

eTextbook Pilot Study Dental Hygiene Courses Fall 2011 and Winter 2012

Project by

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**This analysis was prepared by –
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July 2012



Overview

- Background
- Method: Pre-pilot and Post-pilot Surveys
- Discussion of Survey Results
 - Demographics
 - Usage
 - Perception & Satisfaction
- Discussion of Student Focus Group Study and Faculty Interviews (Post-pilot)
- Lessons learned and Future Plans

Background

- Rising Textbook Costs & Availability of eTextbook Technologies
- University and MLibrary Responses
 - University Textbook Task Force (2006-2007)
 - Campus-wide eTextbook Initiative (MLibrary-led)
 - Phase 1: Spring 2010 – Spring 2011
 - Phase 2: Fall 2011 – Present
- University of Michigan eTextbook Pilot, Winter 2011
- Dental Hygiene, E-Learning Program (2008 Winter – present)
- Dental Hygiene – Elsevier Initiative
 - Fall 2011: Elsevier providing free access to an eTextbook to 7 students in HYGDCE 482-Oral Diseases: Prevention & Management. (3 used-webinar training provided)
 - Winter 2012: Elsevier providing free access to an eTextbook to 30 students in DENTHYG 243: Head & Neck Anatomy. (29 used-webinar training provided)

Pilot Course and eTextbook Information

■ Fall 2011

- ☐ Course: HYGDCE 482-Oral Diseases: Prevention & Management
- ☐ Textbook: Cappelli & Mobley (2008), *Prevention in Clinical Oral Health*.
Paperback, 312 Pages. MSRP: \$54.95 (print); \$49.95 (eTextbook)
ISBN 10: 0-323-03695-3
ISBN 13: 978-0-323-03695-5
Imprint: MOSBY

■ Winter 2012

- ☐ DENTHYG 243: Head & Neck Anatomy
- ☐ Fehrenbach & Herring (2012), *Illustrated Anatomy of the Head and Neck*, 4th ed.
Paperback, 336 Pages. MSRP: \$73.95 (print); \$62.95 (eTextbook)
ISBN 13: 978-1-4377-2419-6
Imprint: SAUNDERS

Method: Surveys

Fall 2011 and Winter 2012

■ Objectives

- ❑ To help us assess usage of eTextbooks
- ❑ To better understand student & faculty expectations of eTextbooks
- ❑ To learn more about student & faculty experience with eTextbooks

■ Methodology

❑ Fall 2011

7 students were invited to take pre- and post-pilot surveys.

100% response rate (n=7)

❑ Winter 2012

30 students were invited to take a survey.

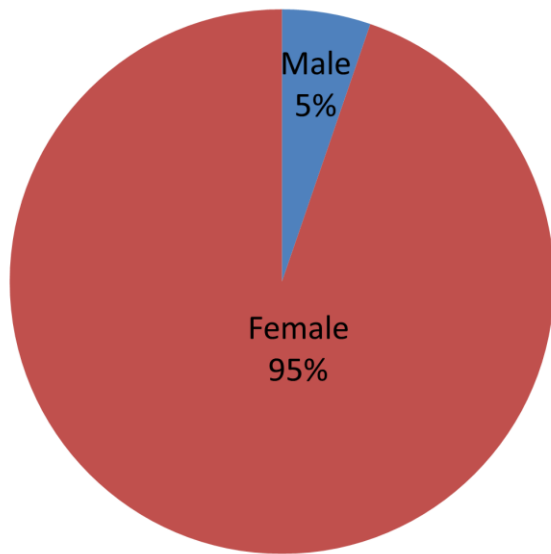
100% response rate (n=30)

- ❑ Following analyses are based on the total observations of 37

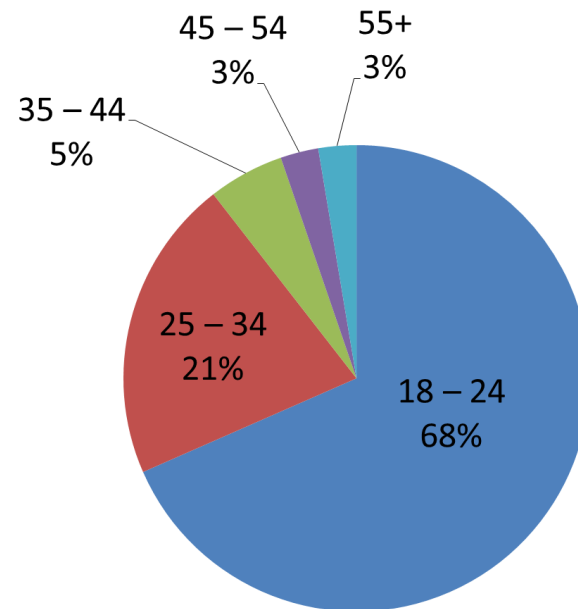
Demographics:

Student Distribution by Gender and Age

Gender

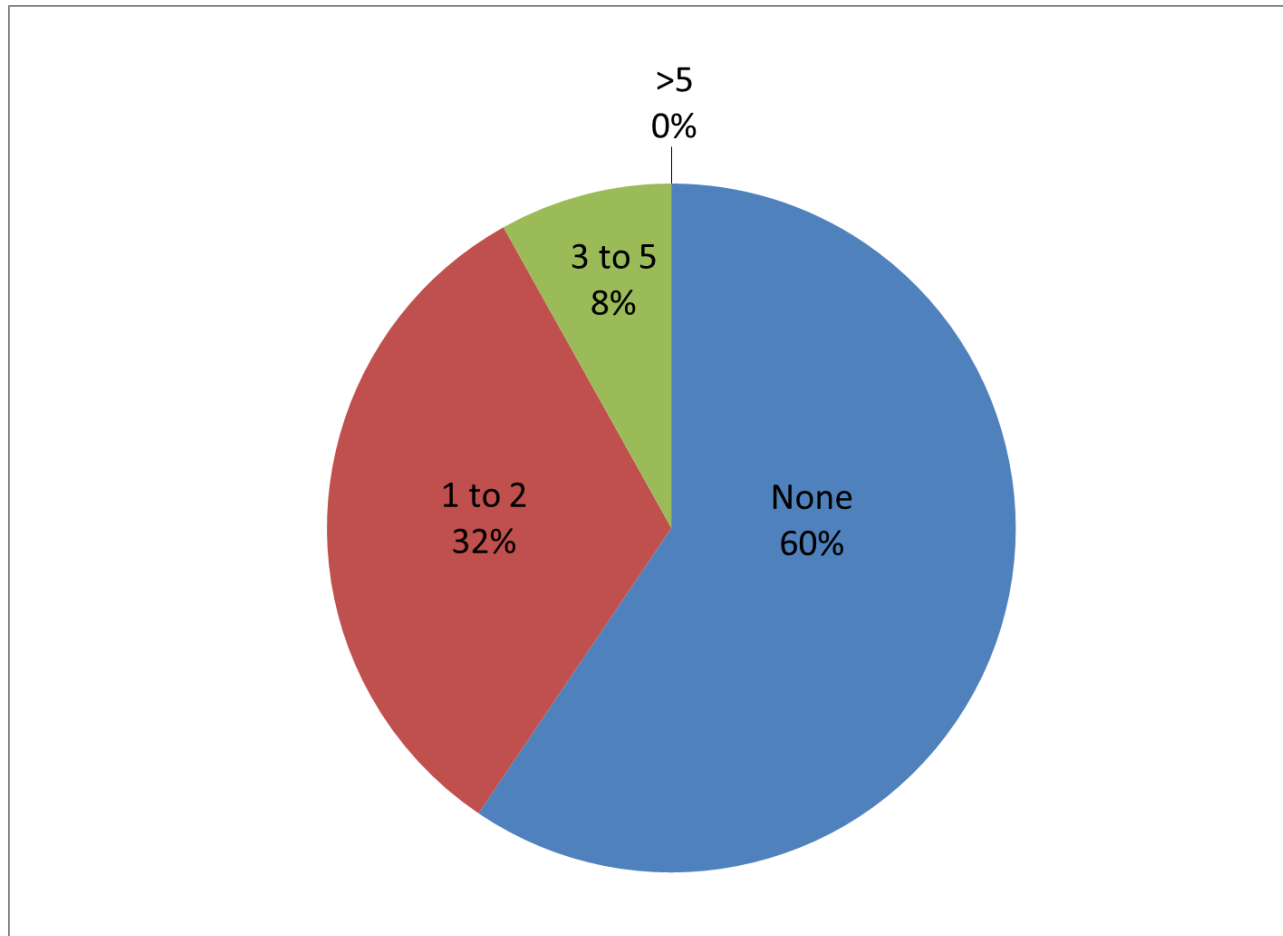


Age



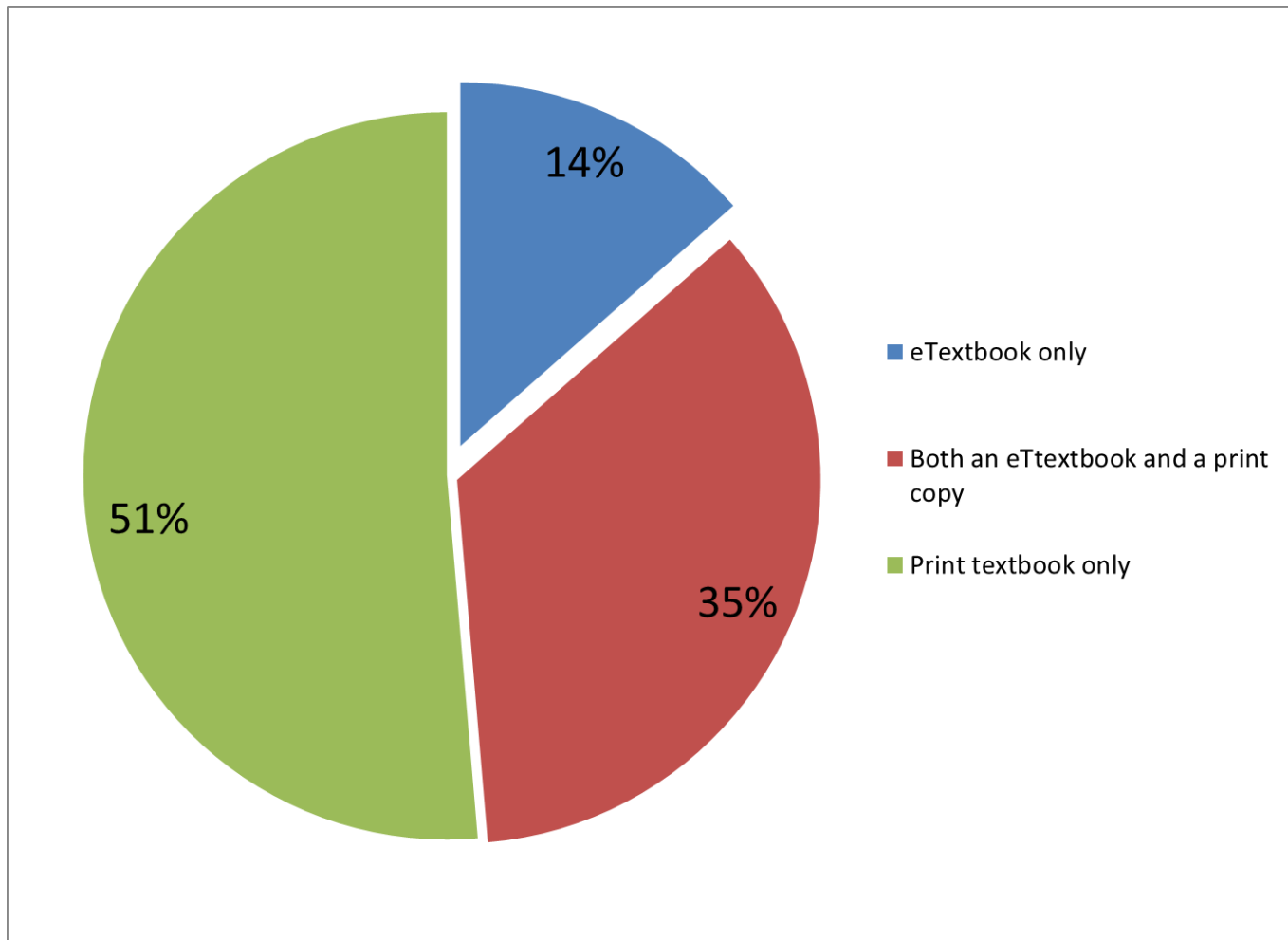
Prior Experience with eTextbooks (Pre-pilot)

Q: How many eTextbooks have you used in the past?



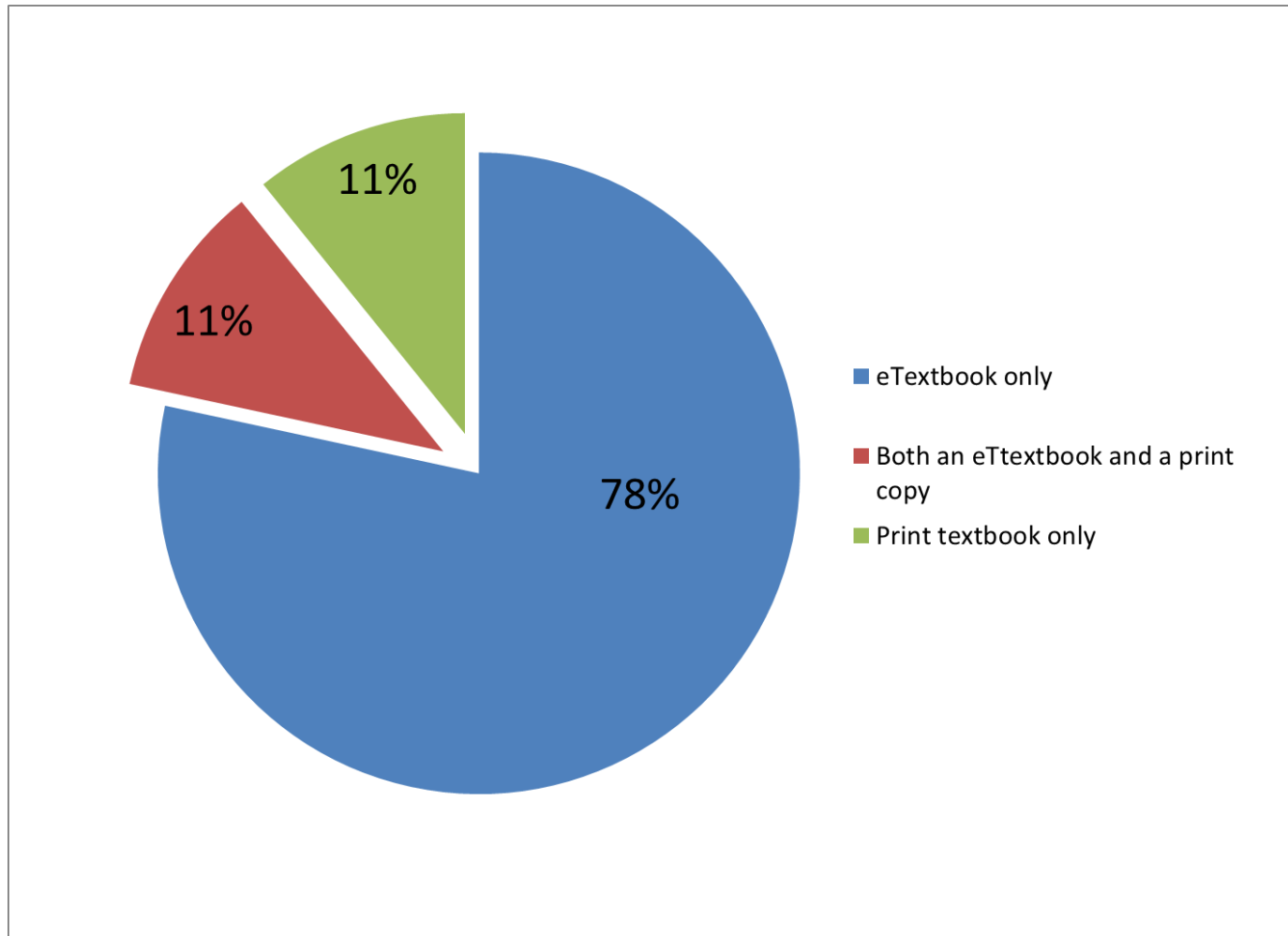
Intended Textbook Format Choice (Pre-pilot)

Q: In this course, you will be given choices in textbook format.
Which of the following options would you consider using?



Actual Textbook Format Choice (Post-pilot)

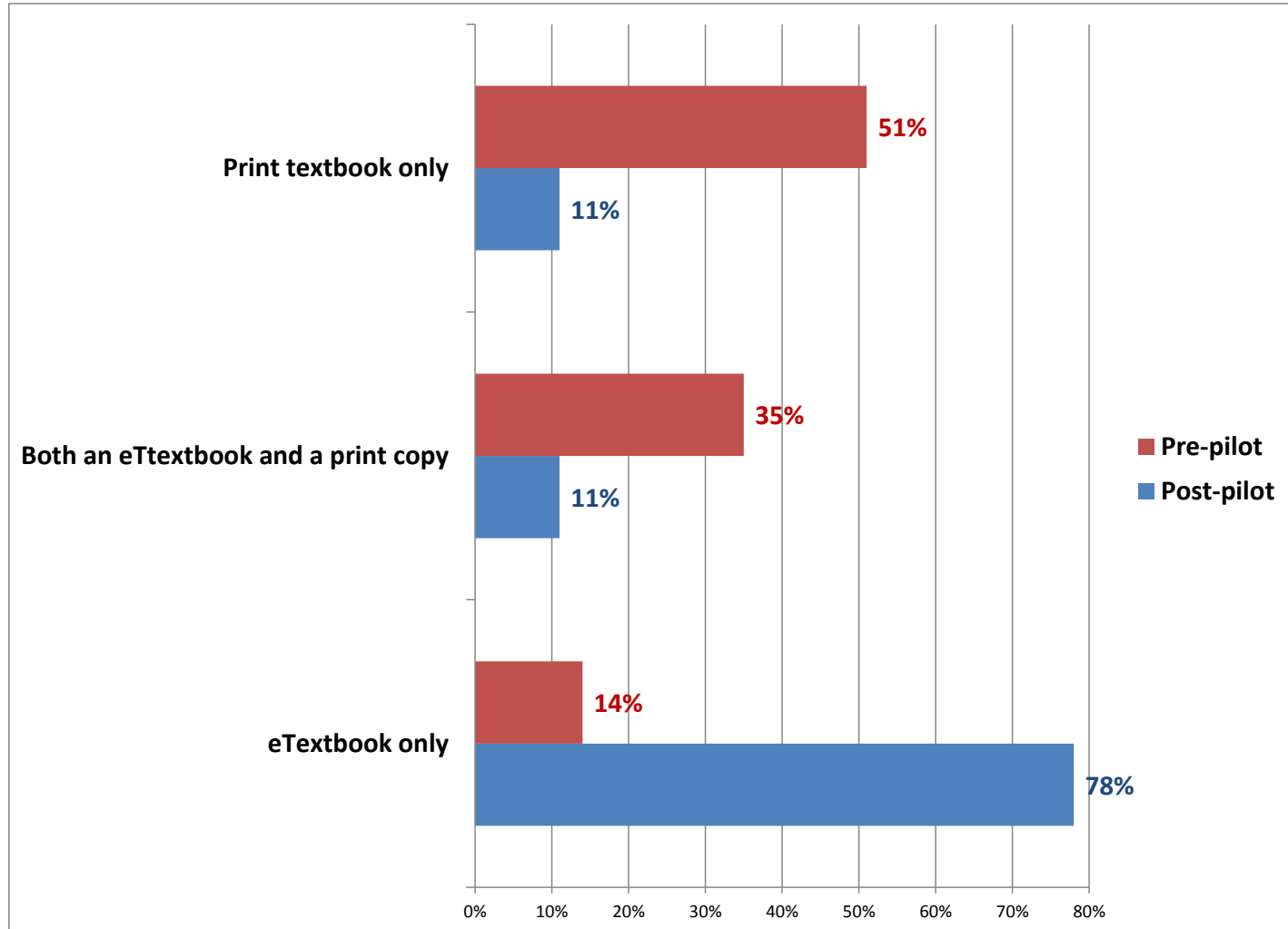
Q: In this course, you were given choices in textbook format.
Which of the following options did you choose?



