

Tablet PCs & Mobile Technology: Active Learning, Practice and Engagement

Tablet PC Technology in Education 2006

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Today's Agenda

- Eller College of Management Undergraduate Programs Mobile Technology Initiative
- Teaching and Learning: Initiative goals and objectives
- Planning and funding
- Faculty experience
- Student experience
- Lessons learned
- Next steps

Teaching and Learning Issues

- Large classes
- Critical thinking
- Skill development
- Problem-based learning
- Student interaction/engagement
- Exposure to business technologies



Planning

- Equipment acquisition
- Initiative design
- Course integration
 - One day intensive faculty/student orientation
 - Gateway consultant services
- Support
- Evaluation

HP Teaching with Technology Grant

- HP grant equipment
- http://www.hp.com/hpinfo/grants/us/programs/tech_teaching/index.html
- Eller student cohort model
- 3 semester course redesign plan
 - Fall 2005
 - Marketing 361
 - Business Communication 314
 - Spring 2006
 - MIS 304
 - Fall 2006
 - MAP 402

Business Communication 314

- Writing
 - Peer editing for 3 cases (using “Track Changes” and tablet pens)
 - Document exchange through Blackboard
 - Final exam on computer
- Presentation
 - In-class collaborative PPT design & presentation, with instructor critique
 - Instantaneous critiques of live presentations via peer emails
 - Impromptu speeches & slide shows development

Business Communication 314

- Research
 - In-class Internet searches for selected topics
 - Effective search techniques emphasized
- Note-Taking
 - Instructor PPT shows available before class
 - Note-takers utilized tablets and GoBinder
- Team
 - Team meeting minutes and agenda development during meetings
 - Communication with project mentors through Blackboard discussion boards

Business Communication 314

- Future implications/considerations
 - On-site tech support needed during each class
 - Common software (GoBinder) helps
 - Classroom management is problematic
 - Malfunctioning computers
 - On-screen distractions (IM, Internet, etc.) for students
 - In-class tablets/laptops seem particularly appropriate for mid-size or smaller classes
 - Simply requiring or supplying the equipment is not enough: new teaching models must also be developed.

Study 1

Large Class Research Assignment

Study Questions:

1. Do “chauffeured” models of Internet research lead to higher quality research papers? If so, how?
2. How does a single tablet PC facilitate small group learning?
3. To what extent does the tablet PC allure students to engage in learning?

Study 1

Large Class Research Assignment

- Course: MIS 304
 - Managing Information in Organizations
- Students:
 - 275 junior business students, all majors
 - Have had at least 8 prior business courses
 - Very little knowledge in most of project requirements, including research techniques and sources

Study 1

Large Class Research Assignment

- Teams of 5
- Task:
 - 5,000 word research paper on how a Fortune 500 company uses information technology to improve it's effectiveness
- Preceptors:
 - top students from previous semester
 - serve as research consultants for current 5-6 teams each
 - trained on use of multiple databases and web sources for project research

Study 1

Large Class Research Assignment

Study Status

1. Preceptor Training: completed
2. Student Research: just beginning this week

Study 2

“Hall Warrior” Students

Main Study Question:

1. How do advanced students use the tablet PC to enhance their student experience, if given access to a wide variety of Internet resources, and open source or shareware applications?
 - Coursework
 - Extracurricular, school related activities, such as clubs
 - Career exploration and planning
 - Personal skills
 - Social networking

Study 2

“Hall Warrior” Students

Methodology:

- 6 advanced students
- Weekly blogs recording:
 - each web site they visited,
 - each nonWeb Internet resource they used,
 - each application they used, both client side and server side,
 - each primary feature of the tablet PC they used.
 - for each resource used or site visited, they record frequency and duration of these visits, what value it provided them, and why they would or wouldn't visit it again.

Study 2

“Hall Warrior” Students

Study Status

1. Student Training: completed
2. Student Research: underway

In their own words...

“The tablet PCs have indeed proved to be an extremely valuable tool in collecting direct market data using Microsoft Access surveys, collaborating with group mates on financial statements, to take notes during class, to provide a framework of organization for daily life, for communicating with peers, as a presentation tool, as a word processor, and a way to stay connected, just to name a few ideas.”

– Aaron, November 2005

In their own words...

“In meetings on Tuesdays at 5:30 we get together and many times brain storm business ideas or ways for businesses to improve. The two Tuesdays I was able to use the tablet, it was awesome. Best meetings yet, first everyone wanted to see how it worked so I passed it around. More importantly during our brainstorming session our secretary Brittany plugged it up to a projector and it was off the hook. I wish you could see the amount and innovative ideas that were being shouted out, pure genius.”

– Sean, November 2005

In their own words...

“During this time I brought the tablet to school and found it most helpful to write notes on the power points which are hardly ever interesting enough to pay full attention to for me. Having the freedom to change the colors of your notes and drawing arrows on your power points makes me focus so much more. It sounds like a pretty basic answer but honestly if I can go through a whole class without daydreaming the tablet was probably the best thing for me academically in my whole college experience.”

– Lawrence, November 2005

Considerations and Challenges

- On site technical support
- Start up and transition time in class
- Coordination of technology
 - Course management system
 - Other tools
- Technological infrastructure
- Large class logistics

Lessons & Next Steps

- Extended implementation
 - Transformation of teaching model (small and large classes)
- Complimentary mobile technology software
- Large class logistical challenges
- Modest results
 - student-to-instructor interaction, better grades, comprehension of complex concepts
- Future initiatives
 - Eller College of Management UG Programs Teaching innovation grants
 - Accounting
 - 1:1 Event

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