

Portal 2011 User Test

Test Date: January 27 – February 1, 2011
 Report Date: March 7, 2011
 Test Location: Indianapolis, IN
 Prepared by: Enlie Wang / Stuart Ough

Contents

Overview.....	3
Major Findings:	3
Methodology.....	5
Usability Test Description	5
Participants	5
Data Collection.....	6
Findings.....	6
Positive Feedback	6
Task Performance.....	7
Severity Ratings.....	7
Common Observations	8
Tab Design vs. Link Design	9
Default States.....	11
Announcements	12
Returning to the Portal	13
Closing a Portal	13
My Files Area	14
My Bookmarks	14
Archives	15
Other	16
Appendices.....	17
Appendix A, Test Plan	17

Appendix B, Participant Waiver	17
Appendix C, Background Information Survey	17

Table of Figures:

Figure 1: Tab Design	10
Figure 2: Link Design	11
Figure 3: Announcement in lightbox	12
Figure 4: My Files page with My Bookmarks.....	15

Overview

The main objective of this study was to evaluate the usability of two portal designs from student perspective. Twelve (12) college students including both undergraduate and graduate students participated in this study. All had at least “a little” experience with an LMS system and a “portal” concept.

The participants found both designs to be easy-to-use and equal in many ways. There was no standout preference between the two design directions; both are well designed and strong candidates in their own approach.

Most usability issues were minor and would be resolved through slight design modifications or the students’ own familiarity after their first uses.

Major Findings:

- Overall, the students found both designs to be appealing and easy-to-use; they displayed little to no issue with the sites usability
- Students rated the “overall ease-of-use” of the portal as 8.1 out of 10.
- 50% (6 of 12) preferred the “Tab prototype” while 42% (5 of 12) preferred the “Link prototype”, and 8% (1 of 12) had no preference. [**Note: this is a correction from the preliminary summary findings which listed the Tab design as a “significant” preference.**]
- Each design was seen as easy-to-use, but offered its own perceived advantages: the Tab prototype was seen as cleaner and simpler, while the Link prototype was seen as more direct and efficient.
- 75% (9 of 12) of users want the all courses to be *collapsed* by default
- Students had little problem finding the black arrowheads for expanding/collapsing a course
- 33% (4 of 12) students expected to expand/collapse the course by clicking the course title next to the arrowhead as well
- 92% (11 of 12) found the Courses button in the upper left corner of the MyLab page with minimal to no error. The location for this button is good, but the label “Courses” should be reconsidered.
- 67% (8 of 12) of students preferred the full announcement to be shown in the pop-up modal window (lightbox)
- All of the students liked the idea of having announcements available through the portal
- All of the students recognized the red circles as indicators of “new” messages waiting

- 58% (7 of 12) preferred location of the larger red circle indicating the total number of new announcements to be near the Hello <name> in the upper header, 33% (4 of 12) preferred it near the Courses menu option, one had no preference. At least one student commented it was unnecessary with the individual indicators listed with each course.
- Students had no problem finding the print, syllabus, and course ID elements
- The students stated they will simply close the tab, browser, or monitor - rather than click sign out - when using their personal computers. Some hoped the browser stored credentials allowing for quicker access upon return. They will click sign out button when using public or school computers.
- All of the students felt the My Files would be helpful and the interaction was intuitive based on experience with other sites
- It will need to be extra clear to students which tab they are uploading to in the My Files are - especially if it has any relationship to delivery to the instructor -
- Students initially misunderstood the Archives prototype, thinking the message headers were actually course headings similar to the main portal page. They expected that all the archived materials will be organized by course.

Methodology

Usability Test Description

The test plan (see [Appendix A, Test Plan](#)) was developed by Enlie Wang, Stuart Ough, and Andy Trus. The prototype screens were built by Andy Trus. The usability test was facilitated by Stuart Ough and observed by Enlie Wang and Andy Trus. All the sessions were recorded using WebEx and Camtasia Studio 6.

