Digital Natives, Digital Immigrants and Why the Learning Management System Works: A Model for Faculty Development

Sondra R. Smith
Co-CIO, Information Technology; Director, Educational Technologies

Michael Phillips
Educational Technologies Training Manager

ST. LAWRENCE UNIVERSITY
Digital Natives, Digital Immigrants and Why the LMA Works": A Model for Faculty Development

• Abstract, Part I
  – This seminar will provide a concrete model for faculty technology development with a pedagogical perspective. Participants will experience components of a participatory seminar developed at St. Lawrence University, where faculty explore the learning management system as a framework for discussion on digital natives and the Net Generation.

• Abstract, Part II
  – Presenters will share experiences and resources from a well-established faculty technology development program, much of which is transferable to other institutions, with the intent to facilitate adaptation elsewhere.
A Bit of Background…

• Quick Facts: St. Lawrence University
  – ~2000 undergraduate students
  – ~200 faculty
  – ~20 miles from Canada in NY’s “North Country”

• Educational Technologies
  – staff & services
Faculty Technology Development @ SLU:

- Pedagogically purposeful programming
- Promotes technology as a tool
- Perceives technology as an option
- Closely collaborated
  - CTL, FYP, NCAT, RCI and others
- Supportive of other programs
  - Dean’s Staff → May Faculty College
“Digital Natives, Digital Immigrants & Why ANGEL Works” (DNDI&WAW)

• An opportunity to explore recent research
  – who are the digital natives/immigrants?
  – how distinct is your dialect?
  – what difference does it make?
• An opportunity to demo the LMS
  – why use a learning management system?
  – when and how does it work best?
  – what does a well-designed course look like?
**DNDI&WAW: Opening Exercise**

- “Discover Your Digital Dialect”
  - tech toys/tools
  - objectives
  - participants/observers
- Use as an ice breaker
- Use as a conversation starter
- Use as an introduction to “digital natives”
DNDI&WAW: Student Case Study

- Institutional context
  - Office of Institutional Research
    - Master Statistics
- Student context
  - CIRP and IT insert
  - HEDS and Senior Survey
**DNDI&WAW: Student Case Study**

- Small group discussion questions for our faculty:
  - What is distinct about Suzanne’s experience, compared to your own, X years ago?
  - In what ways does Suzanne or Jordan epitomize the digital “native” or “immigrant”? 
  - Where are Suzanne and Jordan learning?
Case Study Model: Reporting Back

• What are faculty missing in their understanding of digital natives and tech?
• How would you recommend faculty engage digital natives in their courses?
• How can we help create dialogue between different dialects?
• How might a case study be useful with your faculty?
We should use the tools that are available – myspace, text messaging, webcams – in faculty development.

The degree of information readily available can be intimidating; technology used appropriately may improve results. Our role is to encourage faculty in that regard.

Contextualize technology so that faculty can maintain credibility with students. Even if they choose not to use technology, they need to know what’s going on.

- For students, technology often creates a community space – it may or may not be useful for faculty to be present there.

We tend to divide everyone into groups – native/immigrant, low/high income – despite differences and distinctions.

- Conversation at St. Lawrence has shifted to “dialects”, hoping to acknowledge the overlap and gray areas in the native/immigrant dichotomy.
Online Course Design

• The “flat” structure
• Straightforward delivery/navigation
• Nearly everything you need…
• Interact with content and users
Online Course Design

Online Component

- Week One
  - Notes (outline or lecture)
  - Assignments (to do list)
  - Presentation
  - Video clip/link
  - Audio
  - Images
  - Discussion Forum(s)
  - Drop Box
  - Feedback and/or reminders
  - Assessments
- Week Two
- Week Three
- Week Four
- Week Five
- Week Six
- Week Seven
Online Course Design

- Aesthetics and visual fluency
- Images, graphics, charts (file formats)
- Discussion forums
- Active learning
- Check-points
Online Course Design

• Intro to Cultural Anthropology
• What are my colleagues up to?
• War Stories
• Questions?
Scholarly Influences

- External research/resources → Credibility
- Guided questions → Efficiency
- Using what you assign → Authenticity
Suggested Resources: Educating the Net Generation

**EDUCAUSE Presentations**


“Though we sat just four feet away from one another, the distance suddenly felt light years apart. I would find out, in subsequent conversations, that my professor . . . represented for me a world I could scarcely remember . . . I am a member of the Net Generation. (T)he generalities require greater exploration, especially in the role they will play for college faculty and administrators in determining how best to reach the next generation of learners.”

