

A generation by any other name?

Generation Y

iGeneration

Google Generation

Digital Natives?

Net Generation (N- Gen)

Echo Boomers

Millennials

Digital Generation (D-Gen)

The differences between digital native learners and digital immigrant teachers.*

Digital Native Learners

Prefer receiving information quickly from multiple multimedia sources.

Prefer parallel processing and multitasking.

Prefer processing pictures, sounds and video before text.

Prefer random access to hyperlinked multimedia information.

Prefer to interact/network simultaneously with many others.

Prefer to learn “just-in-time.”

Prefer instant gratification and instant rewards.

Prefer learning that is relevant, instantly useful and fun.

Digital Immigrant Teachers

Prefer slow and controlled release of information from limited sources.

Prefer singular processing and single or limited tasking.

Prefer to provide text before pictures, sounds and video.

Prefer to provide information linearly, logically and sequentially.

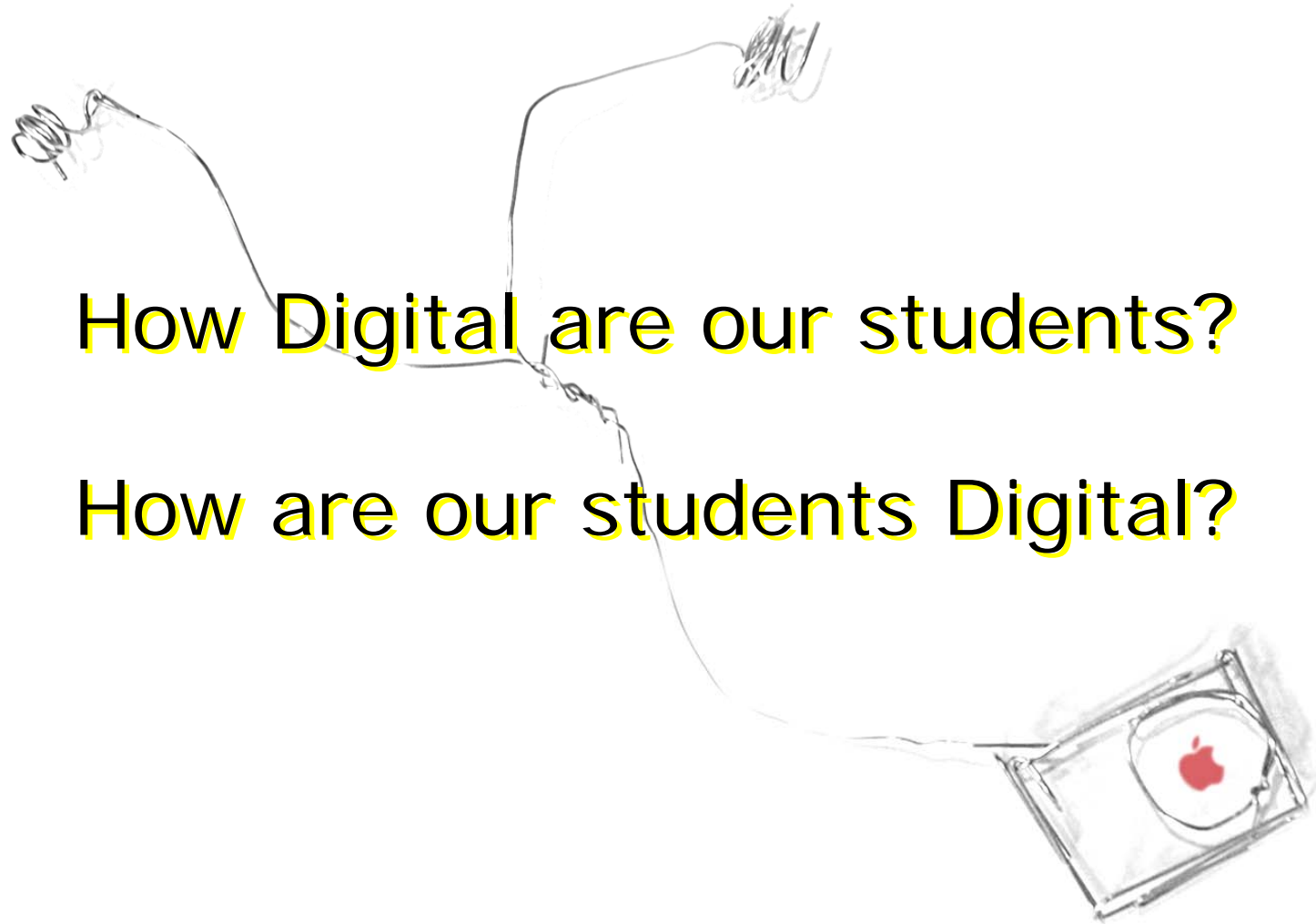
Prefer students to work independently rather than network and interact.

Prefer to teach “just-in-case” (it’s on the exam).

Prefer deferred gratification and deferred rewards.