Each testing session lasted approximately 60 minutes. Participants were asked to sign a waiver form (see [Appendix B, Usability Participants Waiver](#)) and complete a background information survey (see [Appendix C, Background Information Survey](#)) before the study. The initial six participants were shown design prototypes for concept A (with tabs) followed by concept B (with hyperlinks). The last six participants were shown concept B first and then concept A. During the sessions they were asked to locate elements on the page and to interact with the screens to complete simple tasks. Participants were asked questions throughout the sessions about expectations and discussed any general issues they discovered.

Participants

Twelve (12) students participated in this study. This table shows a profile summary:

Age	Average = 24.3 years Std Dev = 3.9 years
Gender	Female = 8 (66.7%) Male = 4 (33.3%)
Hours on PC per Day	Average = 6.9 hours Std Dev = 4.3 hours
Years Using a PC	Average = 11.6 years Std Dev = 6.2 years
Departments/Majors	Human-Computer Interaction = 6 (50%) Electrical/Computer Engineering = 1 (8.3%) Environmental Studies = 1 (8.3%) Finance = 1 (8.3%) Journalism = 1 (8.3%) Library Science = 1 (8.3%) Pre-Med = 1 (8.3%)
Grade Level	Sophomore = 1 (8.3%) Junior = 1 (8.3%) Senior = 1 (8.3%) Graduate Student = 9 (75.0%)
Technology Skill Self-rating (1-10)	Average = 7.75 Standard Deviation = 1.9

Experience with an LMS	None = 0 (0%) A little = 6 (50%) Somewhat = 3 (25%) A lot = 3 (25%)
------------------------	--

The full profile survey results can be found here:

<http://app.sgizmo.com/reports/22861/522012/6TTQ0Z4SZSG9PQYA0N030TNQTPWYMT/?ts=1296847573>

Participants were recruited by Enlie Wang and Stuart Ough from an internal list of student contacts. Participants signed up for this study using the online self-registration tool (Genbook.com). All participated in remote sessions and received \$25 honorariums (American Express gift cards).

Data Collection

All sessions were audio and video recorded. WebEx and Camtasia Studio 6 were used to record screen activity and the users' audio and video during the evaluation.

The users' background information was collected before each evaluation using an online survey. The session recordings were reviewed to task error rates and qualitative comments.

Findings

Positive Feedback

Overall, the participants found the design to be appealing and easy-to-use; they displayed little to no issue with the sites usability. After the session, the participants were asked to rate the perceived ease-of-use of the Portal. They gave the interface high scores:

- Perceived ease-of-use: 8.1 (out of a high score of 10)

Some comments included:

"I like the simplicity of it."

"Looks nice and seems fairly easy to use."

"I like the overall design... I like all the information."

Task Performance

Tasks	Task Difficulty Indicators		
	Completed w/o error	Completed w/ errors*	Failed to complete
Find Print link	12 (100%)	- (0%)	- (0%)
Find and open the syllabus	12 (100%)	- (0%)	- (0%)
Find instructor information	12 (100%)	- (0%)	- (0%)
Find Course ID**	11 (100%)	- (0%)	- (0%)
<i>Access course in tab design</i>	11 (92%)	1 (8%)	- (0%)
<i>Access course in hyperlink design</i>	10 (83%)	2 (17%)	- (0%)
Return from course to portal (1 st)	8 (67%)	3 (25%)	1 (8%)
Return from course to portal (2 nd)	12 (100%)	- (0%)	- (0%)
Find link to purchase textbook	12 (100%)	- (0%)	- (0%)
Noticed/understood new announcement indicators	11 (92%)	1 (8%)	- (0%)
<i>Collapse/expand panel (arrow)</i>	8 (67%)	4 (33%)	- (0%)
<i>Collapse/expand panel (hide link)</i>	8 (67%)	4 (33%)	- (0%)

(*) Many of the errors were considered minor, but still potential inconveniences. Note that, even with errors, participants rated the ease-of-use high and were positive about the design concepts.

(**) Question added after first participant session.

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 that prevent users from completing a specific task or the 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 issues.

Low – These are the least offensive issues. Low severity issues relate to interface enhancements. Addressing these issues could make the application easier to use.

