

# Keynote Address

## Educational Technology Conference



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# Overview



- Today we'll discuss how we can work more effectively with Millennial students
- Please join me in trying to make today's presentation interactive

# Caveat



Making generalizations about generations can be dangerous.

But as Taylor (2005) notes, some generalizations can help in understanding generational cohorts

# A Generational Overview

(Sweeney, 2008 & Pew, 2010)



<b>Generations</b>	<b>Birth Years</b>	<b>Ages in 2010</b>
<b>Silent generation</b>	<b>1925-45</b>	<b>65-84</b>
<b>Baby Boomers</b>	<b>1946-64</b>	<b>46-64</b>
<b>Generation X</b>	<b>1965-1979*</b>	<b>32-45</b>
<b>Millennials (&amp; other labels)</b>	<b>1981*-1992</b>	<b>18-29</b>

\* Experts don't agree on these dates

# Nosce Te Ipsum: Know Yourself



- When (at what age) did you first:
  - read a book?
  - use a computer?
  - use email?
  - use the World Wide Web?
  - play a video game?
  - get a cell phone
  - text
  - join MySpace or Facebook
  - use /join/create any “new media” like MOO or MUD, wiki, blog, podcast, MMORPG, Twitter...

# Know Your Students



- When (at what age) did your students first:
  - read a book?
  - use a computer?
  - use email?
  - use the World Wide Web?
  - play a video game?
  - get a cell phone
  - text
  - join MySpace or Facebook
  - use /join/create any “new media” like MOO or MUD, wiki, blog, podcast, MMORPG, Twitter...

# Knowing Your Students



- More than 70% of 4 year olds today have used a computer (Did You Know 2.0)
- The average American teenager sends 2,272 texts a day (Did You Know 4.0)
- More video was uploaded to Youtube in the last 2 months than if ABC, NBC & CBS had been airing new content 24/7/365 since 1948

# Millennials are all about technology



- Facebook now has 500 million active users (as of July 2010); up from 100 million users in August 2008
- There are 1 billion searches on Google every day or 31 billions searches a month today (Dec 2010) In 2006 it was 2.7 billion
- The number of text messages sent/received every day exceeds Earth's population. (Did you know 3.0)



# Implications for Millennial learners



This is the most wired, connected generation in human history, conscious of its own uniqueness.

Technology use is a badge of generational identity. Many Millennials say their use of modern technology is what distinguishes them from other generations (Pew Report, 2010)

# Implications for Millennial learners



This matters to teachers because Millennials have distinctive ways of thinking, communicating, and learning

*(Oblinger and Oblinger, 2005; Prensky, 2006; Tapscott, 1998).*

# Broad comparison of generational learning styles



- Boomers learn from formal classroom instruction.
- Their learning is textual and verbal.
- Learning is formal, linear, and deductive.

# Broad comparison of generational learning styles



- Generation Xers adapt to both formal and informal learning.
- They like active learning and are more visual.
- Their learning can be both inductive and deductive, linear and non-linear.

# Broad comparison of generational learning styles



- Millennials learn by connectivity and discovery.
- They are plugged into technology but learning is not about technology; it's about the learning technology enables.
- Learning is inductive and non-linear.

*More about Millennials learning styles to follow*

# Note some learning characteristics of *your* students



## Positive

## Negative

Example: They enjoy teamwork

Example: They are easily bored by lectures

Positive	Negative
Example: They enjoy teamwork	Example: They are easily bored by lectures

# What the research shows about three Millennials learning characteristics



Millennials learn differently from previous generations. They:

- Are habituated to media and multitasking
- Are socially oriented in their learning needs
- Lean towards independence and autonomy

*[These characteristics are part of a larger picture, selected more to meet time constraints than any other reason. To get a more complete descriptions of Millennials as learners, see Oblinger & Oblinger's excellent (2005) book or see Sweeney, 2008]*