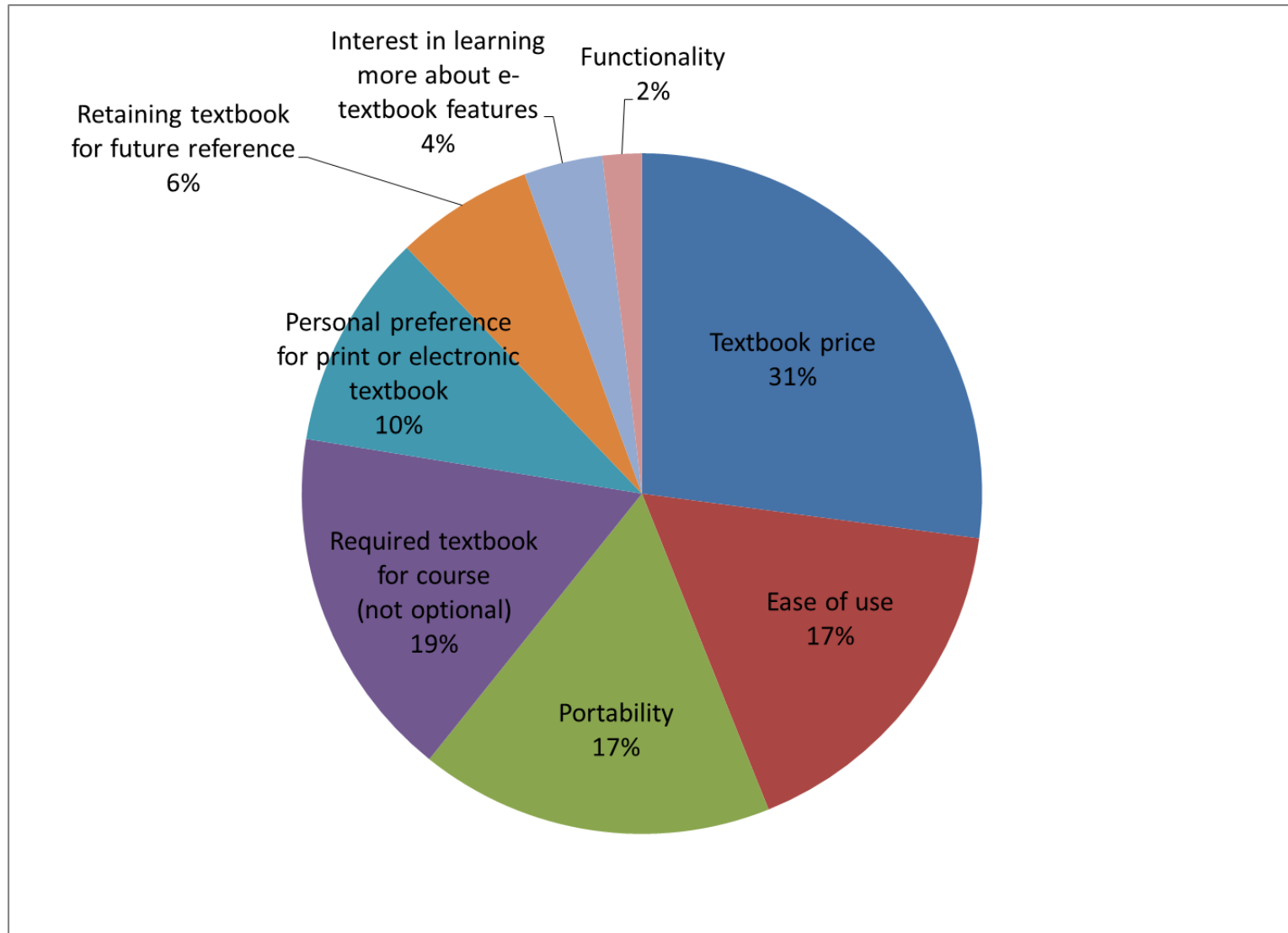
eTextbook Usage:

Tracing Changes from Pre- to Post-pilot

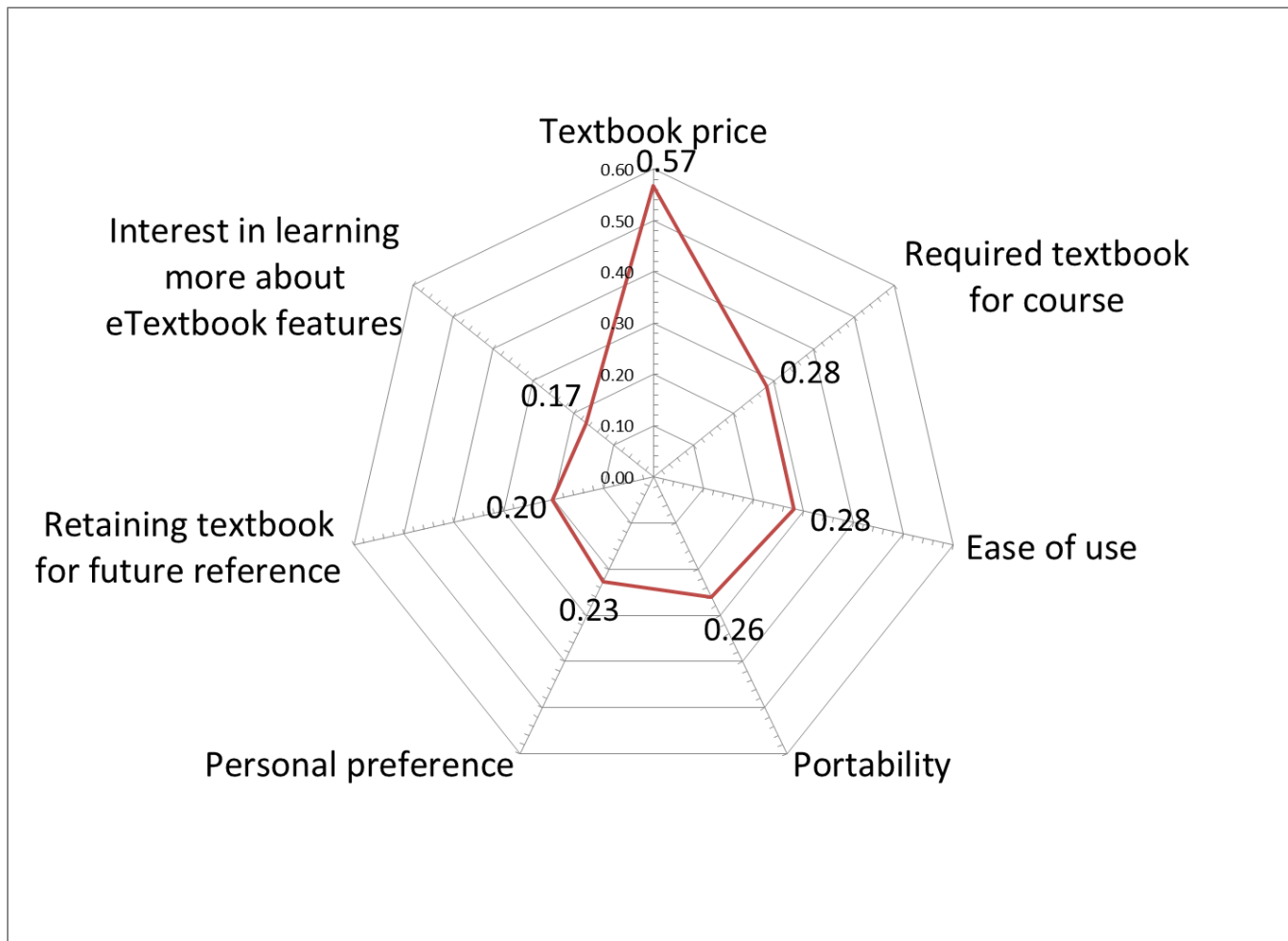
Finding: The actual usage of eTextbooks was much higher than initially expected.



