Exploring Digital Practices Using Mobile Apps and eTextbooks in Higher Education

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Introduction

• Promises
  – Heightened access to information
  – Heightened interactivity with content, peers, instructors, and beyond

• Considerations: Access is not enough
  – Locate, evaluate, manage, use information to build new knowledge

• Understanding practices encourages implementation of support that is more student-centered (Bowen & Pistilli, 2012).
Purpose of Survey

• Understand the landscape of the adoption of mobile technologies and eTextbooks at UCF
  – Baseline for access, usage and beliefs
  – Inform our next course of action regarding faculty development
Participants

• 1082 students enrolled in online, mixed-mode and FTF classes in Summer 2012 at UCF
  – 84 courses from all 12 colleges
  – 86% undergraduates
  – 69% females
  – 60% white
  – Age 18-63 (M=26; SD=8.17)

• 16 instructors
Mobile
Mobile Access:
Device Ownership

<table>
<thead>
<tr>
<th>Device</th>
<th>Android</th>
<th>iPhone</th>
<th>iPad</th>
<th>Kindle</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile</td>
<td>34%</td>
<td>45%</td>
<td>12%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tablet</td>
<td>21%</td>
<td></td>
<td>16%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>eBook Reader</td>
<td>16%</td>
<td></td>
<td>11%</td>
<td></td>
<td></td>
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</tbody>
</table>

1082 (91%) devices are smartphones, 383 (37%) are tablets, and 267 (27%) are eBook readers.
Use Devices for Academic Purposes

- **Mobile**: Ownership: 629 (58%), Use for academic purposes: 314 (82%)
- **Tablet**: Ownership: 383, Use for academic purposes: 172 (64%)
- **E-book reader**: Ownership: 267, Use for academic purposes: 172 (64%)

Total respondents: 1,082
Use Devices to Complete Assignments

- Mobile Device: 52% (Students) vs. 13% (Instructors)
- Tablet: 65% (Students) vs. 6% (Instructors)
- eBook Reader: 44% (Students) vs. 13% (Instructors)

Student sample size (N=1010), Instructor sample size (N=16)
Mobile Apps for Academic Purposes
Demographic Factors

Ownership
• Tablets
  – Graduate students
  – Age
• eBook Readers
  – GPA
  – Gender

Academic Use
• Small mobile devices
  – Freshmen and sophomores
  – Men
  – Asian
  – GPA
• eBook Readers
  – GPA
Perception of Mobile for Academic Purposes

• Easier to access (77%) and complete (64%) coursework
• Increase communication with students (70%) and instructor (55%)
• Increase knowledge in the field of study (58%)
• Improve quality of work (57%)
eTextbook
Most used devices
- Mobile device: 1%
- Tablet: 12%
- eBook reader: 3%
- Computer/laptop: 84%
The majority of students (58%) have not used an eTextbook in their college studies.

Of those that have (42%)...

- 45% were required to use it
- 47% became aware of the option from an instructor
- 42% became aware on their own
- 6% became aware from peers
Of those who have *not* used an eTextbook...

- 38% prefer print textbooks
- 13% are not familiar with eTextbooks
- 10% have not been offered this option by instructor
- 7% did not know it was an option
- 9% do not think they have the right device
- 5% cited cost
- 12% prefer to sell the book back
What features are ‘important’ or ‘very important’ to influence adoption of an eTextbook over a print book?

- **Read**
  - Search for keywords, glossary

- **Study**
  - Highlight, notes

- **Instructor**
  - Highlight, annotate, respond to notes

- **Social**
  - Share notes with classmates, share passages using social media
Perceptions of Features

- Reading: 78%
- Study: 76%
- Instructor: 71%
- Social: 37%
• Around 50% of students seldom or never actively used the features that facilitate learning (highlighting, making notes)
• Around 76% of instructors seldom or rarely used the same features
Beliefs about eTextbooks

• I have the technical skills. (86%)
• I have the study habits to adapt to an eTextbook. (72%)
• I would learn as effectively as with a print book. (60%)
• I would be more engaged/motivated with an eTextbook. (34%)
Main Findings
Finding 1: Access

• Vast majority of students own a mobile device but academic use is not universal.
• Tablets are most popular device for academic purposes but lower ownership than smartphones.
• eTextbooks mostly accessed on laptops but underutilized.
Finding 2: Use

- Mobile learning typically occurs outside of the formal classroom.
  - Large gap between students using mobile devices and instructors requiring mobile devices
- GPA issue
- Limited use of features within eTextbooks
Implications: Faculty Development

• Mobile
  – Leverage the apps students are already using
  – Build mobile into assignments
  – Model effective use

• eTextbooks
  – Select effective eTextbook and require it
  – Infuse into curriculum
  – Model effective use

• Work with support services
Action Taken

• Focus group

• Mobile blog: http://mobile.cdl.ucf.edu/

• Create an open faculty development course
  – Inform faculty of resources and options
  – Provide strategies to help with selection and integration of technologies in curriculum
  – Present best practices and case studies

• 2014 Mobile/eTextbook Survey
References

Questions?

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