

# 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)

# 门 窗

Door & Windows

建材直降 10%

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厨房

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专业家装服务

装饰公司  
专业家装服务

油

料

建材直降 10%

B09  
热水器  
散热器  
浴霸  
饮水机

B08  
暖气片  
PVC/PPR管  
壁挂炉  
铝塑管

B07  
水龙头及配件  
厨房水龙头  
浴室水龙头  
淋浴花洒  
浴霸  
浴霸配件

90  
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C07  
防盗安全门  
金属吊顶  
PVC塑料地板  
梯子

史丹利



*Where's the sandpaper?*

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防盗安全门  
金属吊顶  
塑料地板  
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家私

大家精品

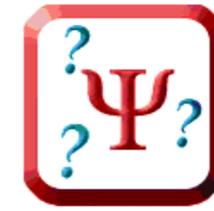
- Course Tools**
- Course Content
  - Assessments
  - Assignments
  - Chat
  - Discussions
  - Mail
  - Roster
  - Search
- My Tools**
- My Grades
  - My Progress
  - Notes



# Psychology 105

## Section 300 - Spring 2009

### Don't Believe Everything That You Think!

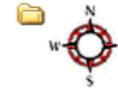


Final Grades have been posted on Banner, and should be available after 7 PM Thursday, May 14.

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



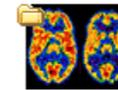
#### [Semester Calendar](#)



#### [Syllabus](#)



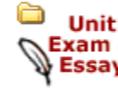
[Unit 1a - Chapter 1](#)  
Critical Thinking with Psychological Science



[Unit 1b - Chapter 2](#)  
Neuroscience and Behavior



[Unit 1c - Chapter 3](#)  
Nature, Nurture and Human Diversity



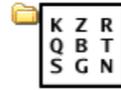
[Unit 1 Exam and Essay Topic](#)  
Exam and Essay Topic for Unit 1; Essay and Citation Information; Information about Plagiarism



[Unit 2a - Chapter 6](#)  
States of Consciousness



[Unit 2b - Chapter 7](#)  
Learning



[Unit 2c - Chapter 8](#)  
Memory



[Unit 2 Exam and Essay Topic](#)  
Exam and Essay Topic for Unit 2



[Unit 3a - Chapter 4](#)  
Developing Through the Life Span



[Unit 3b - Chapter 11](#)  
Emotions, Stress and Health



[Unit 3c - Chapter 15](#)  
Social Psychology



[Unit 3 Exam and Essay Topic](#)  
Exam and Essay Topic for Unit 3



[Unit 4a - Chapter 13](#)  
Psychological Disorders



[Unit 4b - Chapter 14](#)  
Therapy



[Unit 4 Essay Topic & EXAM REVIEW](#)  
Essay Topic for Unit 4 - Final exam will appear on Home Page



[Group Project Information](#)  
CANCELED



[Extra Credit Chapter Quizzes](#)  
Chapters not covered in class - take quizzes for extra credit



#### [Tips for Taking Tests](#)



#### [General Psychology Web Sites](#)



[Student Resources](#)  
Quizzes, flashcards, tutorials, links from textbook publisher



[How To ...](#)  
Information and tutorials about "how to" do tasks in this course and WebCT



[Grading Rubrics](#)  
How what you turn in will be graded

# Is Findability paramount?



# 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
1a. QM Standards Met	2a. QM Standards Met
1b. "Broken" Navigation	2b. "Broken" Navigation

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

\*Motivated Strategies for Learning Questionnaire (MSLQ) developed by Pintrich, Smith, Garcia & McKeachie (1991).