Prefer to teach to the curriculum guide and standardized tests.

* Ian Jukes and Anita Dosaj, The InfoSavvy Group, February 2003
Retrieved from: <http://www.apple.com/au/education/digitalkids/disconnect/landscape.html>



How Digital are our students?

How are our students Digital?

Some Characteristics of ...

Digital Natives*

vs.

Our Students

- 97% own a computer
 - 94% own a cell phone
 - 60% own an “iPod”
- 96% own a computer
 - 94% own a cell phone
 - 76% own an “iPod”

* **Source:** Junco, R and Mastrodicasa, J. (2007). *Connecting to the Net.Generation: What Higher Education Professionals Need to Know About Today's Students.*

Digital Natives

vs.

Our Students

- 97% have downloaded music
- 49% *regularly* download music
- 88% have downloaded music
- 48% *regularly* download music

Digital Natives

- 76% use instant messaging and/or social networking sites

vs.

Our Students

- 77% use *regularly* text messaging
- 76% *frequently* use social networking sites

Student's Perceptions of their Use of ICT in Education

*Survey used was the [Self Assessment of ICT Literacy](#) prepared by Manitoba Education & Training.

Available at: http://www.edu.gov.mb.ca/k12/tech/licit/resources/needs_assess.html

3 = Exemplar

1 = developing

2 = accomplished

0 = beginning

- 2.57 - Operating a computer



3 = exemplar
1 = developing

2 = Accomplished
0 = beginning

- 2.19 - communicating with e-mail
- 2.16 - managing files
- 2.14 - word processing
- 1.97 - creating digital images
- 1.89 - finding information
- 1.57 - analyzing data
- 1.57 - evaluation information



3 = exemplar

1 = developing

2 = accomplished

0 = beginning

- 1.35 - creating multimedia
- 1.27 - creating graphics
- 1.24 - creating video
- 0.97 - collecting data electronically
- 0.51 - creating web pages
- 0.51 – modeling with ICT

3 = exemplar
1 = developing

2 = accomplished
0 = beginning

- 0.43 - collaborating online (blogs/wikis)
- 0.38 - concept mapping



So who are our students?

- Age
 - Range 20 - 44 years
 - Mean 24.5 years
- Gender
 - 63% Female
- Marital Status
 - 53% Single



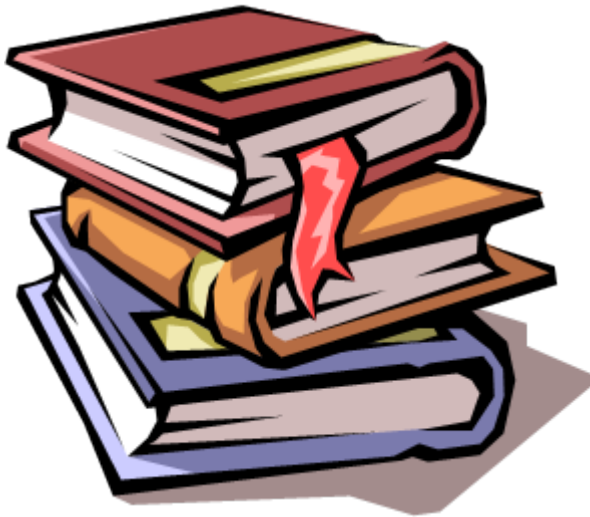
So who are our students?



- B.A. 41
- B.Sc. 24
- B.G.S. 15
- B.P.E.S 7
- B.Mus. 5

Major & Minors

- History 32
- English 28
- Geography 26
- Math 22
- Psychology 17
- Phys Ed 15
- Biology 12



How do they spend their time?



- Computer time at home 129 min
- T.V. 78 min
- Computer time at school 76 min
- Work / paid employment 60 min
- Radio 48 min
- Phone 35 min
- iPod 24 min

How do they use their computers?



- 70% own a laptop
- 37% own a desktop
- 11% own both
- 4% don't own a computer

3 = Frequently

1 = Rarely

2 = Occasionally

0 = Never

- 2.95 - Word Processing
- 2.95 - e-mail
- 2.83 - Googling
- 2.60 - Social Networking Sites



3 = Frequently

1 = Rarely

2 = **Occasionally**

0 = Never

- 2.49 - Music - Listening
- 2.16 - Online Banking
- 2.12 - News Feeds
- 2.06 - Music - Sharing
- 2.01 - Photography
- 1.98 - YouTube
- 1.57 - Spreadsheets



3 = Frequently

1 = **Rarely**

2 = Occasionally

0 = Never

- 1.49 - Online Shopping
- 1.41 - Games
- 1.32 - Record Keeping
- 1.04 - Message Boards
- 0.96 - Blogs & Wikis
- 0.89 - Database management