Table 1: Usability issues and severity ratings

Usability Issue	Severity Rating
Students are unlikely to click "sign out" when using their personal computer. This could impact how and when the system checks for new announcements or other automatic queries.	High
Archive page cause minor confusion; they mistakenly thought the message was actually the course container as the graphic design is similar to the portal page	Medium
In the tab design, users expected clicking the green course title will expand/collapse; not just the arrowhead	Low
Some hesitation in tab design on where to click to access course; several noted how they preferred the clear "Go to Course" link offered in the "Link View" design	Low

Common Observations

Tasks	Common Errors/Expectations
Default to a panel open or all closed preferred the panels to all be closed upon logging in, allowing them to choose which one to interact with first
What do they print at the beginning of a semester	Many are printing very few items (syllabus and class location and times at beginning) or no items at all, instead keeping digital copies on their computer. Some students still print everything for security, but
Access the class software	In the tab view, if they were not on the Course Details tab, students paused a bit looking for any obvious option. This was minor as they eventually found the link in the tab.
See design change between read and unread messages	About half of the users noticed the light yellow background color and box behind the unread messages without being prompted. Some expected a better contrast color (blue) or the title to be distinctly bold if unread – as is common with

Tasks	Common Errors/Expectations
	major email programs.
Closing session on PC	On a personal PC, they simply close the tab or browser If on a public PC, they 'sign out' then close browser

Tab Design vs. Link Design

The design preference was nearly an even split. 50% (6 of 12) participants preferred the "Tab" design, 42% (5 of 12) preferred the "Links" design, and 8% (1 of 12) felt they were equal and had no preference. Some students commented that the tab design was easier to understand and cleaner, especially when the panels were closed. Others liked the direct nature of the hyperlinks on "Links" design. The students had little issue finding the arrowhead or the Hide link when asked to collapse/expand a panel. In both cases, the errors were minor and quickly self-corrected. However, several student also expected (and wanted) the green course title next to the arrowhead to also collapse/expand the panel when clicked.

