# 21st Century Knowledge, Skills and Tools for the Educator

## Do You Remember?

Calculators with paper rolls?

Manual Typewriters? Correcto Type?

TV Analog To Digital?

Flat Screen

Computer Wars?
Mavis
Beacon?

Shopping At a Mall?

Thomas Friedman, World is Flat

Your office is now in the car.

Rotary Phones

### SHIFT HAPPENS—THE WORLD IS FLAT

Elements of the Old Workplace	Elements of the New Workplace	
Structured, M-F, 9—5	Flexible, 24/7	
Stable, secure, pensions	Changing; little security	
Pay linked to position	Pay linked to productivity	
Financial incentives	Variety of incentives	
Continual employment	Frequent periods of unemployment	
Linear career—straight up	Non-linear career; 5—15 jobs	
Work for others	Self Employment	
Local or national economy	International, global economy	
White male influence	Multi-ethnic, female influence	
Job specific duties	Many duties	
Large employers	Small employers	
Labor intensive	Knowledge intensive	
Worker as instrument	Worker as human resource	
Education is completed	Life-long learning	
Education and work considered separate	Education and work commingled	
Focus on product	Focus on customer service	
Error, slippage tolerated, even expected	Total quality management/control	

### Classroom 2.0

21st Century Knowledge and Skills	21st Century Tools	
Communications - Writing	Blogs, Web 2.0	
Communications - Speaking	Presentation software, videos, Smart Boards	
Communications – Listening/ Following Instructions	Podcasts	
Critical Thinking	Simulations/Games	
Problem Solving	Simulations/Games	
Research	Google, Feed Burner, RSS	
Organizational - Use of Resources and tech- nology	Delicious, Bloglines, Grazr	
Decision Making	Simulations/Games, Second Life	
Creativity and Innovation	Flickr - Slide Sharing Videos, Mash Ups	
Computer Literacy	Use of computer software, Internet and tools.	
Financial Literacy	Use of computer software, Internet and tools.	
Team Work/Collaboration	Wikis, Skype	
Leadership	Simulations/Games	
Adaptable/flexible	Simulations/Games	
Social Responsibility	Social Networking	
Productivity and Work Ethic	Group Projects	
Global Awareness	Social Networking, Cluster Maps	







21st Century Tools	WHAT	WHY	HOW
Blogs	Online journal dedicated to a specific topic or group.		Free
Bloglines	Webpage of your favorite blogs, videos, podcasts		Free
Podcasts	Digitized audio and/or video.		Free
Grazr	A web program which finds and collects data and lists them on your blog.		Free
Google	Research, collaboration, communication tools		Free
Feed Burner	Web program which connects your blog with a specific site.		Free
Delicious	Web page which accumulates your favorite links. Everyone can connect to your page.		Free
RSS and Feed Reader	Really Simple Syndication—web program which allows users to subscribe to blogs, websites, online news sources.		Free
Wikis	Group collaboration tool.		Free
Flickr	Slide and picture sharing on the Internet.		Free
Skype	Internet telephone communications with picture.		Free
Twitter	Instant Messaging		Free
Second Life	Game simulation—real world		Free
Social Networking	MySpace, Facebook, Linkin In, Friendster		Free
Cluster Maps	Web software which maps all contacts to your blog.		Free
Social media	Tools that allow anyone to create, share, modify, and critique online content and join online communities.		Free
Mash Ups	Mixing several of these tools together for one specific, unique purpose.		Free

## 21st Century Education: Simulations and Games

#### **TYPES OF GAMES**

- Action
- Strategy
- Adventure
- Educational
- Simulation
- Puzzle

#### **BENEFITS OF GAMES**

- Engagement—active learning
- Expectations
- Experiential learning
- Collaborative learning
- Goal Oriented



#### **CLASSROOM**

- English (creative writing, journalism, debating
- Social Studies
- Business/Economics
- Math
- Physics
- Physical Education

#### **GAMES**

- Blogging, instant messaging, podcasts, flash animation, Macromedia
- Civilizations, Sims
- Economy of the World, Work Craft
- Second Life
- Engine games
- X Box

- DECA, FBLA
- Stock Market Game
- LifeSmarts
- Fed Challenge
- Virtual Enterprise

#### **WEB LINKS**

Links to videos, instructional content

http://www.careersmarts.com/21c.htm

**Common Craft Tools**—great instructional videos http://www.commoncraft.com/

Classroom 2.0

http://www.classroom20.com/

**David Warlick 2Cents** 

http://davidwarlick.com/2cents/

**Digital Media and Learning** 

http://digitallearning.macfound.org/site/c.enJLKQNIFiG/b.2029199/k.BFC9/Home.htm

WBL21C

http://wbl21.blogspot.com/

<u>GREEN ROOM</u> - great podcasts http://www.ltgreenroom.org/

nttp://www.itgreenroom.org/

Partnership for 21st Century Skills

http://www.21stcenturyskills.org/org/

Will Richardson

http://weblogg-ed.com/

Ed Tech for 21

http://lainiemcgann.blogspot.com/