3 = Frequently

1 = Rarely

2 = Occasionally

0 = Never

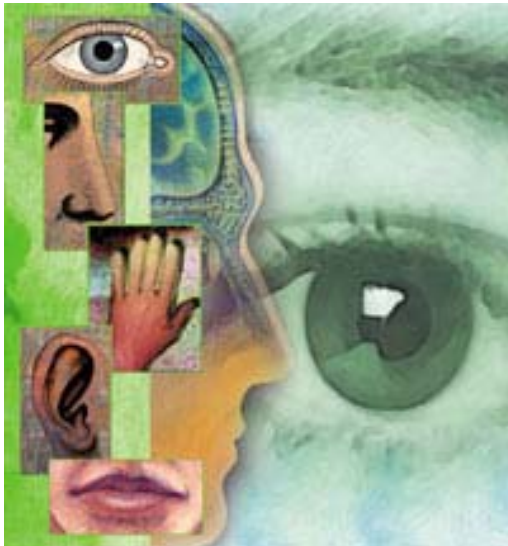
- 0.49 - Skype
- 0.35 - Role Playing Games
- 0.26 - Audio-conferencing
- 0.05 - Online dating



Students are individually different



Profile - Perceptual Modalities



- Visual 2.7
- Auditory 2.8
- Read/Write 1.2
- Kinesthetic 4.4
- Analytical 3.0
- Global 8.0

History Majors/Minors

- More likely to be auditory learners $p = 0.041$
- Less likely to be kinesthetic learners $p = 0.050$
- Less likely to play computer games $p = 0.006$

Geography Majors/Minors

- More likely to be Field Independent learners $p = 0.027$
- Less likely to play computer games $p = 0.019$
- Less likely to use online shopping $p = 0.021$
- More likely to use online banking $p = 0.011$
- More likely to chat groups $p = 0.033$
- More likely to message boards $p = 0.044$

Math Majors/Minors

- Less likely to use social networking $p = 0.003$
- More likely to use RPGs $p = 0.034$

Phys Ed Majors/Minors

- Less likely to be visual learners $p = 0.036$
- Less likely to be auditory learners $p = 0.004$
- More likely to be kinesthetic learners $p = <0.001$

- More likely to use chat groups $p = 0.032$
- More likely to read fan fiction $p = 0.047$

Psychology Majors/Minors

- More likely to be Field Independent learners $p = 0.004$
- More likely to use audio conferencing $p = 0.004$
- More likely to use soc networking sites $p = 0.002$
- More likely to do record keeping $p = 0.038$

English Majors/Minors

- More likely to be read/write learners $p = 0.011$
- Less likely to have Internet access $p = 0.003$
- Less likely to spend time on a computer $p = 0.037$
- Less likely to own a computer $p = 0.040$
- Less likely to use spreadsheets $p = <0.001$
- Less likely to use databases $p = 0.005$
- Less likely to do online shopping $p = 0.007$
- Less likely to play computer games $p = 0.010$
- Less likely to watch music videos $p = 0.013$
- Less likely to do record keeping $p = 0.019$
- Less likely to do online banking $p = 0.043$

What are the implications for Teacher Education?

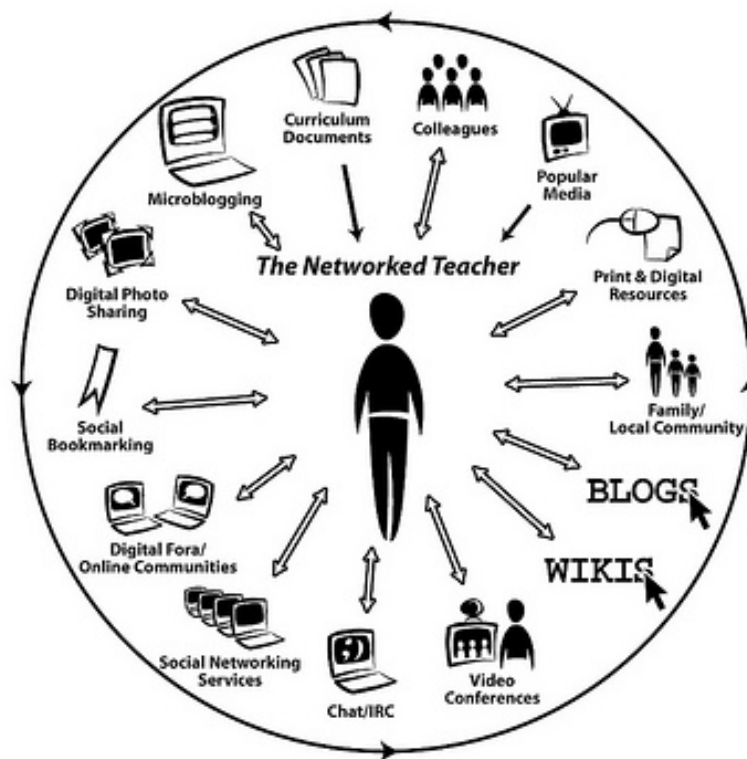


Diagram retrieved from: <http://flickr.com/photos/courosa/2922421696/>