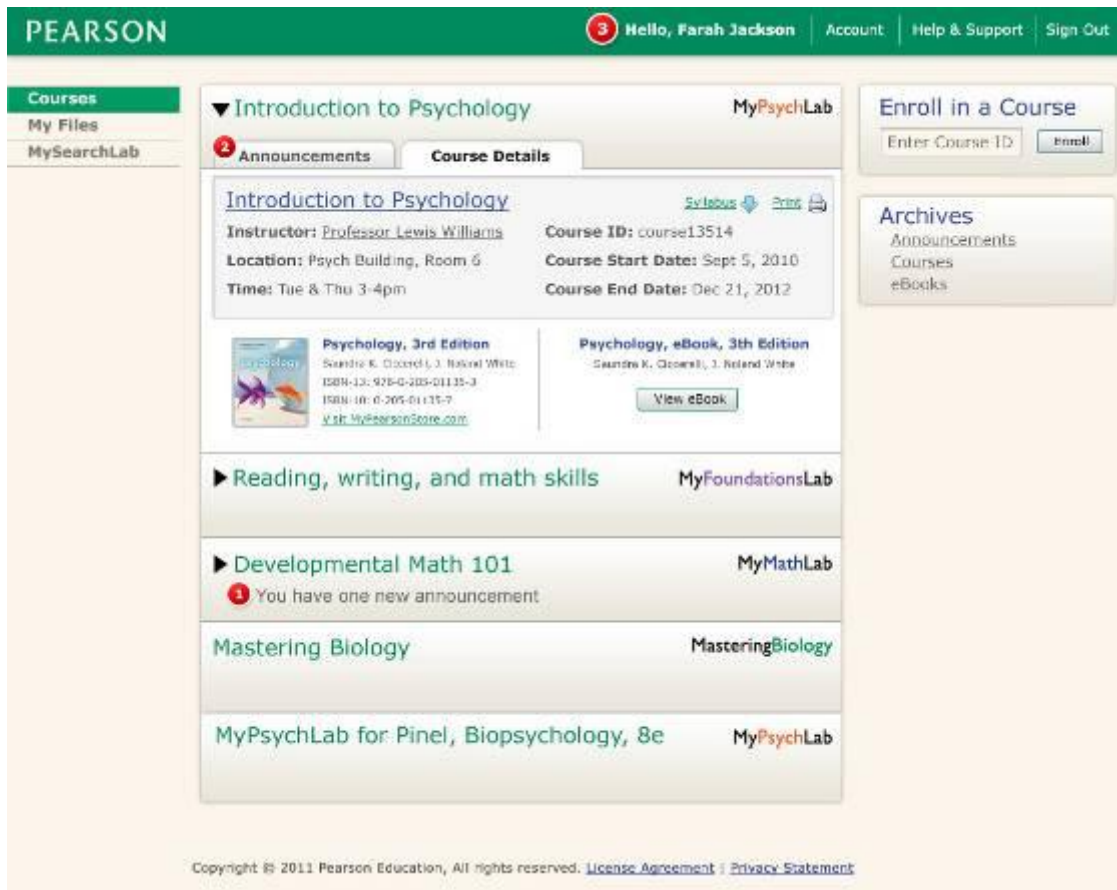


Figure 1: Tab Design

The screenshot shows a user interface for a Pearson course. At the top, there is a green header with the Pearson logo and user information: 'Hello, Farah Jackson', 'Account', 'Help & Support', and 'Sign Out'. Below the header, a navigation menu includes 'Courses', 'My Files', and 'MySearchLab'. The main content area features a course card for 'Introduction to Psychology' by MyPsychLab. The card includes a 'Go to Course' link, a notification for 'Announcements', and a 'Course Details' tab. The course details section lists the instructor (Professor Lewis Williams), location (Psych Building, Room 6), time (Tue & Thu 3-4pm), course ID (law889762), start date (Sept 5, 2010), and end date (Dec 21, 2012). Below this, there are two book options: 'Psychology, 3rd Edition' (print) and 'Psychology, eBook, 3th Edition' (with a 'View eBook' button). To the right of the course card is an 'Enroll in a Course' section with an 'Enter Course ID' field and an 'Enroll' button, and an 'Archives' section with links for 'Announcements', 'Courses', and 'eBooks'. Below the course card, there are four more course cards: 'Reading, writing, and math skills' (MyFoundationsLab), 'Developmental Math 101' (MyMathLab), 'Mastering Biology' (MasteringBiology), and 'MyPsychLab for Pinel, Biopsychology, 8e' (MyPsychLab). Each of these lower cards has a 'Go to Course' link and a notification for 'Announcements'. At the bottom of the page, there is a copyright notice: 'Copyright © 2011 Pearson Education, All rights reserved. License Agreement | Privacy Statement'.

Figure 2: Link Design

Recommendations:

- If the Tab view is used, place a “Go to Course” hyperlink or button to the right of the tabs for more direct access to the course.
- Make the product logo in the upper right of each container a link to the system.

Default States

The majority stated they would prefer the course panels to be collapsed by default upon entry to the portal. Also, when expanding the tab view, they believe the Announcements panel should be the default, recognizing that once the course details were known, that tab would have less use throughout the semester.

Recommendations:

- Since the vast majority of students only have one Pearson course, it will be fine to have the course information open by default; however, if two or more courses exist in the account, have both panels closed by default.

- Investigate code logic that make the “Course Details” section the default view on a student’s first entry. On subsequent returns open to the Announcement view by default.

Announcements

All of the students liked the idea of having announcements available through the portal. They felt it was a convenience. The students had no trouble recognizing the red circles as indicators of “new” messages waiting.

Students were split between the preferred locations of the larger red circle icon showing the total number of new announcements; a few even felt it was unnecessary. 58% (7 of 12) preferred it placed near the “Hello, <name>”. Either location would be effective.

Lastly, the majority of students (67%, 8 of 12) preferred the full announcement to be shown in the pop-up (lightbox) window rather than within the framework.