# 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"

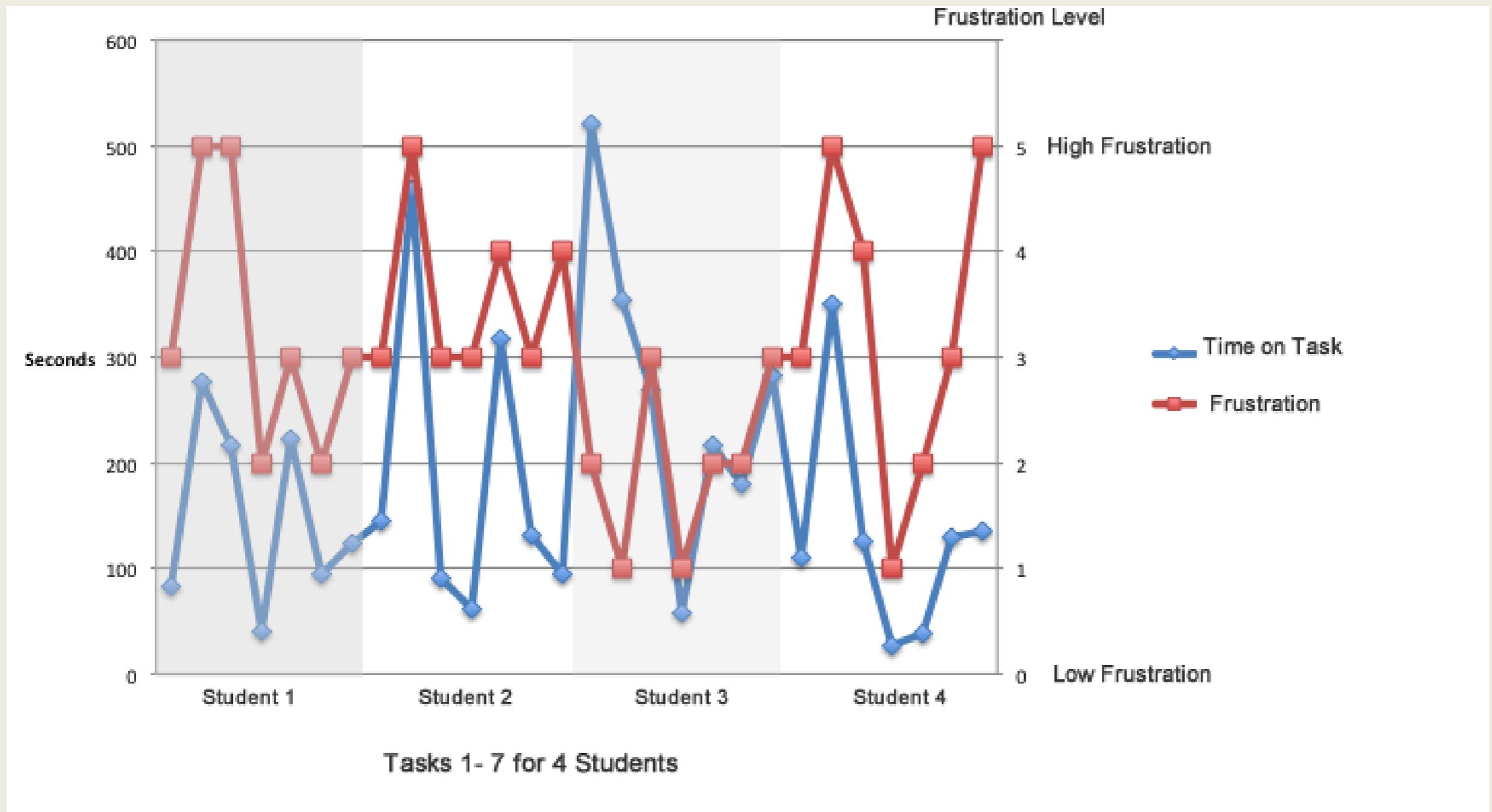
The course syllabus (just find it, don't open)

