

# Usability Report:

## Course Compass General Announcements

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## Overview

The test was designed to evaluate the usability of three (3) wireframe designs of system announcements, as well as, determine the user preference towards one design. The test included six (6) undergraduate students and four (4) college instructors.

Objectives again included:

- Gauging intuitiveness of the announcement placement and interaction
- Evaluating which design would be more efficient and better match the needs of the user

## Major Findings

- All participants like the system messages to be separate from their course Announcements.
- All participants expect the message to remain in the list after closing the lightbox.
- Design preference is essentially toss up with five (5) preferring the use of separate messages boxes and essentially five (5) preferring the use of a single message box with a scroll bar. Either design is acceptable.
- Nine (9) of ten (10) participants want the system messages to be stored in an archive for later retrieval if needed.
- Instructor office hours, contact information, and course announcements were consistently in the top three (3) features when ranked.
- No significant usability issues were noted in any design related to opening or closing the lightbox, or the distinction between closing a single announcement versus closing all.

Please see the "Findings" section below for details and recommendations on these and other issues.

# Methodology

## Usability Test Description

The usability test was conducted using seven (7) in-person sessions at the Indiana University School of Informatics, Indianapolis campus, as well as, three (3) remote sessions using Cisco’s WebEx web conference tool, facilitated by Stuart Ough and observed by Enlie Wang. The test plan (see **Appendix A, Test Plan**) was developed by Enlie Wang, Andy Trus, and Stuart Ough. All the sessions were recorded by Camtasia Studio 6 software and are available at [http://ux.pearsoned.com/research/usability/usability\\_studies/CourseCompass%20Announcement/index.html](http://ux.pearsoned.com/research/usability/usability_studies/CourseCompass%20Announcement/index.html).

Each testing session lasted approximately 30 minutes. Participants were asked to sign a waiver form (see **Appendix B, Participant Waiver**) and complete a background information survey (see **Appendix C, Background Information Survey**) before the study began. After the evaluation, they were asked follow up questions and discussed any general issues with the facilitator.

Six (6) college students and four (4) university instructors were recruited by the LTG Usability team to participate in this study. Each participant received a \$25 American Express gift card for their participation. Full demographic reports can be found here:

Students:

<http://app.sgizmo.com/reports/22861/386455/HQAVZQ06ISE1MOW988J1Z10FRT90L5/?ts=1285076844>

Instructors: <http://appv3.sgizmo.com/Reports/view?id=367322&reportid=384252>

**Table 1: Basic Participant demographics**

	Students (6)	Instructors (4)
<b>Age</b>	Average = 21 years Std Dev = 2.4 years	Average = 49.3 years Std Dev = 14.7 years
<b>Gender</b>	Female = 0 (0%) Male = 6 (100%)	Female = 3 (75%) Male = 1 (25%)
<b>Hours on PC/day</b>	Average = 5.8 hours Std Dev = 3.0 hours	Average = 8.0 hours Std Dev = 2.8 hours
<b>Grade Level</b>	Freshmen (2) Sophomore (2) Senior (1) Graduate (1)	NA
<b>Majors / Departments</b>	Informatics (2) New Media (2) Pre-med (1) Environmental Science (1)	Biological Sciences Informatics Early Childhood & Special Ed Economics
<b>Technology Skill Self-rating (1-10)</b>	Average = 7.3 Standard Deviation = 1.9	Average = 6.5 Standard Deviation = 0.6
<b>Use an LMS or Pearson online product</b>	Yes = 5 (83.3%) No = 1 (16.7%)	Yes = 3 (75%) No = 1 (25%)

## Tasks

During the evaluation, each participant was asked to:

1. Rank system features
2. Select the system messages
3. Find further details on a message
4. Expectation after closing a message modal
5. Dismiss a single message
6. Dismiss all messages (if applicable)
7. Select a preferred design

## Testing Environment

This table summarizes the remote participants' computing environment:

<b>URL of tested website:</b>	<a href="http://onyxdev.pearsoncmg.com/usability/Portal%20Announcement/index.html">http://onyxdev.pearsoncmg.com/usability/Portal%20Announcement/index.html</a> U: guest P: ctgfriend
<b>Computer platform:</b>	PC or Mac
<b>Web browser:</b>	Participants used their own browsers
<b>Screen resolution:</b>	Participants used their own settings
<b>Remote testing software:</b>	WebEx
<b>Connection speed:</b>	High-speed required (actual speed unknown)