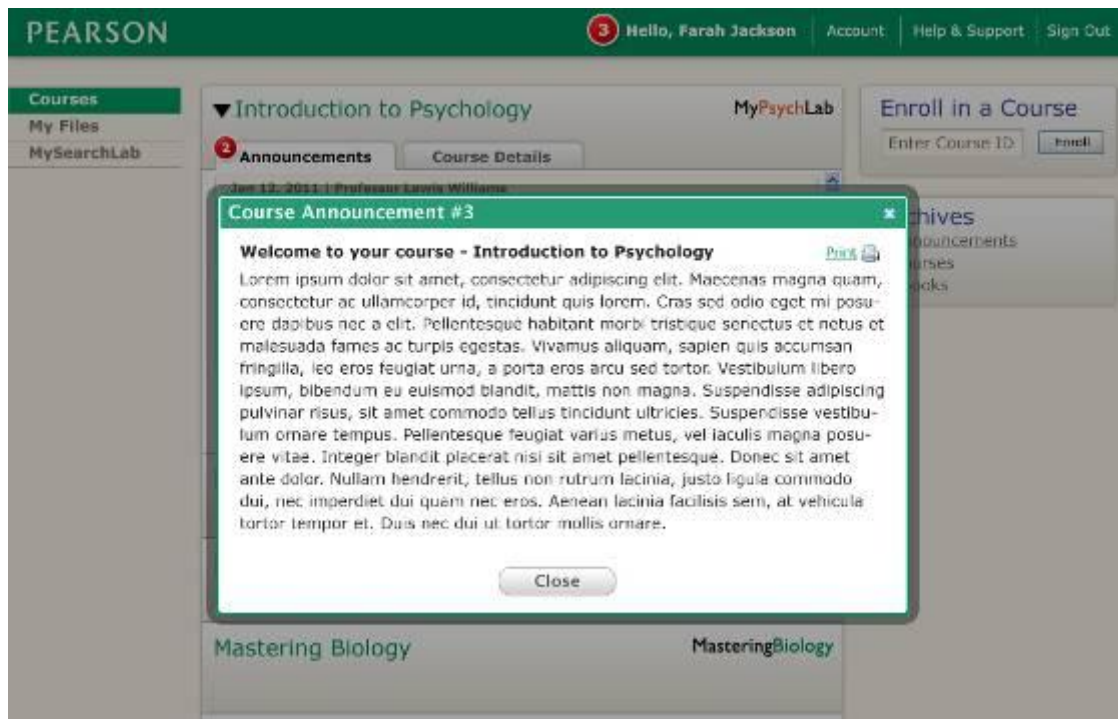


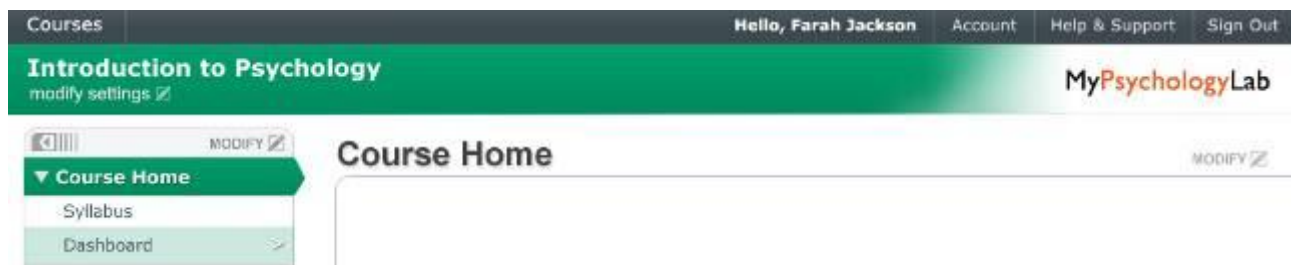
Figure 3: Announcement in lightbox

Recommendations:

- If used, place the total announcement circle up by the “Hello, <name>” text.
- Open announcements in the lightbox. The expectation is an announcement will be general and not include specific instructions a user would try to follow while looking at the text. The lightbox does not allow the user to interact with the system.

Returning to the Portal

67% (8 of 12) had no issue finding the Courses link in the upper left on their first task; only one (1) student failed to find it. Fortunately, 100% (12 of 12) remembered the location of the Courses link by their second return to the MyLab page, implying an easy to learn and remember location based partially on experience with other sites. The location for this button is good, but the label "Courses" should be reconsidered as it wrongly assumes that every student has more than one course in the portal.