# 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)

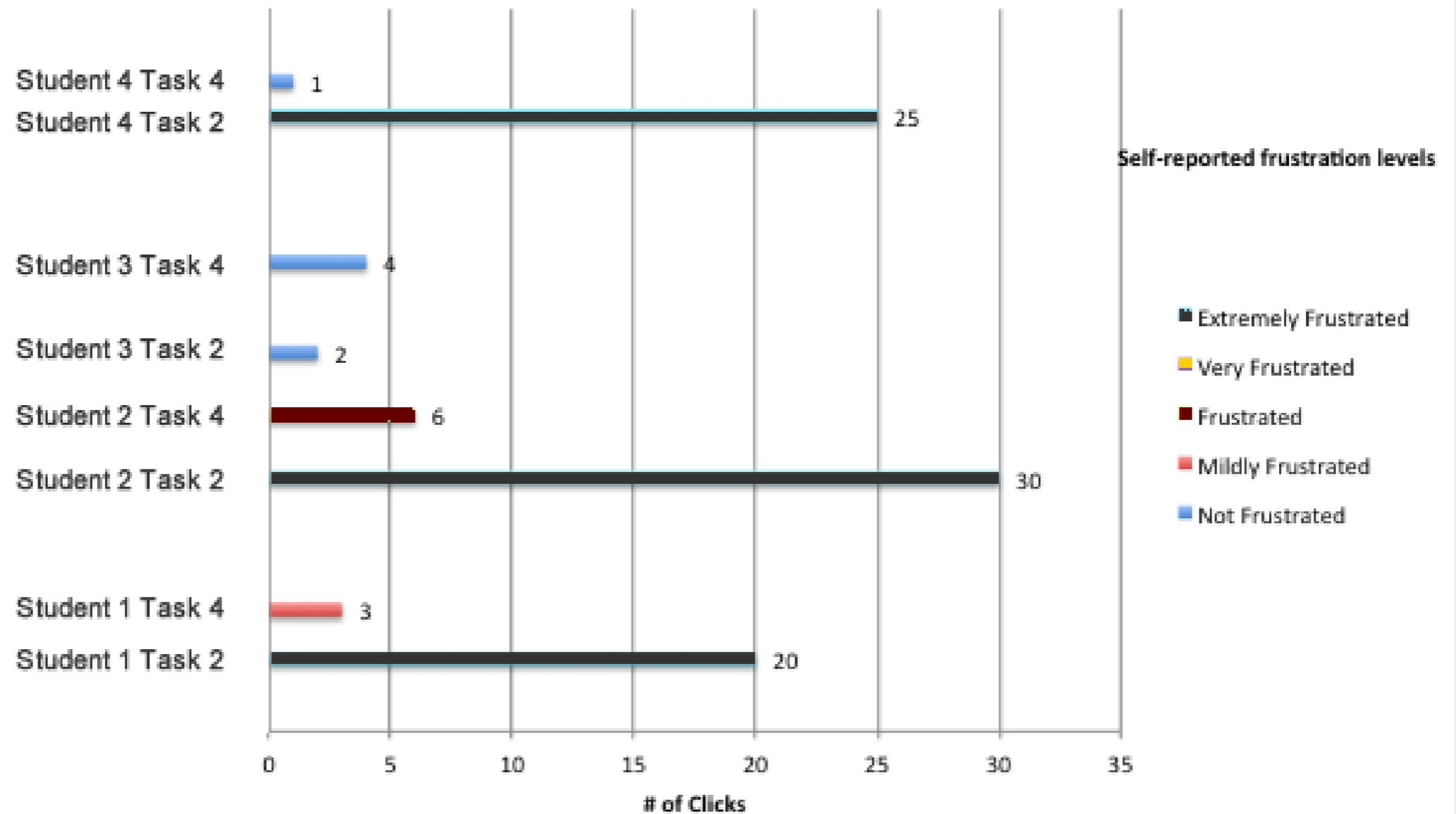
Course grading policy that also includes a list of projects/activities and their associated point values.