“The assumption of the technology literate undergraduate student population needs to be demonstrated with quantitative data. A study by the ECAR addressed four questions: What kinds of IT do students use and what are their preferences? With what levels of skill are they using these technologies? How does this use contribute to their undergraduate experience? What value does the use of IT add in terms of learning gains?”

“By far, the most important reason given for growth in CMS use was that, over time, they began to see increased uses for it in their teaching. . . . to include more interactive materials . . . to address diverse learning styles. Faculty also use the CMS as a way to increase the amount of feedback... An important aspect of this is the use of the online gradebook . . . altering their relationship with their students and the students’ relationships with their own work. . . . Faculty using (CMS) find that they achieve a number of pedagogical gains.”

“One method to assess student usage is to examine system logs. ... Another method is to ask students about the system’s benefits and its features. ... In some studies, students reported that the use of a CMS improves learning. ... The fact that the interactive elements of the CMS are getting such little use and mixed results suggest that the real potential of the CMS as a learning platform must await maturation in the pedagogies with which they are bundled.”

“Today’s students think and process information fundamentally differently... our students’ brains have physically changed. (They) are “native speakers” of the digital language.... Digital immigrant instructors... are struggling to teach a population that speaks an entirely new language. ... (and) assume that learners are the same as they always have been. ... But that assumption is no longer valid.”

“The brain constantly reorganizes itself... a phenomenon known as neuroplasticity. Research... shows that people who grow up in different cultures do not just think about different things, they actually think differently. ... A key finding is that brains do not reorganize casually, easily or arbitrarily.”

Sample Guided Questions

Measuring Student Experiences with Course Management Systems (J.B. Caruso, ECAR Research Bulletin)

For IT staff: If we (IT) want to facilitate faculty use of CMS to the benefit of teaching and learning, where should we focus our efforts?

For faculty: Which pedagogical tools are of most interest to you and also highly valuable to students and easily provided via CMS?

Faculty Use of Course Management Systems (ECAR Key Findings)

Are these 2003 findings still relevant? Why or why not?

Faculty look to CMS for course/management and find pedagogical advantages in the process. How can we promote these?

Where is the onus on IT? Where is the onus on faculty?
Sample Guided Questions

The Student’s Perspective (C. Windham)
What clues to success in class pedagogy does the author provide?
How does the author frame the role of technology in the day to day life of net gen students? What is the role of students in learning?
Consider one of your courses and reflect on how you might introduce a component to enhance relevancy: community and interactivity.

Convenience, Communications and Control: How Students Use Technology (R Kvavik)
What evidence does the author provide to support the premise upon which we build our faculty technology development programming, “It’s not about the technology, it’s about the learning.”?
What conclusions does the author draw about the students’ tech skills and abilities?
Faculty Technology Development

• Collaborations in Space
  – CTL as a faculty learning space
  – CTL for “liaison hours” appointments

• Collaborations in Time
  – May Faculty College (IR presentation, ANGEL site)
  – August: Back to Basics (pre-NFO)

• Collaborations in Resources
  – January: Faculty Technology Festival (and TechFair)
Building Community @ SLU

“Best Practices…with Technology” website
– Connection to TechFair (at TechFest)
– Connection to mission of CTL
– Connections between pedagogy and tech
  • Collaborations Across the Arts
  • Calculus with PRS
  • ANGEL for Advisees
  • Senior Year Experience & Mem/Cog Lab
  • Chinese Imagery & Poetry for Peace
Academic - Tech Collaborations

- What kinds of pedagogical practice on your campus could be shared more widely?
- How can you help expand faculty thinking in use of technology to transform learning?
- Who are your collaborators in something like a best practices project?
Closing Considerations

• Strategies for dealing with curmudgeons and critics
  • Invite them into the faculty development and technology planning process
  • Welcome constructive criticism
  • Provide plenty of opportunities for evaluation
  • Use their good work by way of example
Closing Considerations

• Recapping key points
  • It’s not about the technology, it’s about learning
  • It is necessary to develop credibility
  • Locate institutional research and resources
  • Willing collaborators may be hiding in the wings

• Your take home message?
References and Resources


References and Resources


References and Resources


Thank you for attending this seminar!

Sondra R. Smith
ssmith@stlawu.edu
Co-CIO, Information Technology;
Director, Educational Technologies