



CREATING DYNAMIC LEARNING COMMUNITIES
at school • at home • at work



Schools Exceeding Expectations (SEE) Conference
Maryville, Tennessee – April 29-May 2, 2009

Book Talk

iBrain

Presented by Linda Jordan and Sue Pearson

2009 SEE Conference – Saturday, May 2, 2009

Susan Kovalik & Associates, Inc.
dba **The Center for Effective Learning**
33506 10th Place South Federal, WA 98003
253.815.8800 Fax 253.815.8816
www.theCenter4Learning.com

iBrain: Surviving the
Technological Alteration of
the Modern Mind

Gary Small, M.D. and Gigi
Vorgan

Linda Jordan and Sue Pearson
S.E.E. Blount County 2009



Book's Focus



1. Key strategies for bridging the brain gap
2. A technology toolkit for digital immigrants
3. Tips for managing techno-brain burnout

“ The people who are crazy
enough to think they can
change the world are the
ones who do.”



iBrain, p. 1

Digital Definitions

Digital Natives:

- A *digital native* is a person who has grown up with digital technology such as computers, the Internet, mobile phones and MP3. This group has never known a world without computers, 24-hour news, Internet and cell phones.



1. *Millenials* (most technologically savvy-value financial success, balance work and play)
2. *Generation Xers* (self-reliant, risk-takers)

Digital Definitions

Digital Immigrant:

- A *digital immigrant* speaks DSL, digital as a second language. These are people who came to the digital/computer age as adults (radio, telephone, TV-biggest impact)
1. Baby boomers (willing to challenge authority-Woodstock; work long hours; value individualism)
 2. Seniors (most traditional, respect for authority, least technologically sophisticated)



INFO BYTE

2,800,000,000:

This is the number of people who are connected by handheld communication devices – 40% of the world's population. Enter the Mobile Wallet, a technological advance that allows cell-phone users to buy products and services over their cell phones. Mobile Wallet, the study says, “are projected to grow significantly, to 1.4 billion by the year 2015.”

Can you say “ka-ching?”



Delta Sky Magazine, February 2009

Digital Native Learners Prefer	Digital Immigrants Teachers Prefer
<ul style="list-style-type: none"> Receiving information quickly and from multiple multimedia sources Parallel processing and multitasking Processing pictures, sounds and videos before text. Interact/network simultaneously with many others Learning that is relevant, instantly useful and FUN! 	<ul style="list-style-type: none"> Slow and controlled release of information from limited sources Singular processing and single or limited tasking Provide text before pictures, sounds and videos. Students work independently rather than to interact/network Teach to teach the curriculum guide and to standardized tests


High-Tech Revolution

The high tech revolution is redefining how we:

- Communicate
- Reach people
- Influence people
- Exert political and social exchange
- Glimpse into the lives of co-workers, neighbors, celebrities, and politicians.
- Young minds tend to be the most exposed




High-Tech Revolution



As a consequence of this high tech revolution (overwhelming and early high-tech stimulation of the Digital Native's brain), we are witnessing the beginning of a deeply divided brain gap between younger and older minds-in just ONE generation-resulting in two separate cultures.


High-Tech Revolution

- This revolution has also plunged us into a state of *continuous partial attention*, described as continually staying busy-always scanning for contact
- Differs from multi-tasking* where we have a purpose for each task and are trying to improve productivity




Loss of Face-to-Face Social Discourse

- Internet is replacing TV as prime source of brain stimulation.
- We rely on the Internet and digital technology for entertainment, political discussions, and even social reform as we chat with friends and co-workers.
- As the brain evolves and shifts its focus toward new technological skills, it drifts away from fundamental social skills such as *reading facial expressions during conversation or grasping the emotional context of a single gesture*



Research/Studies



- 2007 University of Texas: study of more than 1,000 children found that on a typical day 75% of them watch TV, 32% watch videos/DVDs-total exposure? One hour 20 minutes. For 5-6 year olds, an additional 50 minutes is spent in front of the computer.
- Kaiser study: young people ages 8 to 18 expose their brains to 8.5 hours of digital and video sensory stimulation each day (most spent passively-watching TV/videos/DVDs, listening to music, video games, and using the computer)

Technology . . . The
 knack of so arranging
 the world that we
 don't have to
 experience it.

Max Frisch, architect and author



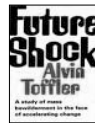
1. Key Strategies-Bridging the Brain Gap-Social Skills 101

- Reconnect with face-to-face offline communication exercises (3 T's-Tools, Town Hall, Tribes)
- Cut back on technology time. Track personal use-begin to decrease that amount by 10-20%.
- Make a conscious effort to spend time with people you care about
- Schedule regular family dinners (teens who reflect on day with families less likely to abuse drugs)
- Adopt healthy lifestyles-diet, stress reduction, exercise, off-line metal aerobics



“The illiterate of the
 twenty-first century will
 not be those who cannot
 read and write,
 but those who cannot
 learn, unlearn, and
 relearn.”

Alvin Toffler, author of *Future Shock*



2. Technology Toolkit

- Making technology choices
- Email-subject line; concise; mind your form, include message thread, note return address, to CC or not, attach w/care, keep up with your inbox, save important emails, manage your time, etiquette, BEWARE!
- Sending photos of self (sometimes sexually explicit)



2. Technology Toolkit

Search engines

- Trim your keywords
- Homepage search engine
- Advanced searches (using quotations)
- Online dictionary/thesaurus/almanac and phone book
- Calculator
- Get a library card



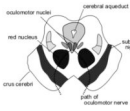
2. Tknlgy Tlkt

Text Messaging



- Short and sweet
- Do hand exercises-stretches to relieve joint stiffness, pain and tendinitis
- Best to avoid texting during meetings, meals, social interactions and while driving
- Use shortcuts-B4 2 long, u'l b txting 2

2. Technology Toolkit

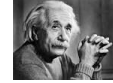


Online Safety and Privacy

- When safety becomes threatened, brain activity shift parafloccular gray area, a region that controls fight or flight.
- Change password on a regular basis; automated hackers can test up to 10 million per second-lower case letters only password can be compromised within 6 hours. Add upper case letters and numbers-may take thousands of years to break.
- Know company/district rules; limit surfing; double-check posts, create pdf's of documents-prevents misrepresentation, joke off-line

"It has become
appallingly obvious that
our technology has
exceeded our humanity."

Albert Einstein, Theory of Relativity



3. Managing Techno-Brain Burnout

- Vary management styles (pair techie savvy Millennial with corporate savvy Boomer)
- Vary learning environments: Generation X through web-base formats, Boomers through traditional classroom settings
- Multi-generational: grandparent with grandkids
- Improve human contact skills



THE FUTURE BRAIN

- Will be tech savvy
- Ready to try new things
- Mastered multi-tasking and *paying attention*
- Fine-tuned its verbal and non-verbal skills
- Assert itself PLUS express empathy
- Excellent people skills
- Able to nurture its own creativity



"When looking at the future,
the "what" is far more
predictable than the "when."
And the "how" will always
feel different than
predicted."



- Thomas Frey - Senior Futurist, The DaVinci Institute

Never trust anything
that can think for itself
if you can't see
where it keeps its brain.

~J.K. Rowling~