# Broken Course: Time on Task relationship to Frustration Levels



# Results: Eye-tracking

Broken Course: # of Clicks related to Frustration Level



# Study Design: Eye-tracking



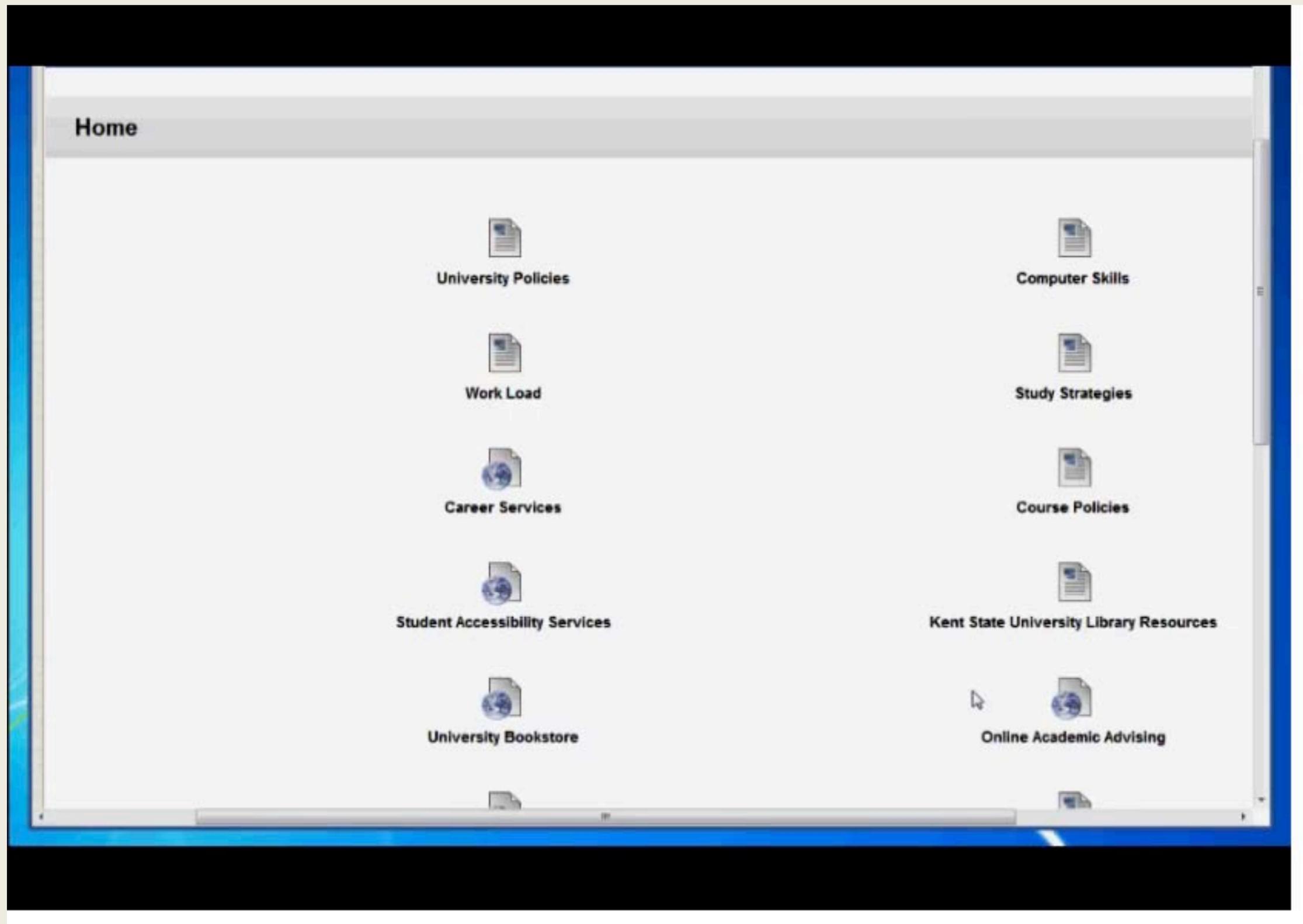
# *Task 2: High Frustration Looking at, but not seeing...*

Please refer to your course scheduler/plan for due dates for discussion posts, projects, and all assignments.

- Attached Files:
-  [discussion guidelines technical writing.pdf](#) (328.685 KB)
  -  [Critiquing Collaborator.pdf](#) (848.941 KB)
  -  [Writing Concisely Discussion.docx](#) (45.846 KB)
  -  [Time Management Discussion.docx](#) (29.312 KB)
  -  [Letter or Memo for Introduction.docx](#) (50.441 KB)
  -  [Audience Discussion.docx](#) (31.45 KB)
  -  [Organizing a Resume Discussion.docx](#) (31.954 KB)
  -  [Re-Entering the Workforce Discussion.docx](#) (31.617 KB)
  -  [Resume Assignment.docx](#) (48.109 KB)
  -  [Letter of Application Assignment.docx](#) (47.447 KB)
  -  [ENG 20002 Course Schedule Fall 2012 v6T3.pdf](#) (11.523 KB)



# *Eye-Tracking Video*



# Eye-Tracking Video

ome

  
**University Policies**

  
**Computer Skills**

  
**Work Load**

  
**Study Strategies**

  
**Career Services**

  
**Course Policies**

  
**Student Accessibility Services**

  
**Kent State University Library Resources**

  
**University Bookstore**

  
**Online Academic Advising**

I Feel **stupid**

Like it should be easy, but I'm missing something

I feel discouraged and helpless

**Frustrated**

**irritated**

**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

**anxious**

**Blame**

I feel like I don't know what I am doing

*when you are frustrated, you're not thinking too rationally.*

**MYSELF** **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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