# I. Media and multitasking



- Millennials are habituated to simultaneous use of multiple media (Oser, 2005)
  - They report using multiple media simultaneously, using computers and the Internet at the same time as video games, print media, music, and the phone
  - Young people aged 6-14 pack 8.5 hours of media usage into 6 hours (Kaiser Family Foundation, 2005)
- In the traditional classroom, they are easily bored and often display short attentions spans (Howe & Strauss, 2000; Oblinger & Hagner, 2005)



## II. Social interactivity and learning



- For Millennials, the distinction between tools for fun/socializing and work/study are blurred
- Social networking is their favorite pastime, socially and academically
- Academically, they enjoy collaboration

# III. Independence and autonomy in learning style



- Millennials learn better through discovery and experiential learning (Howe & Strauss, 2000; Hay, 2000)
- They have a need for immediacy and immediate gratification (Oblinger & Hagner, 2005)
- They want interactive learning experiences (Tapscott, 1998)
- They desire personally meaningful learning experiences (Glenn, 2000)

# Making the most of Millennials' learning



- For educators there is hope in that this generation is very education-oriented
  - They are goal oriented and work hard towards their goals (Whitney-Vernon, 2004)
  - They value education as a step towards career success (Oblinger & Oblinger 2005)
- This offers us many means to reach them in the classroom
- **Think of some of *your* successes in the classroom.**

# Strategies for successfully teaching and learning with the Millennials



- Some “proven” strategies for successfully addressing Millennials’ learning in:
  - Use of media and multitasking
  - Social orientation
  - Independence and autonomic learning

# Strategies for addressing use of media and multi-tasking



- Utilize technology well, and consistently
- Redesign assignments that use technology to incorporate higher-order critical thinking and information literacy skills.

In incorporating media, teachers should put pedagogy first

Examples: student webquests, wikis for group projects, twitter or blogs to follow citizen journalism or learn civic engagement

# Strategies for addressing media and multi-tasking



- Incorporate multimedia learning (Tapscott, 1998) and interactive environments (Oblinger & Hagner, 2005)
- Podcasts (or Vodcasts) require little effort
- The Web offers a host of multi media resources to transform assignments

A range of resources that Millennials relate to are easy to find and use - from YouTube to MOOs and MUDs; from games like SimCity to locative media like geocaching ([www.geocaching.com](http://www.geocaching.com))

(Easy MOO tutorial at <http://classweb.gmu.edu/bhawk/611-CW/moo-to.html>)

# Strategies for addressing social orientation



Tried and true techniques of group work and collaborative learning work effectively for Millennials

Online collaborations (wikis, virtual teams and group projects) are effective supplements to the ftf classroom

Some thought should be put into collaborative assignments

Students should be taught how to effectively work in groups

# Strategies for addressing social orientation



Use social networking: from Facebook and Twitter to IM, Texting, Wiki and Blogs, YouTube and Flickr

- If you'd rather not socially network, you can still use social networking for pedagogy.

- Wikis are easy to use; Youtube provides a user-friendly forum
- Use Facebook academically (Eg., Michael Kearns course on "the Networked Life" at UPenn)
- Harness the power of texting (Eg., Hilary Wilder & Gerry Mongillo's cell phone based expository writing course at William Paterson)



# Strategies for addressing independence and autonomy



- First and foremost - reduce lecture time and incorporate more discussion
- Offer choice among assignments
- Allow for multiple forms of feedback

When used correctly, these strategies promote critical thinking and analysis

*[From Zheng & Ferris, 2009]*

# Strategies for addressing independence and autonomy

- Redesign assignments to incorporate more interactive and/or personally meaningful learning experiences

Examples: “Day Without Technology” or “Week in the Life” assignments

In addition to promoting independent learning, these strategies also address Millennials’ need for choice, immediacy and instant gratification.