Recommendations:

- Change "Courses" to "Course List" which can apply to both single or multiple courses on the portal.
- Explore using a bold font or other typography to increase legibility in the upper left corner. Perhaps a less than (<) character to imply and arrow or "back".

Closing a Portal

The students said they typically just close the tab, browser, or laptop monitor - rather than click sign out - when using their personal computers. Their desire is for the browser to store login credentials for quicker access upon return. They said they will click 'sign out' when using public or school computers per standard, suggested security protocols pushed by the schools.

Recommendations:

- This is not a topic to be resolved through attempts to train the user through messaging. The development team should find a pragmatic means to refresh announcements or other relevant subsystems without the user being required to re-login.
- Any efforts to automatically query the messaging server on a regular basis are a bonus. This would not need to be as often as a person's email client. 30 minute or greater intervals could be used to lesson system burdens.
- Conduct a student survey or review system logs to find the average length of time a student is in the product. It may be deemed that the normal login intervals and frequency is adequate to satisfy announcement refresh requirements.

My Files Area

All of the students felt the My Files would be helpful and the expected interaction seemed intuitive based on their previous experience with other similar sites. The students rated the “usefulness” of the My Files section as an 8.3 (out of a high score of 10).

One concern is it will need to be extra clear to students which tab (course) they are uploading to - especially if it has any relationship to assignment or grade-sensitive delivery to the instructor. We will want to lessen any chance of uploading to the wrong course and causing an unnecessary burden for the student or instructor.

Recommendations:

- Include help or instruction text to clarify if the My Files area is a sharing location or a private file locker only for personal use.

My Bookmarks

The My Bookmarks area may only get moderate use at best. Student interest was mixed, and the total rating for “usefulness” was 6.9 (out of a high score of 10). Though the method for managing bookmarks was unclear from the prototype screens, students expected the links to be associated with a course and not just in one general list. Some thought a duplicate interface to the My Files section could work.

The screenshot shows the Pearson My Files interface. At the top, there is a green navigation bar with the Pearson logo, a user greeting 'Hello, Farah Jackson', and links for 'Account', 'Help & Support', and 'Sign Out'. On the left, a sidebar contains 'Courses', 'My Files', and 'MySearchLab'. The main content area is titled 'My Files' and features two tabs: 'MyMathLab' (selected) and 'MyPsychLab'. Below the tabs, the current course is identified as 'Developmental Math 101'. A file list table is displayed with columns for 'Name', 'Date Modified', and 'Size'. The files listed are: 'Precalculus_ClassList.xls' (70 KB), 'Precalculus_Project.pdf' (954 KB), 'Precalculus_Quiz1.doc' (5.1 KB), 'Precalculus_Quiz2.doc' (201 KB), and 'Additional Class Documents'. A progress bar at the bottom of the file list indicates 'Course Space Used: 12 MB of 20MB'. Below the file list is a 'My Bookmarks' section with the heading 'Easily bookmark resources related to your course.' It includes two input fields: 'Title:' (with a note '(33 characters left)') and 'URL:'. 'Cancel' and 'Add' buttons are positioned below the input fields. At the very bottom of the page, a copyright notice reads: 'Copyright © 2011 Pearson Education, All rights reserved. [License Agreement](#) | [Privacy Statement](#)'.

Figure 4: My Files page with My Bookmarks

Recommendations:

- Use a similar interface from the My Files area that allows for bookmarks to be stored and related to specific courses. This could be through the use of tabs or a simple directory structure.

Archives

Due to the similar graphic design elements, many of the students misunderstood the Archives prototype page, thinking the messages were actually class headers similar to the main portal page. They expected the archived materials to be organized by course.

Recommendations:

- Use the same interface as the Portal main page. Organize by course and place the archived messages within the area that can be expanded or collapsed.

Other

- Students had no problem finding the print, syllabus, and course ID elements
- Students liked the information on the instructor modal window. Many also expected to see a link to the instructor's personal school website or a CV as well.

Appendices

Appendix A, Test Plan

Available at the User Experience site: <http://ux.pearsoned.com/research/>

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 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 Survey

<http://app.sqizmo.com/reports/22861/522012/6TTQ0Z4SZSG9PQYA0N03OTNQTPWYMT/?ts=1299533729>