This table summarizes the facilitator's computing environment in the lab:

<b>Computer platform:</b>	Windows PC
<b>Web browser:</b>	IE 8
<b>Screen resolution:</b>	1280x800
<b>Operating system:</b>	Windows 7
<b>Remote testing software:</b>	WebEx + Camtasia Studio 6
<b>Connection speed:</b>	LAN

This table summarizes the facilitator's computing environment used when conducting in-person sessions:

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<b>Computer platform:</b>	Windows PC Laptop
<b>Web browser:</b>	IE 8
<b>Screen resolution:</b>	1280x800
<b>Operating system:</b>	Windows 7
<b>Recording software:</b>	Camtasia Studio 6 + Logitech web cam
<b>Connection speed:</b>	N/A



**Figure 1: Remote testing**



**Figure 2: In-lab testing**

# Usability Findings

## Severity Ratings

Findings are rated on a three-point scale. Positive findings were not rated. Three severity levels are:

- **High** – These are the most severe issues. Issues at this level prevent users from completing a specific task or from completing their test. These issues should receive the greatest attention.
- **Medium** – These issues make completing a task more difficult. If medium issues occur on frequently used elements of the application, they should be addressed as high severity level issues.
- **Low** – These are the least offensive issues. Low severity issues are ones that relate to interface enhancements. Addressing these issues could make the application easier to use.

The following is a summary of the issues from the usability testing.

**Table 2: Usability issues and severity ratings**

Usability Issue	Severity Rating
Initial misconception the system announcement containers would contain high priority course messages	Medium
Expectation of an available announcement archive	Low
No sales & marketing related announcements	Low
Scroll bar is too small	Low

## Top of Mind Features

Participants were asked to list items they would expect to see after logging into the system on the first day, and again in the context of 3 weeks into the semester.

- For the first day the most common expectations were a syllabus (40%), assignments (40%), announcements (30%), and instructor contact information (30%).
- After three weeks the most common expectations were assignments (40%), instructor contact information (40%), and grades (20%). Here are the answers given by participant.

**Table 3: Answers to open-ended questions on expected features**

Participant	On the First Day	After 3 Weeks
S.G. (Student)	syllabus, calendar, way to email prof, gradebook, assignments	assignments, gradebook, way to email prof
S.M. (Student)	announcements, books, syllabus, assignments with due dates	grades, link to email professor

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A (Student)	name and/or numbers, due dates, announcements, syllabus	upcoming due dates, announcements
M (Student)	course name, assignments (likes MyMathLab), schedule (syllabus)	same, plus grades and teacher feedback
J (Student)	class location and time, anything to bring or prepare for first day	pending assignments, items to prep for next class
N (Student)	topic lists	all assignments listed in one location
W (Instructor)	student roster with images, who has checked in with the class	students who might be having issues (grades), big picture view of the student progress, who's logging in
K (Instructor)	(She didn't quite understand these two questions) information that this is the portal to online accounts through the texts they have purchased	welcome back message, course list
B (Instructor)	name of course, professor info	nothing different
D (Instructor)	announcements, assignments, general discussion (forum)	Same as first day

## Feature Rankings

Participants were asked to rank the following features from most important (1) to least (11) and within the context of the the first day of class and again as if it was 3 weeks into the semester. Totals were then added for each feature; lowest score being the most important.

**Table 4: Overall feature rankings across students and instructors**

Feature Importance <i>Overall</i>	<i>Overall</i>	
	First Day Pts/Rank	3 Weeks Pts/Rank
Instructor Office Hours & Contact Information	30 (1)	40 (3)
Course Time, Building and Other General Info	33 (2)	70 (7)
Textbook Info and Purchase Link	54 (6)	81 (10)
Download the Syllabus	48 (4)	82 (11)
Download Additional Course Documents	86 (11)	68 (6)

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Course Announcements	43 (3)	25 (1)
Notifications of Upcoming Course Events and Due Dates	51 (5)	35 (2)
Links to Resources We've Given You to Help with your Course	75 (8)	56 (5)
Links to Resources We Recommend Purchasing for your Course	80 (9)	77 (9)
Tool to Complete Research Projects & Complete Bibliographies	84 (10)	71 (8)
Discussion Forum for Classmates and the Instructor	74 (7)	55 (4)

