E-Textbooks for Engineering Courses

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Abstract
Considering the cost of textbooks, we try to make e-textbooks available to students whenever possible. In Fall 2011 we provided 41 e-textbooks to 2072 students in 36 engineering classes (~8% of all engineering classes). Our survey sought to learn about student use and perceptions of the e-textbooks.

Method
Qualtrics survey with 21 questions asked about:
• Demographics
• Awareness of e-textbook
• Students’ e-textbook experience
15% response rate (n=299)

“Make sure electronic textbooks are reliable. As a student, I need to be able to trust that my textbook will be available whenever I need it.”

“Great as a secondary source, but I still find it easier to flip through a book to identify my topic.”

Findings: Awareness Matters!
• 71% of students who were aware of the e-textbook used it.
• Students are more likely to use library copies of e-textbooks when they know there is a copy available.
• Students are about 51% more likely to use library electronic copies given the advanced notice.
• Providing students with information about the availability of electronic copies has the most significant impact on increasing student use of e-textbooks from the library.

Future Plans
• Publicize the e-textbooks more.
• Publicize them early.
• Work to provide links in course registration module and course management sites.
• Conduct focus groups to get more information.

Regression model for student usage of library e-textbooks

Usage of library e-textbooks
- Awareness of library e-textbooks
- Gender
- Student status (Graduate student)
- Student’s cost-consciousness
- Textbook format preference
- Type of vendor
- Textbook as optional reading

Logit model for student usage of library e-textbooks

Exploratory Variable | Coefficient | Std. Err | z | p-value
--- | --- | --- | --- | ---
Awareness of library e-textbooks | 3.665 | 0.3048 | 0.09 | < 0.01
Gender | -0.201 | 0.3135 | -0.65 | 0.517
Student status (Graduate student) | 1.043 | 0.376 | 2.77 | < 0.01
Student’s cost-consciousness | 0.650 | 0.349 | 1.86 | < 0.01
Textbook format preference | 0.407 | 0.329 | 1.22 | < 0.01
Type of vendor | -0.201 | 0.136 | -1.49 | 0.168
Textbook as optional reading | 0.715 | 0.302 | 4.63 | < 0.01
Constant | -3.135 | 0.756 | -4.16 | < 0.01

All tests of significance are one-tailed with robust standard errors.
Number of observations = 299
Log Likelihood = -110.703
Prob > chi2 = 0.988
Pseudo R2 = 0.3154
Wald chi2 (1) = 91.20