Influential Factors/Features Determining Students' Textbook Format Choice (Post-pilot)

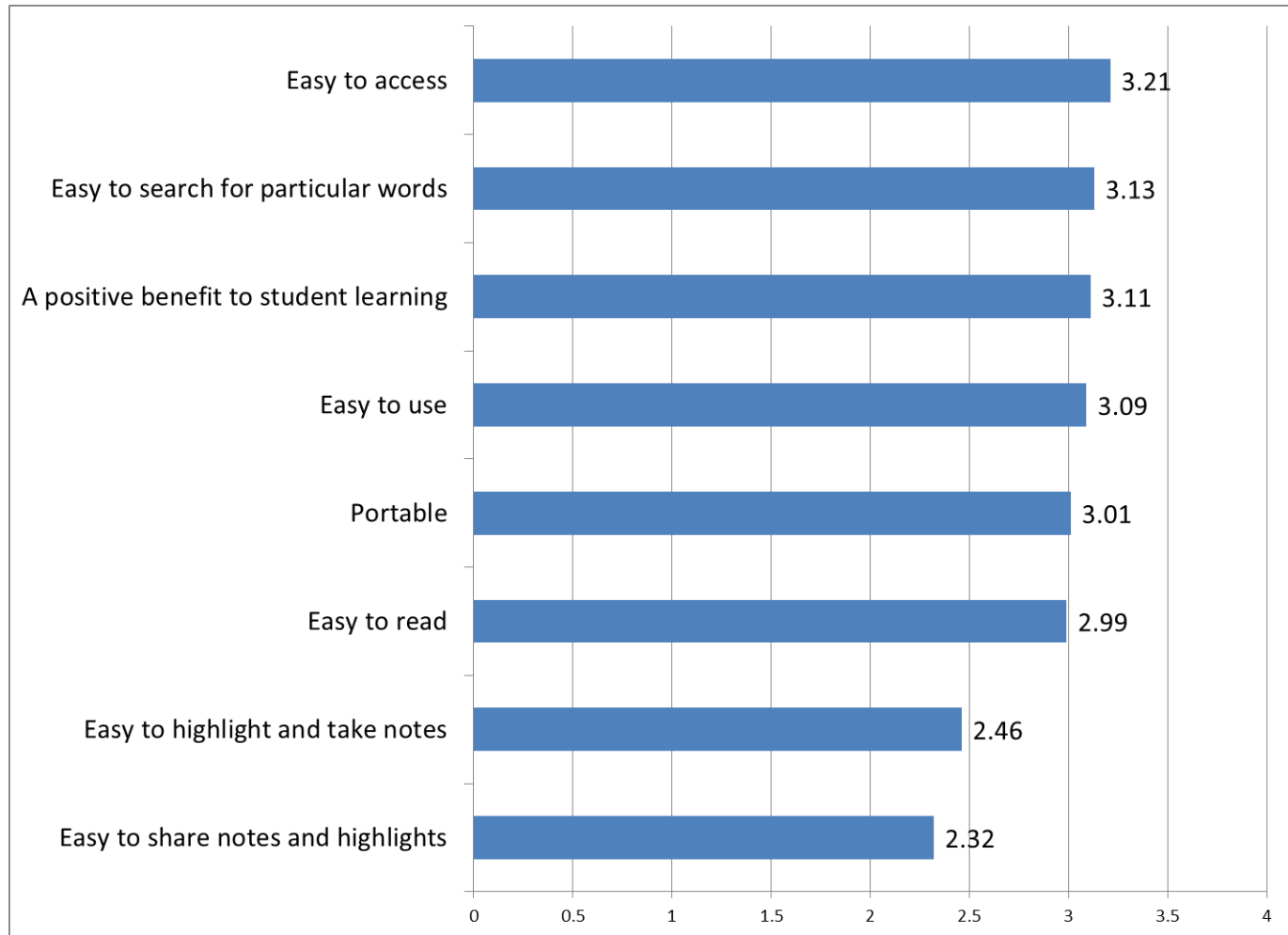


Influential Factors/Features Determining Students' Textbook Format Choice, Ranked by Importance (Post-pilot)



Expectations from eTextbooks (Pre-pilot):

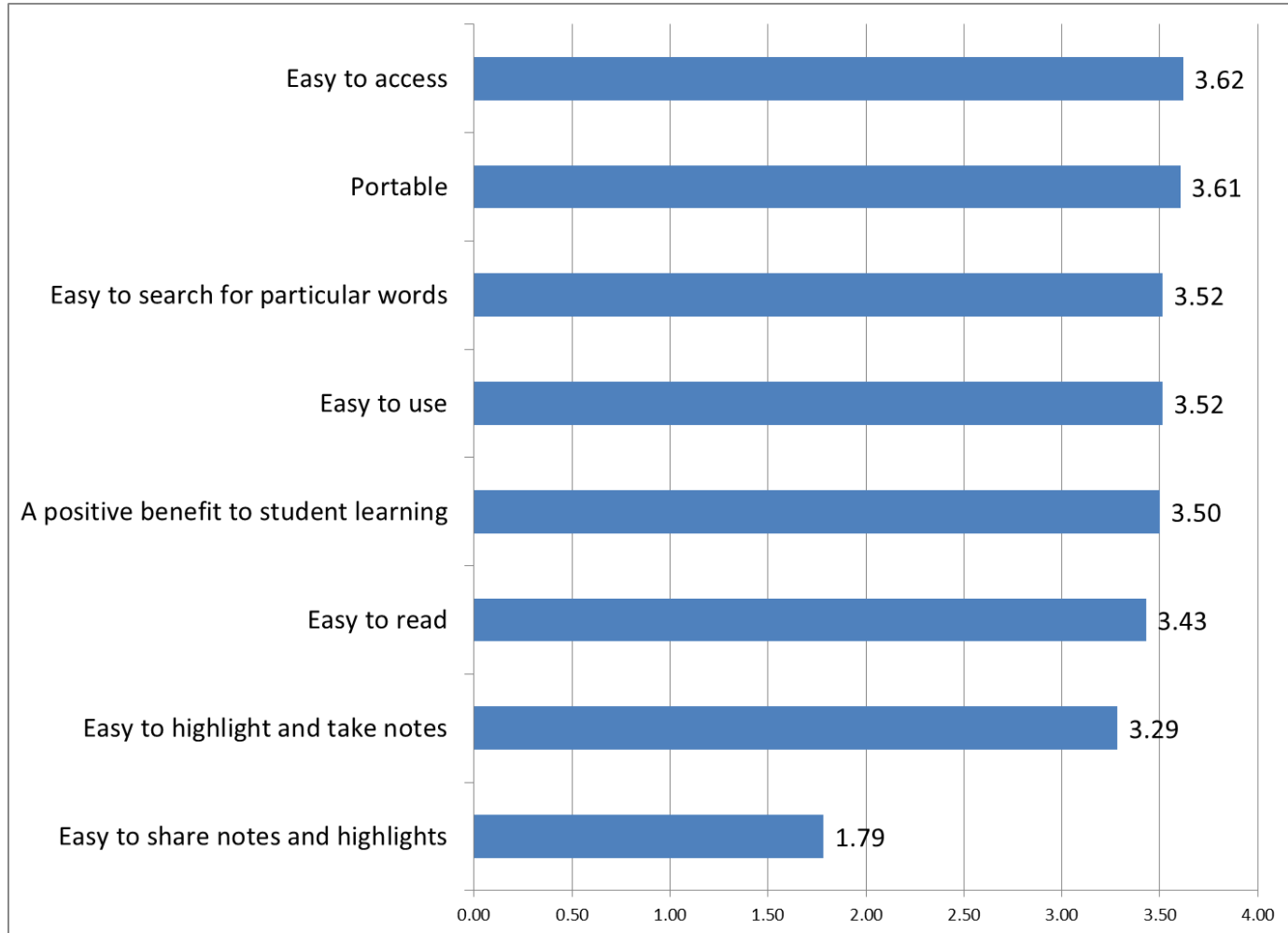
Q: When using an e-textbook I expect it will be.....



Survey coding: 1:strongly disagree, 2: disagree, 3: agree, 4: strongly agree

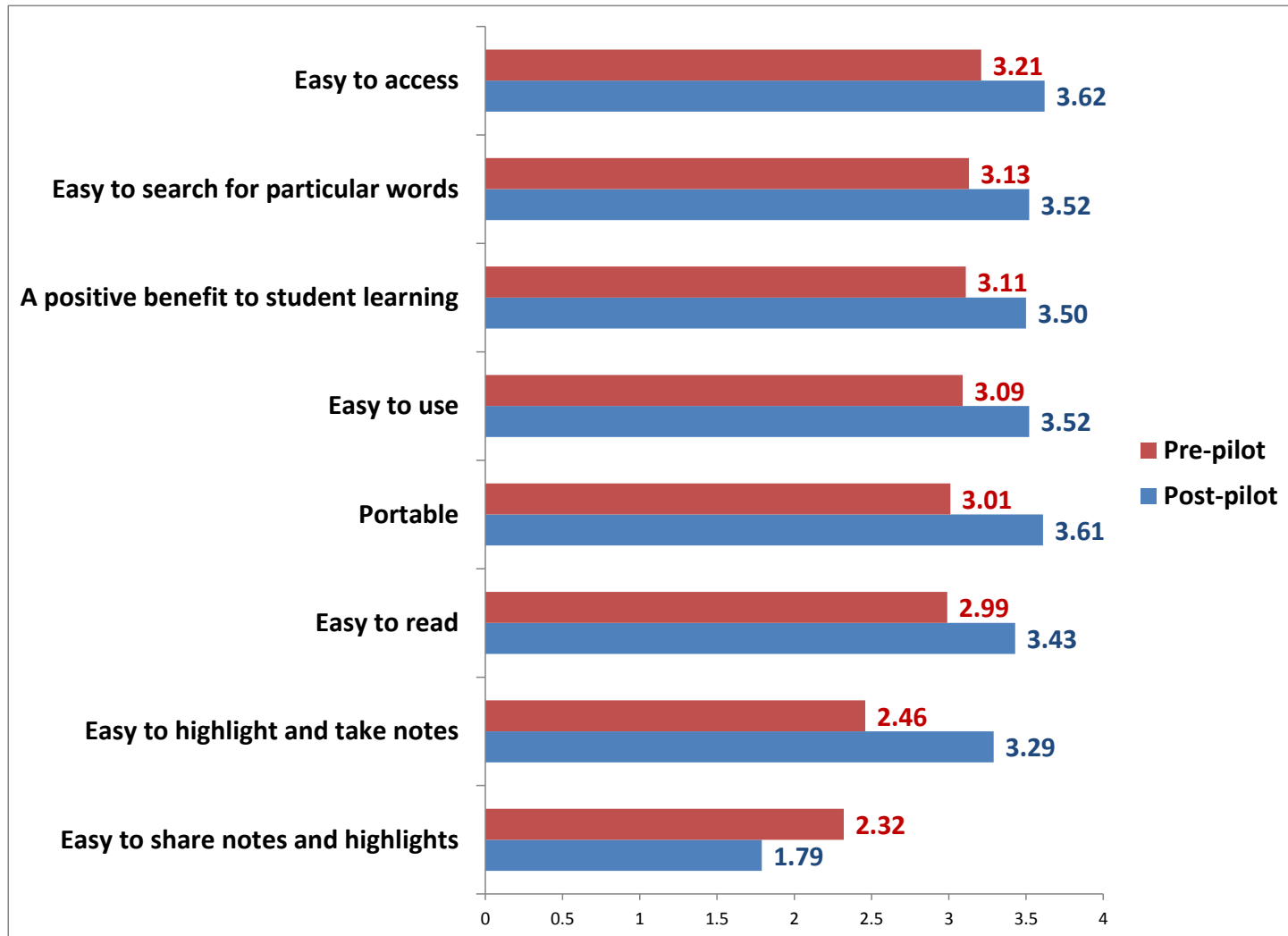
Experiences with eTextbooks (Post-pilot)

Q: In using the eTextbook, I've found it to be....



