The Impact of Findability on Student Perceptions of Online Course Quality and Experience

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What’s the problem?

What happens when students have trouble finding components of a course?
“It’s in Blackboard!”
What is Findability?

“The degree to which a particular object is easy to discover or locate, [as well as] the degree to which a system environment supports navigation and retrieval.”

(Peter Morville, 2005, Ambient Findability).
What is Findability?

“There is little research regarding the implementation of usability testing in academia, especially in online course development.”

(Fisher & Wright, 2010)
Where's the sandpaper?
Psychology 105
Section 300 - Spring 2009
Don't Believe Everything That You Think!

Final Grades have been posted on Banner, and should be available after 7 PM Thursday, May 14.

I've enjoyed working with each of you. One problem with online courses is that I don't get to meet most of you in person! Don't hesitate to call or email me if you have questions about your grade, and have a great summer!

ANNOUNCEMENTS

Orientation and Introduction to Course
READ FIRST! Orientation, overview and set of first-week assignments are enclosed.

Semester Calendar

Syllabus

Unit 1a - Chapter 1
Critical Thinking with Psychological Science

Unit 1b - Chapter 2
Neuroscience and Behavior

Unit 2a - Chapter 6
States of Consciousness

Unit 2b - Chapter 7
Learning

Unit 2c - Chapter 8
Memory

Unit 2d - Chapter 11
Emotions, Stress and Health

Unit 3a - Chapter 4
Developing Through the Life Span

Unit 3b - Chapter 15
Social Psychology

Unit 3c - Chapter 12
Psychological Disorders

Unit 3d - Chapter 13
Therapy

Unit 4a - Chapter 12
Extra Credit Chapter Quizzes
Chapters not covered in class - take quizzes for extra credit

Unit 4b - Chapter 14
Essay Topic & EXAM REVIEW
Essay Topic for Unit 4 - Final exam will appear on home page

Unit 5a - Chapter 15
General Psychology Web Sites

Unit 5b - Chapter 3
How To ...
Information and tutorials about "how to" do tasks in this course and WebCT.

Unit 5c - Chapter 1
Grading Rubrics
How what you turn in will be graded

Unit 5d - Chapter 4
Group Project Information
CANCELED

Unit 5e - Chapter 5
Tips for Taking Tests

Unit 5f - Chapter 6
Student Resources
Quizzes, flashcards, tutorials, links from textbook publisher
Is Findability paramount?

Impt. Course Info
Possible Issues with Low Findability

More time looking = less time learning

Possibly related to instructor perception, attrition

Both self-efficacy and motivation have been shown to have an effect on student success in online courses
(Irizarry, 2002; DeTure, 2004; Zimmerman, 2000)
Study Design: The Courses

Chose 2 courses that meet QM standards, including Standard 6.3

“Break” the findability for those 2 courses (total of 4 courses)
Study Design

1. Self efficacy pre-test

2. | Course 1                          | Course 2                           |
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<td>1a. QM Standards Met</td>
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   participants perform 7 tasks on one of these four courses

3. Five “experience” questions
   Self efficacy post-test
Study Design: Participants & Procedure

- Mix of undergraduate/graduate online students, various majors and ages; 81 students total (40 in QM courses, 41 in “broken” courses)
- Pre-test (self-efficacy/motivation) (from MSLQ*)
- 7 scenario-based tasks, focused on Essential Stds, find 11 items
- Post-test (self-efficacy/motivation), 5 “facets of experience”
- Eye-tracking (with think-aloud) or Focus Group

Example Tasks

Task 1: This is the first time you’ve ever logged into this course. You have no idea what to do, so you’re looking for clues. See if you can find these two items that can help you get started:

The video entitled, “How to navigate and interact with your course”

The course syllabus (just find it, don’t open)
Example Tasks

Task 6: Now that you’ve had a look at some of the assignments, you want to know what you have to focus on to get the grade you want. Find the: (3.2)

Course grading policy that also includes a list of projects/activities and their associated point values.
Broken Course: Time on Task relationship to Frustration Levels

![Diagram showing the relationship between time on task and frustration levels for four students across tasks 1-7. The x-axis represents students (1-4) and the y-axis represents time in seconds. The chart includes two lines indicating frustration and time on task with high and low frustration levels marked.](image-url)
Results: Eye-tracking
Broken Course: # of Clicks related to Frustration Level
Study Design: Eye-tracking
Task 2: High Frustration
Looking at, but not seeing...
Eye-Tracking Video
Eye-Tracking Video
I Feel stupid
I feel discouraged and helpless
irritated

Frustrated INCOMPETENT
It’s frustrating because you’re on a self-paced schedule and once you find time to complete a task, you want to be able to do it

Blame myself
I feel like I don’t know what I am doing
when you are frustrated, you’re not thinking too rationally.

the PROFESSOR
I’ll say it’s a stupid course and the professor isn’t doing any work
I feel like I need to get ahold of the teacher and I don’t blame anybody
Study Design: RQ

Do findability issues impact student feelings of course quality and experience?

**RQ1:** Do QM-recognized courses have higher findability than our “broken” courses?

**RQ2:** Do students report lower levels of self-efficacy and motivation after interacting with “broken” courses?

**RQ3:** Do students’ overall impressions of an online course differ between courses that meet Standard 6.3 and those that do not?
Do QM-recognized courses have higher findability than “broken” courses?

- Independent samples t-tests compared
  - time-on-task
  - self-reported difficulty in finding items
  - self-reported frustration level in finding items.
- Time-on-task higher for “broken” courses
- Reported difficulty and frustration were also higher
- All results were statistically significant except for difficulty and frustration for Task #5
Do students report lower levels of self-efficacy and motivation after interacting with “broken” courses?

• Paired samples t-test compared aggregate measures of self-efficacy and motivation for both QM courses and “broken” courses.

• For QM courses, there was no statistically significant difference on either self-efficacy or motivation

• Broken courses showed lowered self-efficacy AND motivation, (both were statistically significant)
Do students’ overall impressions of an online course differ between “broken” and “unbroken” courses?

• 5 post test questions (1-5 scale):
  1. Easy to find items
  2. Enjoyed their experience with the course
  3. Would recommend the course to friends
  4. Feel like the course instructor would be good
  5. Course would be frustrating to take for semester

• Independent samples t-tests compared 5 questions for QM and “broken” courses

• Results showed those in the QM courses had a better “experience” (all results statistically significant).
What now?

Findability might matter more than we think!

Findability may have a significant effect on self-efficacy and motivation, as well as student perception of the instructor.

Consider the importance of findability in the development of course templates.
Thanks!

Questions?

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