# Broad models for transformation



Some tried and true learning models can be effectively used address all three of the learning needs we've discussed:

- Active learning
- Experiential learning
- Learner centered teaching

# Experiential learning *(Kolb, 1984)*

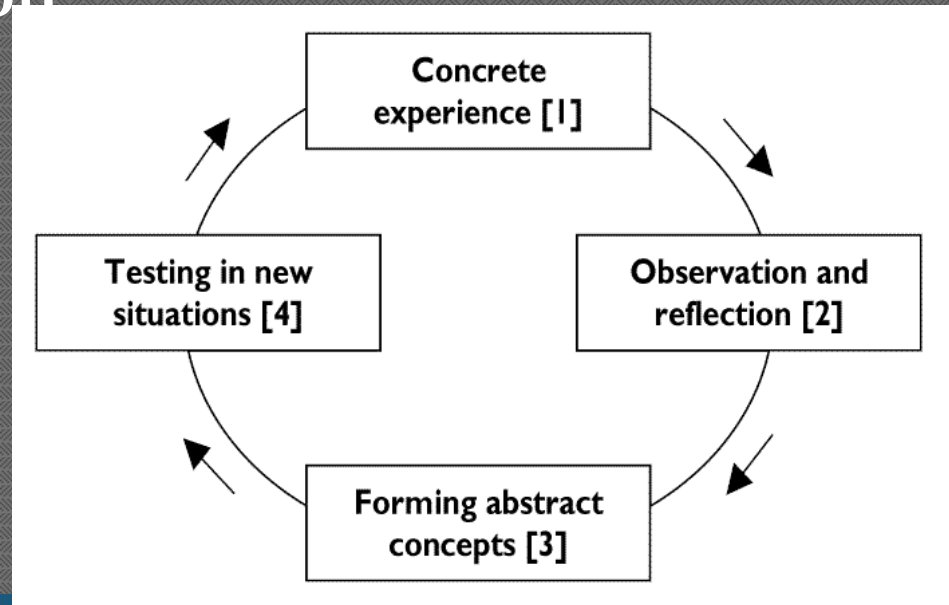


- The “learning by reflection on doing” model goes back to Aristotle
- Students are given a chance to acquire and apply knowledge, skills and feelings in immediate and relevant settings.
- Some related (but distinct) models of learning
  - Action learning
  - Cooperative learning
  - Service learning

# Active Learning (*Bonwell & Eison, 1991*)



- Active learning can be used to focus responsibility for learning on the learners
- Learning is active in that students are doing something - like discovering, processing, and applying information



# Learner-Centered teaching (Barr & Tagg, 1995)

## Teaching-Centered

**Deliver instruction**

**Transfer of knowledge from teacher to student**

**Active faculty**

**One teaching style**

**Curriculum development**

**Quantity and quality of resources**

## Learning-Centered

**Produce learning**

**Discovery and construction of knowledge**

**Active students**

**Multiple learning styles**

**Learning technologies development**

**Quantity and quality of outcomes**

# Learner-Centered Model, continued.



<b>Teaching-Centered</b>	<b>Learning-Centered</b>
<b>Quality of faculty</b>	<b>Quality of students</b>
<b>Time held constant; learning varies</b>	<b>Learning held constant; time varies</b>
<b>Learning is linear and cumulative</b>	<b>Learning is a nesting and interacting of frameworks</b>
<b>Promote recall</b>	<b>Promote understanding</b>
<b>Faculty are lecturers</b>	<b>Faculty are designers of learning environments</b>

# Overview of Application Activity (Part 2 of handout)



- Choosing a course to transform
- Achieving change



# Where do you stand?

- While “...we will never understand or use the technology in precisely the same way as the Natives do” Prensky (2004) we must learn to “speak the language” if we are to remain successful as educators in the 21st century
- Naomi Baron (in Carlson, 2005) feels that reshaping our teaching to engage the Millennials is, at some point, “killing higher education” by failing to teach mental discipline, failing to teach them to think on their own, or to communicate their ideas clearly.

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