Survey coding: 1:strongly disagree, 2: disagree, 3: agree, 4: strongly agree

Expectations and Experiences: Tracing Changes from Pre- to Post-pilot



Survey coding: 1:strongly disagree, 2: disagree, 3: agree, 4: strongly agree

Expectations and Experiences: Tracing Changes from Pre- to Post-pilot

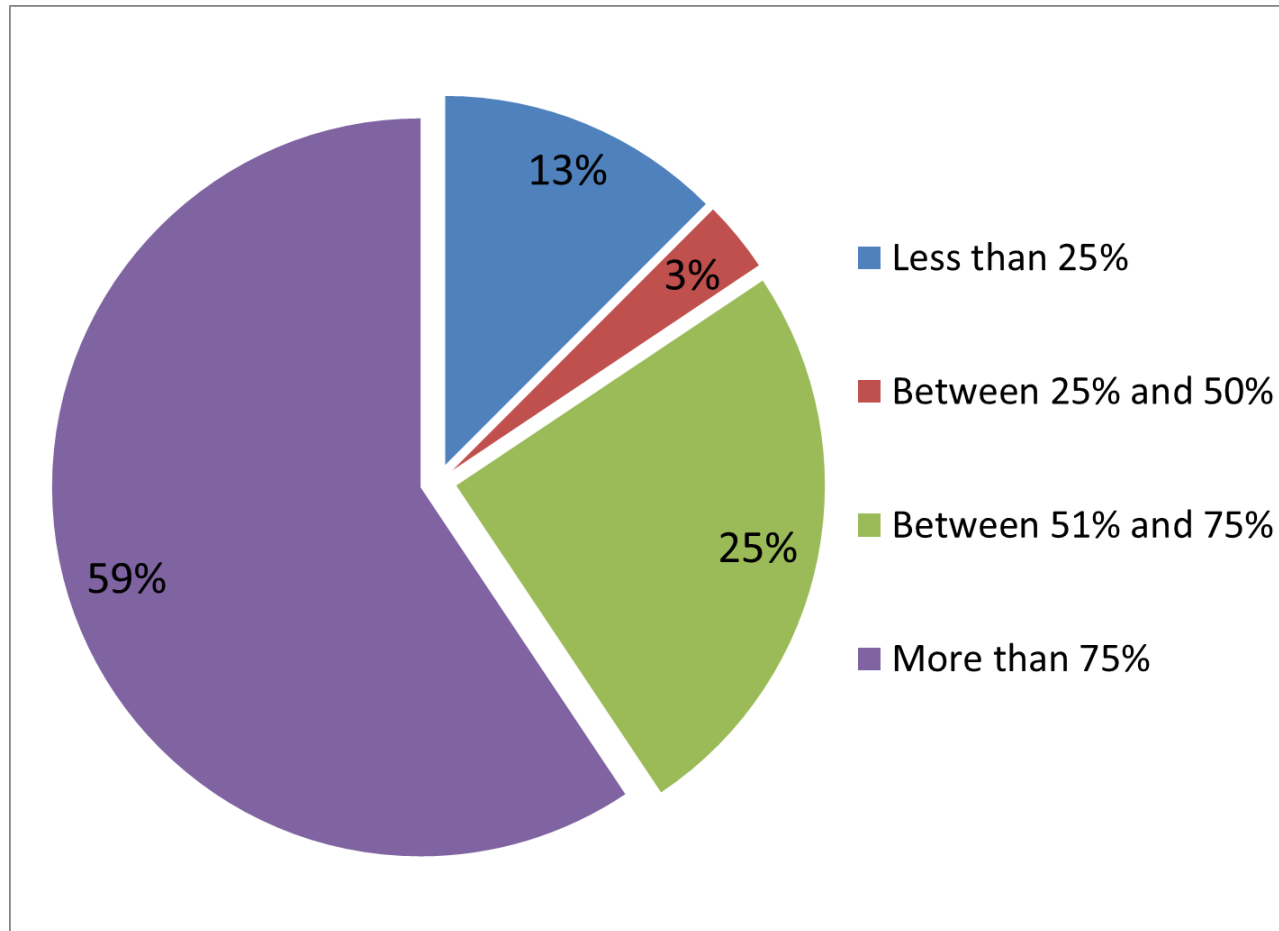
	Pre- → Post-pilot	(% of change)
■ Easy to access	3.21 → 3.62	(+13%)
■ Easy to search for particular words	3.13 → 3.61	(+15%)
■ A positive benefit to student learning	3.11 → 3.52	(+13%)
■ Easy to use	3.09 → 3.52	(+14%)
■ Portable	3.01 → 3.21	(+6%)
■ Easy to read	2.99 → 3.43	(+15%)
■ Easy to highlight and take notes	2.46 → 3.29	(+33%)
■ Easy to share notes and highlights	2.32 → 1.79	(-23%)

Findings:

- Overall, students have had relatively positive experiences with eTextbooks.
- In the pre-pilot, 20% of survey respondents reported that they don't know what to expect from eTextbooks regarding annotation features.
- Similarly, in the post-pilot survey, 25% of survey respondents reported that they did not use any annotation features. Thus, the average score is based on the answers from the 75% of survey respondents.

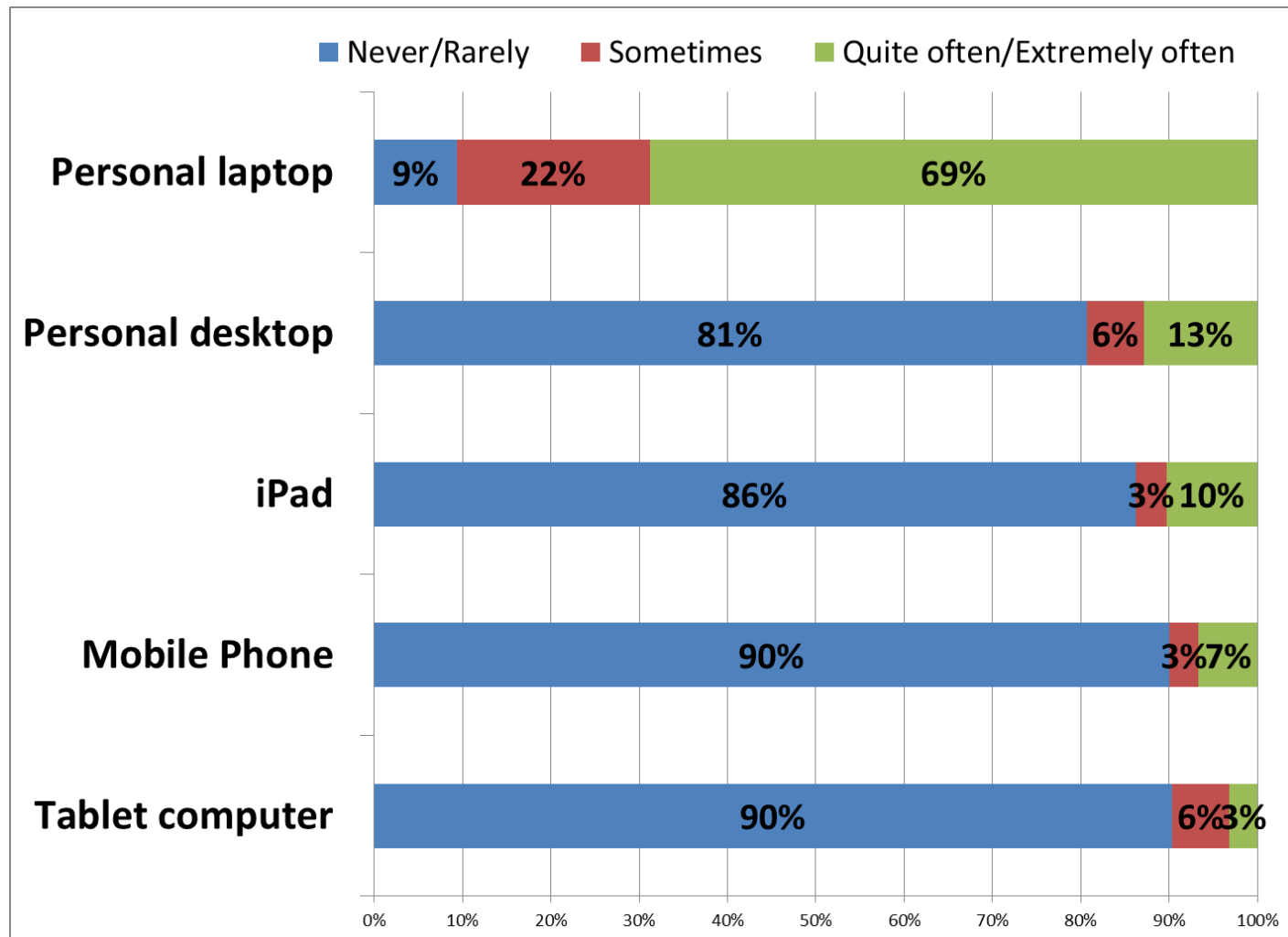
Students' Reading Pattern (Post-pilot)

Q:What percentage of the assigned readings was done with the e-textbook?