**Table 5: Features rating by user type and time frame**

	<i>On First Day</i>		<i>After Three Weeks</i>	
<b>Feature</b>	<b>Student Pts/Rank</b>	<b>Instructor Pts/Rank</b>	<b>Student Pts/Rank</b>	<b>Instructor Pts/Rank</b>
Instructor Office Hours & Contact Information	22 (2)	8 (1)	30 (4)	10 (1-2)
Course Time, Building and Other General Info	17 (1)	16 (3)	45 (9)	25 (3)
Textbook Info and Purchase Link	37 (6)	17 (4)	52 (10)	29 (4)
Download the Syllabus	29 (4-5)	19 (5)	54 (11)	28 (5)
Download Additional Course Documents	52 (11)	34 (9-10)	41 (7)	27 (9-10)
Course Announcements	29 (4-5)	14 (2)	15 (1)	10 (1-2)
Notifications of Upcoming Course Events and Due Dates	26 (3)	25 (6)	19 (2)	16 (6)
Links to Resources We've Given You to Help with your Course	44 (7)	31 (8)	25 (3)	31 (8)



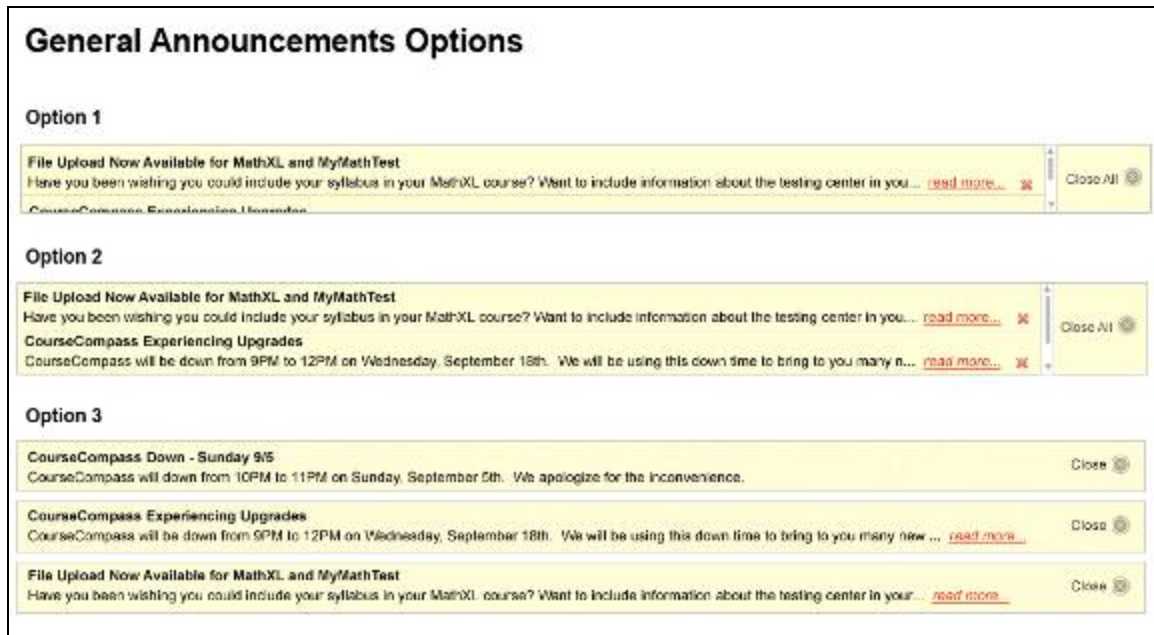
## Course Compass General Announcements Evaluation

Links to Resources We Recommend Purchasing for your Course	45 (8-9)	35 (11)	43 (8)	34 (11)
Tool to Complete Research Projects & Complete Bibliographies	50 (10)	34 (9-10)	38 (6)	33 (9-10)

## Design Preference

No clear winner was found. While option 3 (separate containers) had the most individual votes, for all intent-and-purpose, options 1 and 2 were considered nearly the same. Therefore the more realistic outcome is an even split between (a) a single container with scroll bar and (b) separate containers for each announcement.

In the end, it is our belief that any design will be accepted and usable. If the probability of having multiple system messages at once is high, then we recommend option 2, but without the Close All. There will never be enough messages that the user cannot easily dismiss them individually within a reasonable amount of time.



