Integrating Tablets & Mobile Technology: Breaking Down the Class Through Active Learning, Practice and Faculty Engagement

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Panel 2

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

Private Freehand 1

Private Freehand 2
Panel 3

Teaching and Learning Issues

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

Panel 4

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
- Eller student cohort model
- 3 semester course redesign plan
  - Fall 2005
    - Marketing 361
    - Business Communication 314
  - Spring 2006
    - MIS 304
  - Fall 2006
    - MAP 402

Marketing 361

- Wall Street Journal Article Presentations
- Primary data research
  - Live demonstrations in class
  - Group questionnaire review/critiques
- Informal leadership
- Future implications and considerations
  - Technological infrastructure
  - Technological saturation
  - Distributed training
  - Large class challenges
  - Marketing simulations
Panel 7

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 onscreen

Panel 8

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.

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 brainstorm 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
Panel 15

Software Solution - *DyKnow*

Integrated Solution

- Collaborative Note Taking
- Classroom Interaction
- Computer Monitoring
- After Class Activities

Panel 16

**Key Pedagogy: Polling**

*What is the basic accounting equation?*

A. Assets = Liabilities x Equity
B. Equity = Liabilities/Assets
C. Liabilities = Equity + Assets
D. Assets = Liabilities + Equity
E. None of the above
F. I'm lost
Panel 17

**Key Pedagogy: Leverage Content**

**The Accounting Equation**

\[
\begin{align*}
\text{Assets} & = \text{Claims} \\
\text{Assets} & = \text{Liabilities} + \text{Equity}
\end{align*}
\]

- **Asset:** something of value
- **Liability:** something owed (creditors' share of the assets)
- **Equity:** what remains (owner's share of the assets)

Panel 18

**Key Pedagogy: Collaborative Note Taking**

The *four Ps* of Marketing (also known as the Marketing Mix):

1. **P-**
2. **P-**
3. **P-**
4. **P-**
Panel 19

**Key Pedagogy: Progressive Disclosure**

The Marketing Mix

- Product
- Place
- Target Market
- Price
- Promotion

Panel 20

**Using the resources available to you including the internet, course readings and lecture material, apply Porter’s Four P’s to evaluate one of the following companies:**

1. Eli Lilly
2. Microsoft
3. GE
Panel 21

Key Pedagogy: Replay

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Panel 22

Key Pedagogy - Student Control

Analyze this poem identifying the rhyme scheme and any metaphors

Dreams
by Langston Hughes

Hold fast to dreams
For if dreams die
Life is a broken-winged bird
That cannot fly.

Hold fast to dreams
For when dreams go
Life is a barren field
Frozen with snow.

Panel 22

Private Freehand 22
Panel 23

St. Louis: Current Economic Conditions

- Moderate expansion in business activity
- Unemployment: 5.277% (District)
  - IL-6.1%
  - IN-5.4%
  - WI-4.7%
  - MI-5.6%
  - KY-4.7%
  - TN-3.1%
  - MS-6.3%
- Consumer Spending:
  - Retail sales down but retailers generally optimistic about upcoming holiday sales
  - Automobile sales down on average with inventories at expected or higher levels

Panel 24

Consumer Price Index and Inflation

Currently inflation has been rising slightly slower than the national averages.

CPI has been increasing at about 3% nationally. In New England, its 2.9%
Panel 25

Solve for equilibrium price and quantity & draw a graph showing your equilibrium:

\[ Q^d = 400 - 20P \]

\[ Q^s = -20 + 10P \]

Panel 26

Solve for equilibrium price and quantity & draw a graph showing your equilibrium:

\[ Q^d = Q^s \]

\[ 400 - 20P = -20 + 10P \]

\[ 420 = 30P \]

\[ P = 14 \]

\[ Q^d = 30 \]

\[ Q^s = 12 \]

BONUS:

What would \( Q^d \) and \( Q^s \) be if the government imposed a maximum price of $10 per unit in this market? 

\[ Q^d = 30 \]

\[ Q^s = 20 \]
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