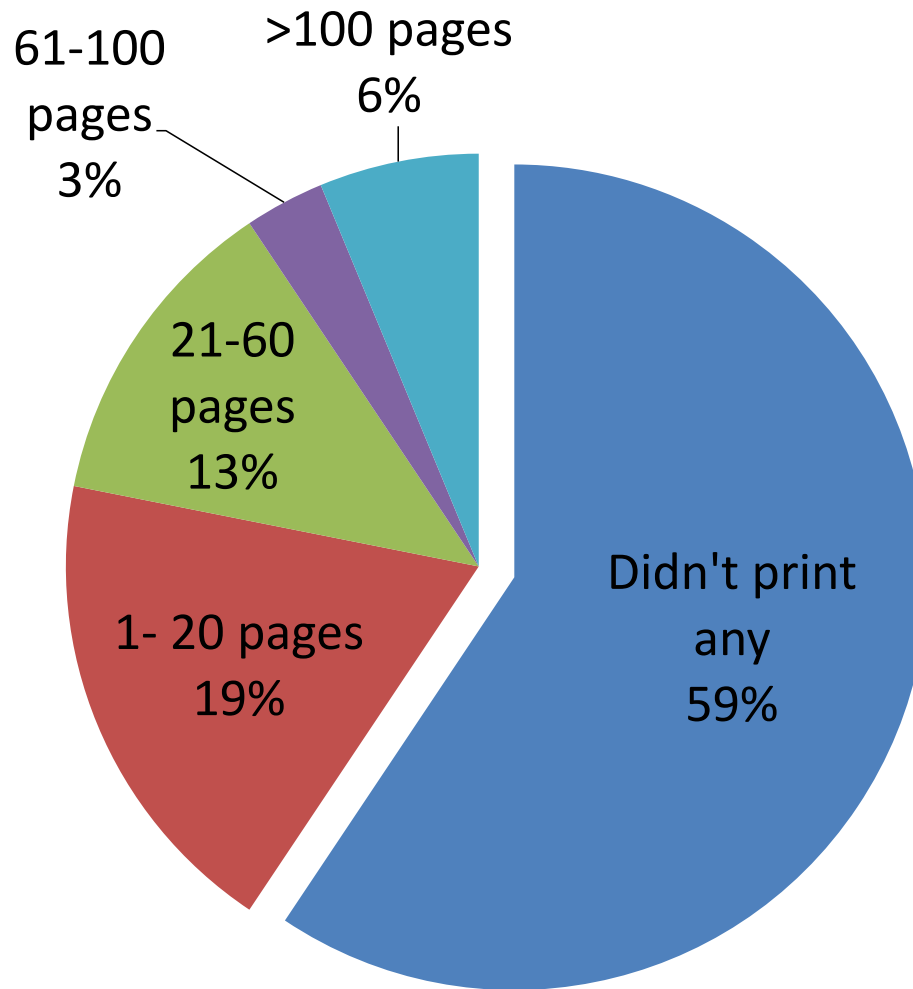
Frequency by Mode of Access

Q: How often did you use the following devices to read your e-textbook?



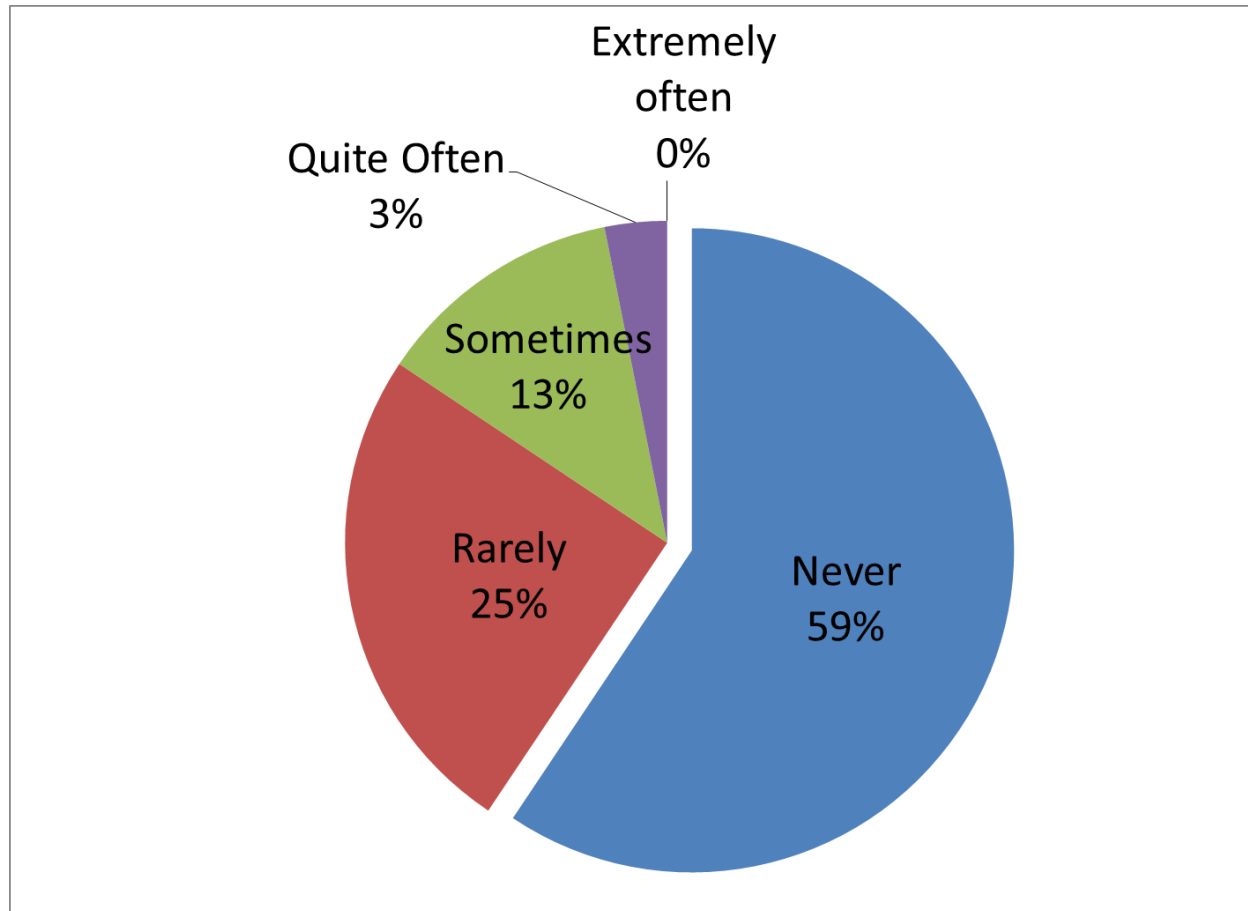
Student Behavior toward Printing

Q: How many pages did you print?



Technical Difficulty with eTextbooks

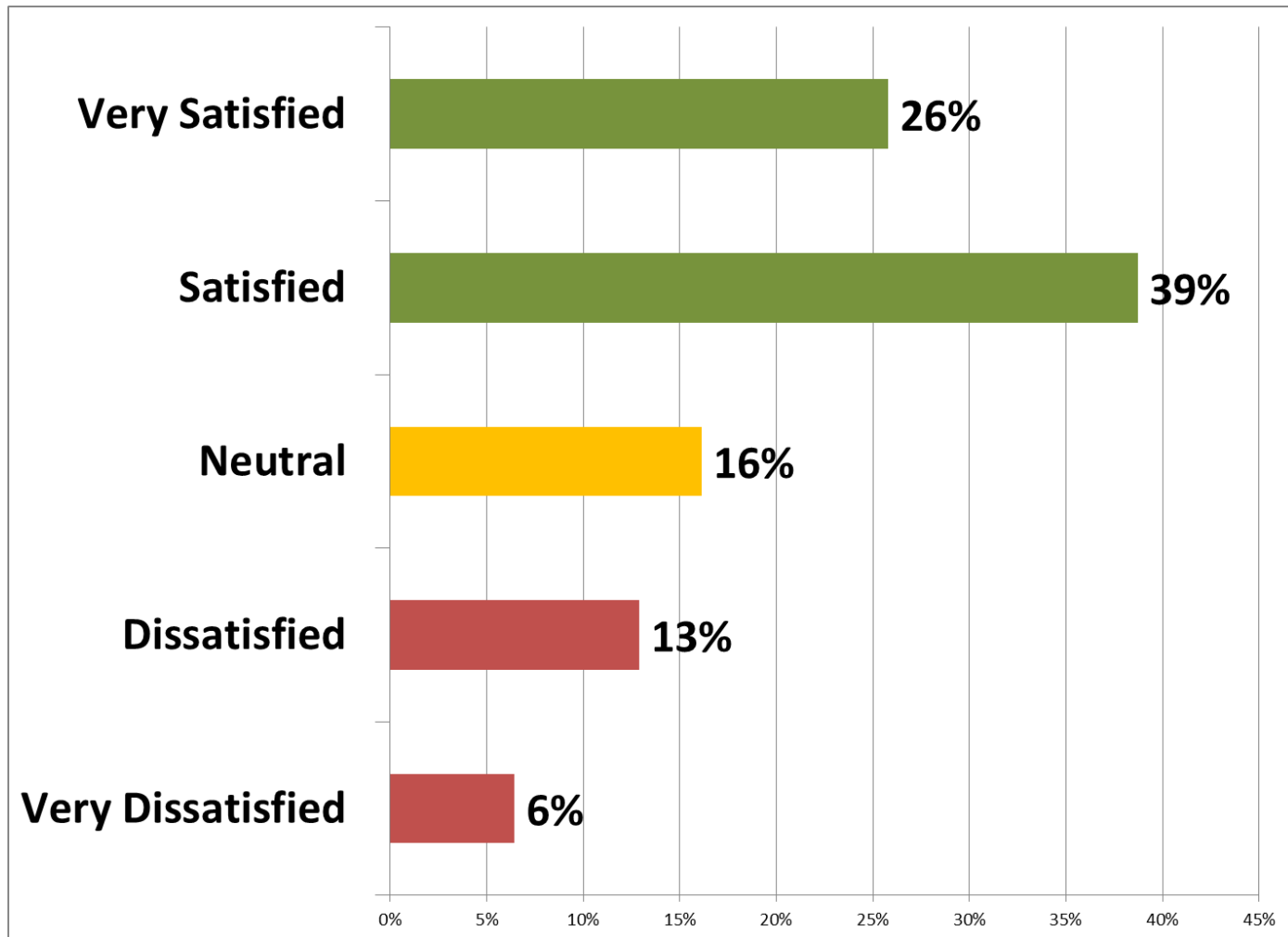
Q:How often did you have technical difficulty using your e-textbook through Pageburst?



