blogs/forums/text bits
 - Skimming/scanning (as it applies to webpage and small screen layouts)
 - Step by step directions (illustrated or not)
- **Following directions:** auditory, video, written
- **Evaluation skills**
 - Determining bias/validity of data
 - Creating/establishing criteria suitable to task; revising criteria based on results
 - Comparing to criteria & testing/drawing conclusions
- **Problem solving skills**
 - Determining what you need from available data
 - Prioritization
 - Scientific method/experimentation
- **Collaboration skills** (not face to face - e-mail/blogs/social networking sites/twitter)
 - Communication skills (speak, listen, write)
 - Guide/teach others
 - Avoid/negotiate/resolve conflict
- ***Life-long learning skills**
 - Flexibility to learn via different modes;
 - Knowing how you learn best (metacognition?)
 - Take responsibility for learning; pro-active in learning
- ***Generalization; pattern recognition**
 - ability to apply prior knowledge to new situations;
 - think logically – if this, then this

[Medieval helpdesk <http://www.youtube.com/watch?v=pQHx-SjgQvQ>]
- ***Courage/gumption**
 - No fear; open to new things; ability to wing it; able to cope with uncertainty;
 - have good/strong coping skills for stress

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Teaching Strategies/Recommendations (our ideas)

- **Overall Recommendation – Equipped for the Future** <http://eff.cls.utk.edu/>
 - Content Standards http://eff.cls.utk.edu/fundamentals/16_standards.htm
 - Common Activities http://eff.cls.utk.edu/fundamentals/common_activities.htm

Collaboration

- **Structured Cooperative Learning:**
 - C-Pal: Basics of Adult Literacy Education: Cooperative Learning http://www.c-pal.net/course/module4/m4_cooperative_learning.html
 - 5 Levels of Cooperative Learning <http://literacy.kent.edu/cra/cooperative/coop.html>
 - Kagan Online <http://www.kaganonline.com/>
- **Collaborative discussion-based activities**
 - C-Pal: Basics of Adult Literacy Education: Collaborative Learning http://www.c-pal.net/course/module4/m4_collaborative_learning.html
 - Collaborative Learning in Adult Education. ERIC Digest No. 113 <http://www.ericdigests.org/pre-9220/adult.htm>
- **Tutoring/mentoring**
 - Kagan Strategy: Rally Coach http://www.usd416.org/pages/uploaded_files/Rally_Coach.pdf
 - Peer Tutoring in Adult Basic and Literacy Education. ERIC Digest No. 146 <http://www.ericdigests.org/1994/tutoring.htm>
 - Effective Practices for Mentoring <http://www.nationalservicerresources.org/ep-literacy>

Problem Solving

- **Contextualized/relevant instruction**
 - C-Pal: Basics of Adult Literacy Education: Contextualized instruction http://www.c-pal.net/course/module4/m4_contextual_instruction.html
 - EFF Teaching/Learning Toolkit <http://eff.cls.utk.edu/toolkit/examples.htm>
 - Creating Authentic Materials & Activities for the Adult Literacy Classroom <http://www.ncsall.net/fileadmin/resources/teach/jacobson.pdf>
- **Project/problem-based learning** (*especially community involvement social/global issues*)
 - C-Pal: Basics of Adult Literacy Education: Problem-Based Learning http://www.c-pal.net/course/module4/m4_problem-based_learning.html
 - NCSALL: Turning Obstacles into Opportunities <http://www.ncsall.net/?id=383>
 - 1999 & 2000 Families First Idea Books: Integrating Work Skills and Basic Skills. http://www.cls.utk.edu/2000_idea_book.html http://www.cls.utk.edu/1999_idea_book.html

Life-Long Learning Skills

- **AVOID passive learning** -“just sitting and receiving.” Opportunities for *everyone* to discuss and/or use what they have just learned should occur every 7-10 minutes.
- Provide individualized learning plans based on long and short term goals.
- Building Metacognitive Awareness http://eff.cls.utk.edu/toolkit/support_metacognitive_awareness.htm

Courage/gumption

- Build self efficacy and esteem
- Allow learners to crack open technology – de-mystify it
- Teach stress management http://www.cls.utk.edu/pdf/ls/Week3_Lesson22.pdf