**Figure 3: Examples of each design option**

**Table 6: Votes per design option**

Design	Opt 1 – Small	Opt 2 – Medium	Opt 3 – Separate
Votes:	2	3	5*

(\*) One participant wanted design 3, but with a scroll bar on the far right to prevent more than 2 or three. She likes the spacing in three along with the more simple single Close option.

## Content Misconception

Severity: Medium

A common initial misconception was that the separate announcement container might contain high priority messages from instructors, or reminders of important due dates or test dates.

### Recommendation:

- Include a label above or within the system announcement container to help establish the messages are system, and not course, related. For example, begin each headline with "System Announcement:..."

## Expectation of Announcement Archive

Severity: Low

Nine (9) out of ten (10) participants expect announcements that are closed to still be available in an archive. While the fear of a loss of information and choice is always high with users, the likelihood of a user actually returning to read a system message is low. Some users intend to leave system announcements open until after their applicable date and either close it then, or expect the system to automatically remove it.

### Recommendation:

- Create an archive for system announcements. This access to this archive does not need to be prominent as usage will inherently be low. Options could include placing a link in the upper right menu, within the support page, within the profile page, or within the Announcements & Notifications page.

## No Sales & Marketing Messages

Severity: Low

One instructor said it directly, but it will be important not to let other types of messages into the system announcement area. If users begin to feel the messages are not truly related to system access (i.e., maintenance schedules, system upgrades, etc.) they will begin to ignore them overall.

### Recommendation:

- Be cognizant of the language used in messages that point out new features so that they do not come across as a sales pitch. While the intention behind such educational messages may be good, some students and instructors will find them distracting and misplaced.

## Scroll Bar Too Small

Severity: Low

Several participants commented that the scroll bar within the system announcement container appears small and raised fears they would have trouble interacting with it.

### Recommendation:

- Use a scroll bar design large enough for easy interaction.

## Other Comments & Feature Requests

### Include Posting Dates

Two instructors want to see “posted dates” on each system message. They feel including a posting date will help organize and prioritize the list.

**Recommendation:**

- Include a “Posted: MM/DD/YYYY” line within an announcement.

### Automatically Remove Messages

Users expect intelligent systems to partially maintain themselves. This includes automatically removing time-sensitive announcements after their time frame has passed.

**Recommendation:**

- Include program logic to remove time-sensitive system announcements after their relevant window has expired.

### Visual indicators for unread/read messages

Three (3) participants would like a message’s appearance to change after they have closed the lightbox. This mental model is from their interaction with common email programs which use visual organization clues.

**Recommendation:**

- This is a nice feature for those who intend to leave messages open or for within an archive.

## Appendix

### Appendix A - Test Plan

[https://docs0.google.com/document/edit?id=1gfSnTHr5ses1Gj9a6SNb--qQ5DvpwfNd8ZoG3D\\_iNT4&hl=en&authkey=CNLm088D#](https://docs0.google.com/document/edit?id=1gfSnTHr5ses1Gj9a6SNb--qQ5DvpwfNd8ZoG3D_iNT4&hl=en&authkey=CNLm088D#)

### Appendix B - Participant Waiver

Please read the following:

I have freely volunteered to participate in this product evaluation/usability study.

I have been informed in advance what my task(s) will be and what procedures will be followed.

I understand that the task(s) are designed to evaluate the ease of use of our product and are NOT designed to measure my performance.

I understand that the computer screen and phone conversation will be recorded during this session for further study if needed. Names will not be associated or reported with data or findings from this evaluation.

I permit Pearson to use my quotes and video segments from this usability evaluation in marketing materials.

I am aware that I have the right to withdraw consent and to discontinue participation at any time.

I will not disclose the testing content to others.

I have been given the opportunity to ask questions and have had my questions answered to my satisfaction.

My acceptance below may be taken as my affirmation of all the above statements; it was given prior to my participation in this study.

If you agree with all of the statements listed above, select the "Yes" radio button and go to next page.

Yes

No

### Appendix C - Background Information Surveys

<http://www.surveygizmo.com/s3/367322/Course-Compass-Announcement-Design-Instructors>

<http://www.surveygizmo.com/s3/367322/Course-Compass-Announcement-Design-Instructors>