Note: Only one student reported in the survey that she contacted Elsevier tech support about technical difficulties when using the eTextbook.

Satisfaction/Dissatisfaction with eTextbooks

Q: Please rate your overall satisfaction with your e-textbook using the Pageburst platform?



Reasons for Satisfaction/Dissatisfaction

Q: Please describe why/why not satisfied?

■ Top 5 Reasons for Satisfaction

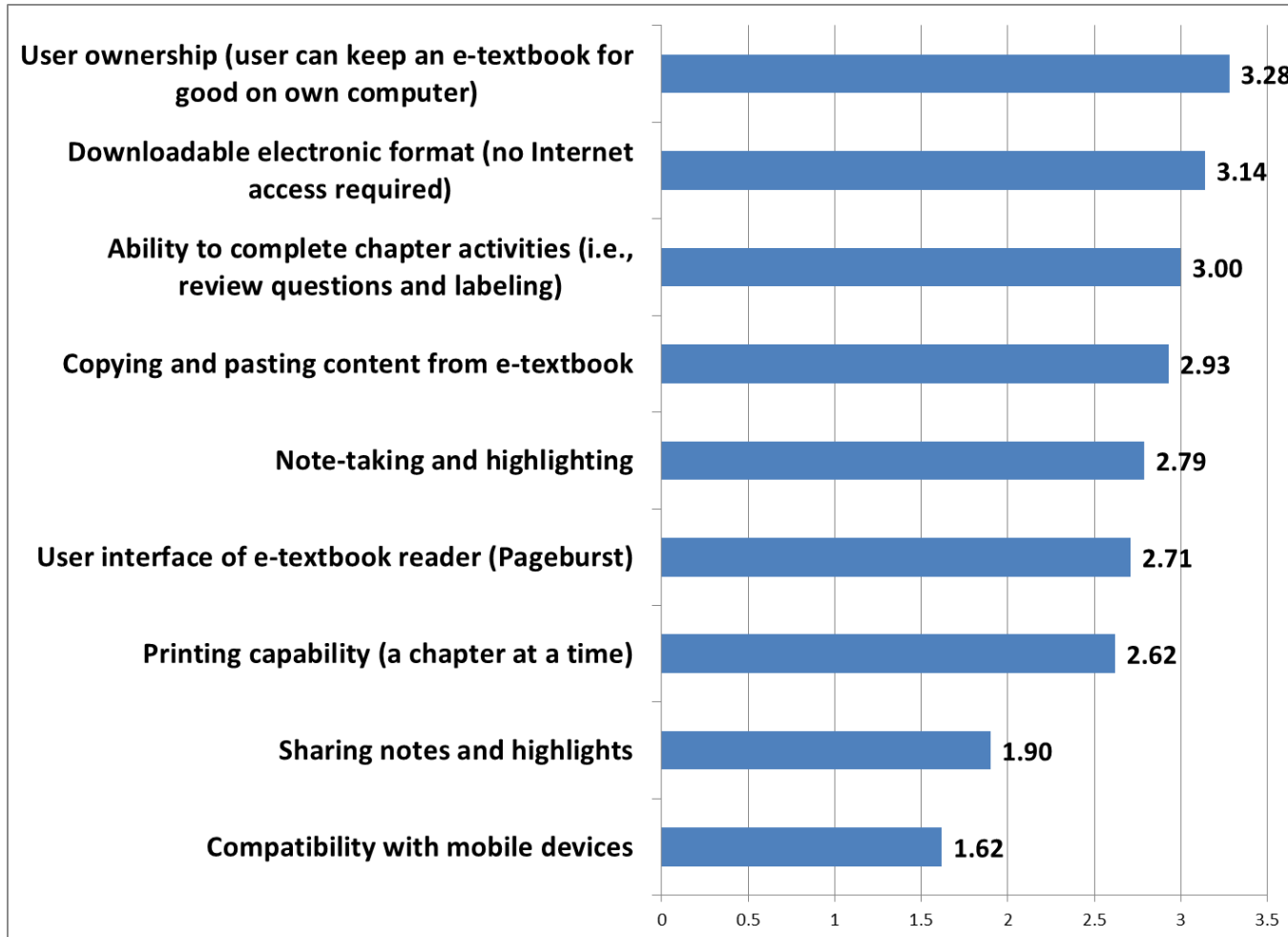
- Portable
- Searchability
- Downloadable
- Easy to use
- Cost-effective

■ Top 5 Reasons for Dissatisfaction

- Requires the platform (Pageburst); Requires the use of one's own computer ("I don't take my laptop to school.")
- Difficult to read and highlight the chapters on the computer
- Hard to read and scroll through the pages
- Lack of page fidelity
- Lack of color printing for photos, charts, diagrams

Satisfaction/Dissatisfaction by Features

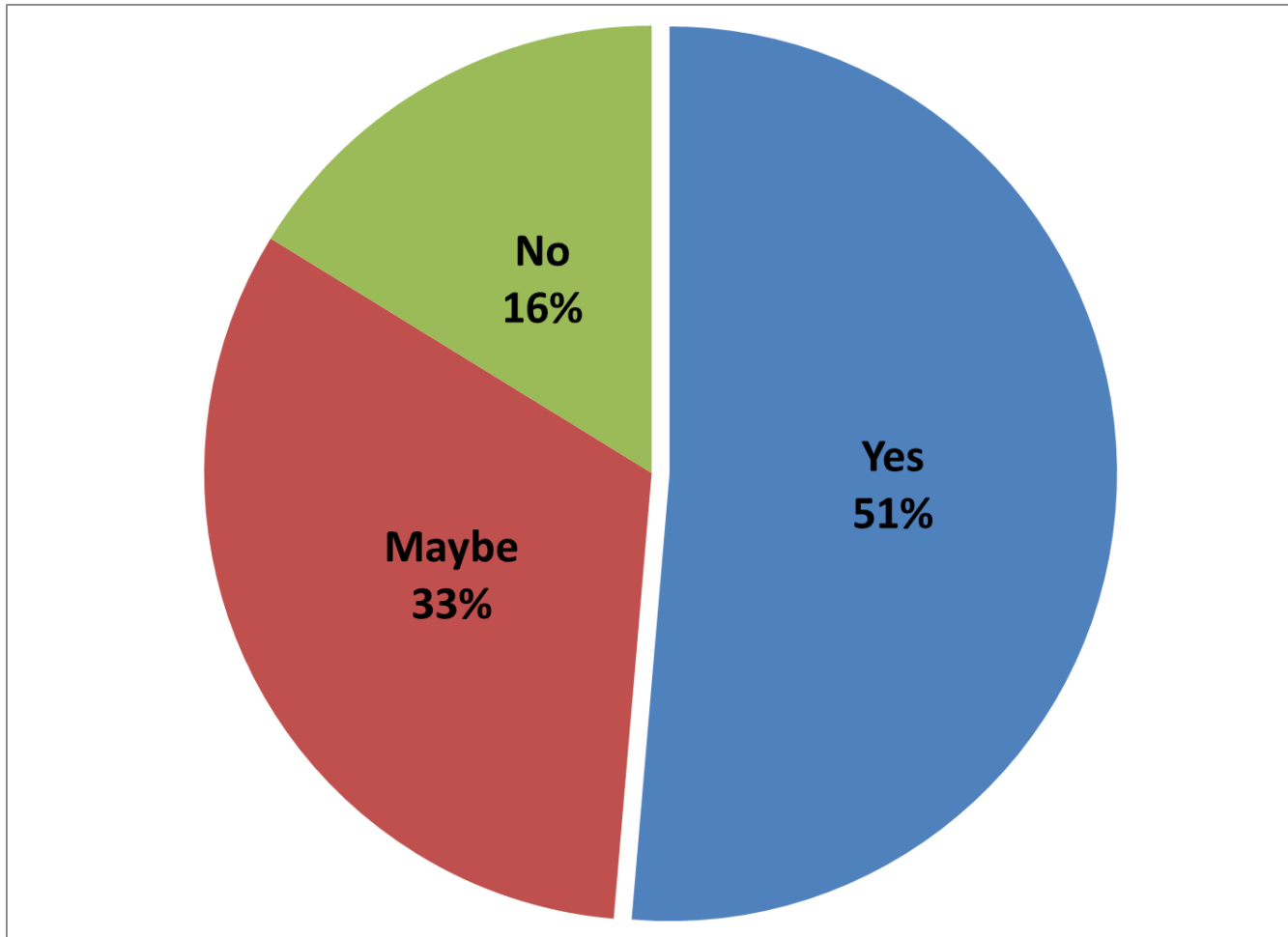
Q: Please rate your satisfaction with the following features of your e-textbook.



Survey coding: 1: Very dissatisfied, 2: Dissatisfied, 3: Satisfied, 4: Very satisfied, (0: Didn't use, the data for "didn't use" were excluded from the analysis.)

Future Use of eTextbooks

Q: Would you choose to use an e-textbook in future?



Future Use of eTextbooks

Q: Would you choose to use an e-textbook in future?
Please describe why/why not?

- I would use an eTextbook again because...
 - Easy to use
 - Cost effective
 - Versatile
 - Handy, Portable
 - Easy to read
- I would not use an eTextbook again unless....
 - Cost-saving is significant
 - Easier to turn pages
 - I can learn better from a screen

Suggestions

Q: Do you have any suggestions for improvement of Pageburst, e-textbooks, and other related services?

- More interactivity
- Interface - ability to look at two pages at once
- Interface - make sure the layout of the book actually fits the screen.
- Interface - scroll to the bottom of one page and arrow to the next page so people know for sure the page was complete
- Improvement in the labeling exercises – “we should be able to type in on the blank lines and maybe if possible have the book correct us if we labeled it wrong.”
- Page fidelity between print and eTextbooks
- Increase the limit of how many devices can get access to the book

Print vs. Electronic, or Both: Where is the Tipping Point?

- We asked students a hypothetical question –

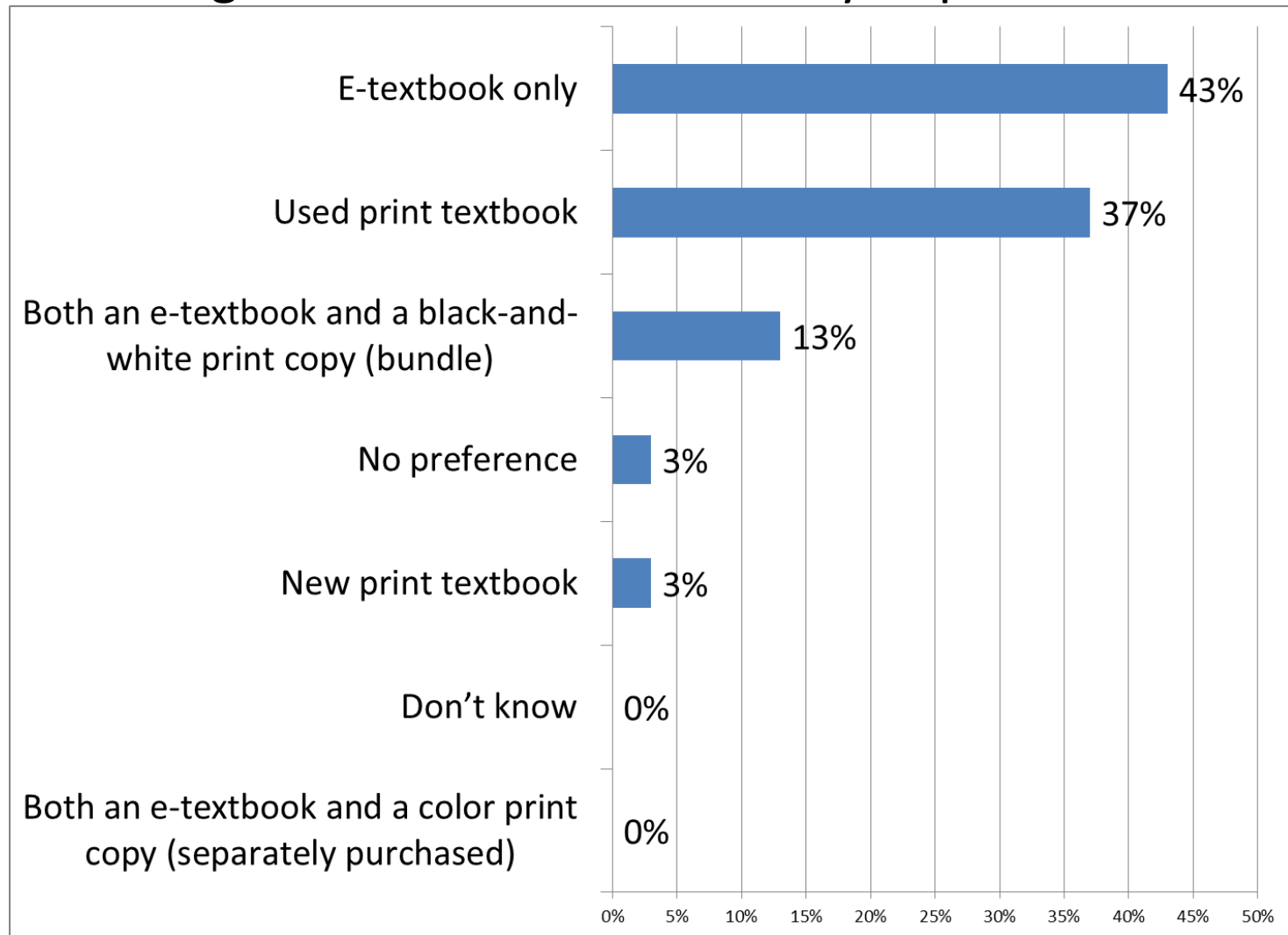
Today, textbook prices vary across textbook formats. For instance, if a new print textbook at list price would cost you \$100, the same used print textbook would be about \$65.

In an eTextbook format, the cost would be about \$60. A bundle (e-textbook and a black-and-white print copy) would be about \$85.

With price differences being considered, which of the following textbook formats would you prefer to use?

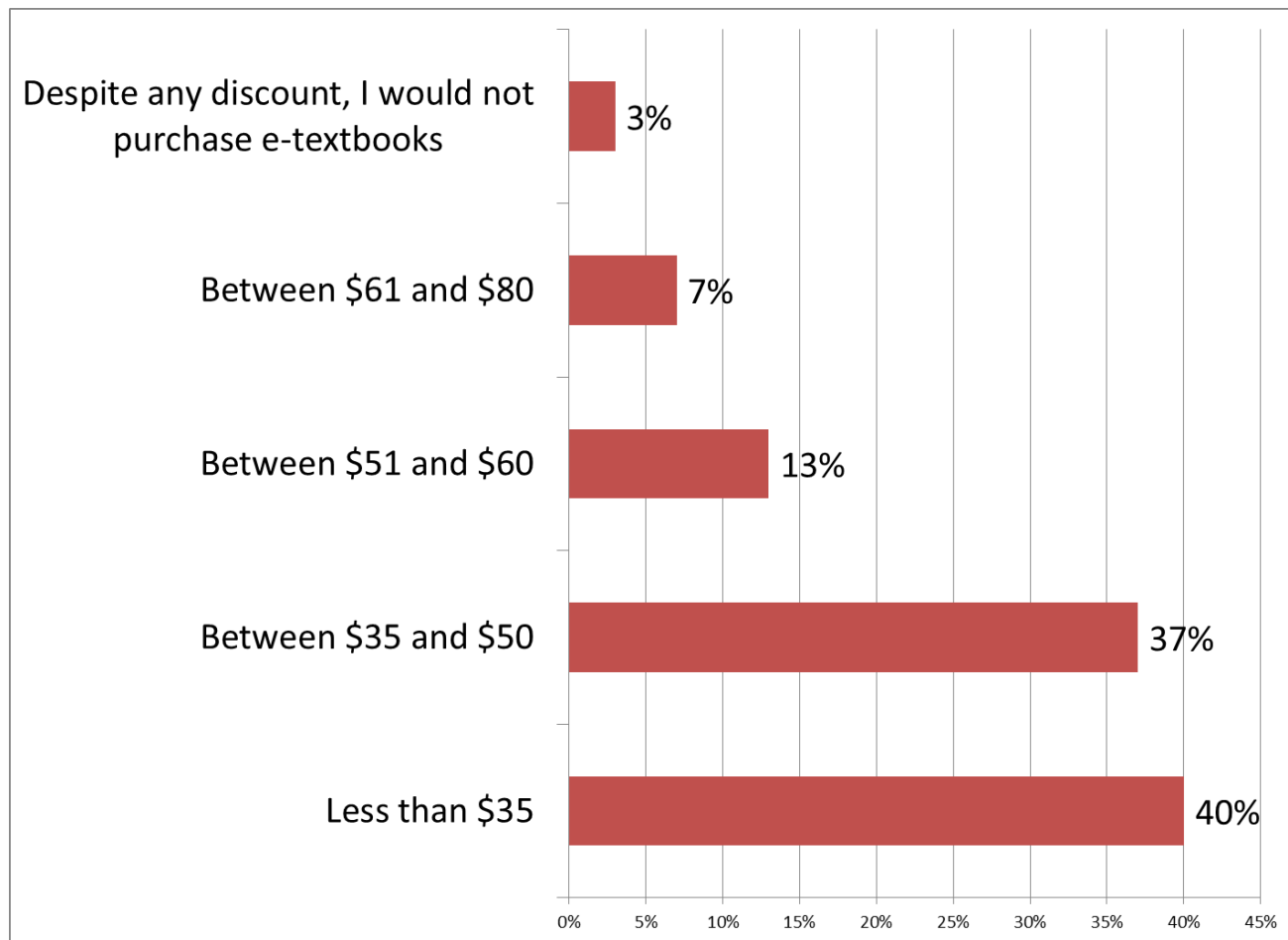
Print vs. Electronic: Where is the Tipping Point?

Q: With price differences being considered, which of the following textbook formats would you prefer to use?



Print vs. Electronic: Where is the Tipping Point?

Q. If a print version of a new textbook is priced at \$100, what price would you be willing to pay for this book in an e-textbook format?



Post-pilot Student Focus Group Study

- More interactivity through the use of an eTextbook would have been better.
- Interface - ability to look at two pages at once.
- Interface - make sure the layout of the book actually fits the screen.
- Interface - scroll to the bottom of one page and arrow to the next page so people know for sure the page was complete.
- Improvement in exercises through the use of an eTextbook.
- Page fidelity between print and eTextbooks would have been better.
- Increase the limit of how many devices can get access to the book.
- Audio function (text read-out function) turned out a 'bonus' feature.

Post-pilot Faculty Interviews

■ Incentives behind Pilot Participation

1. Faculty's own interest in using eTextbooks in e-Learning courses
2. Student's interest in eTextbooks
3. Interest in trying something new in teaching courses

■ Overall Feedback on the Pilot

1. One faculty member said that once the semester began, there was no time for self-orientation on using digital features (note-taking and highlighting) of e-textbooks. More preparation for using eTextbooks may have helped faculty participants take greater advantage of eTextbooks.
2. One faculty who used eTextbooks more actively than the other had more positive overall feedback on the pilot program.
3. Instructors noted that their student responses to the eText pilot were more positive than initially expected.

■ Impact of the eText Use on Teaching

1. Neither of the two interviewees mentioned that the use of eTextbooks in class significantly affected or changed their conventional teaching style.



Lessons Learned and Future Plans

Under development...

U-M Dental Hygiene will report back with you on this in the months ahead.