

Short Usability Test Report for Early Birds

Date of Report: April 22, 2014
 Date of Test: April 15, 2014 & April 20, 2014
 Location of Test: Lowell, MA & North Reading, MA

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Executive Summary

The goal of the Early Birds usability tests was to get feedback regarding the look and feel of the website from those not involved in its development process and apart of its target audience. The study on April 20, 2014 was conducted with children who were unable to attend the in-class study on April 15, 2014.

The usability tests were divided into two separate scenarios: using the website as a teacher and using the website as a student. Participants that completed the first scenario as a teacher were asked to register for an account, create assignments, and view lab reports. Participants that completed the second scenario as a student were asked to create, access, edit, and submit a lab report. 7 total participants completed the study. Most participants completed 1 of the 2 scenarios; however, a few participants completed both scenarios.

Overall, the participants were able to effectively navigate through the website. Most participants successfully performed all tasks, but several participants did not complete the tasks in the correct order. The results of these tests indicate changes need to be made and are outlined in further detail below.

Methodology

Who we tested

7 participants, having the following characteristics, evaluated Early Birds.

Audience Type

College Students	4
College Professors	1
Elementary School Students	2
TOTAL (participants)	7

Gender

Women	0
Men	7
TOTAL (participants)	7

Age

5-10	2
11-17	0
18-24	4
25-44	0
45-60	0
61-70	1
TOTAL (participants)	7

What participants did

The participants met with the facilitators for approximately 15-20 minutes to complete 1 scenario and 25-30 minutes to complete both scenarios. The teacher scenario was comprised of 12 tasks divided into 2 parts of 8 and 4 tasks, and the student scenario was comprised of 8 tasks divided equally into 2 parts of 4 tasks. It took 10 minutes to fully complete a scenario. Additionally, participants spent 5-10 minutes filling out the questionnaire following task completion.

What data we collected

Participants were asked to provide their name, date, as well as operating system and browser information. We asked for this technical information to pinpoint any browser or operating system specific problems.

We silently watched participants complete each assigned task and recorded our observations on the evaluator form. After the tests were completed, we discussed potential website changes based on our observations. We did not focus on how the website should be changed during the tests; we simply focused on what the participants were doing.

Once participants completed the testing, we provided them a questionnaire regarding their overall experience as well as what they did and did not like about the website. In addition to inquiring about their satisfaction, we were interested in how participants completing the student scenario felt the website would appeal to younger students.

Major findings and recommendations

While there were no major issues or changes that need to be implemented as a result of usability testing, there were several concerns that need to be addressed.

- **Navigation regarding documents opening in new tabs.** It is very unclear how to navigate back to the website when links are opened in new tabs. For example, the information sheet and lab reports on the teacher hub open in new tabs. Since these documents were designed for printing, we did not add any navigational elements to these pages that would help users navigate back to the website. We assumed participants would close the tabs or switch back to the main Early Birds website, but most participants were confused after opening these documents.

We feel an appropriate fix for this problem is to open lab reports in new windows. It is likely users will recognize new windows opening more than tabs opening. Unfortunately, we will not be able to confirm our suspicions with additional usability tests before our final release. Additionally, the link to open the information sheet will download the sheet as a PDF file.

- **Submitting lab reports.** There is no prompt confirming lab submission and alerting users they will be unable to edit their work after submission. As a result, participants instantly submitted their lab reports without finishing it. This confused and annoyed participants because they were given no warning that they could not continue working on a lab report after it was submitted.

A proposed solution to this problem is to include a warning message that pops up when a user clicks submit. This message will notify users that they are about to submit their lab report and will not be able to make future edits. This will also give users the choice to submit or return to their lab report.

- **Creating a lab (as a student.)** The younger participants were confused beginning their lab reports. When they did not see their name on the list for an assignment, they did not know what to do because they also did not see the prompt to begin a new lab below the list of names.

We are still working on coming up with a viable solution that can be implemented in the limited time we have left. We think the best solution would be to implement a feature that would allow teachers to add rosters of student names and to associate rosters with particular assignments. With this design, students would only have to select their name from a list to begin a lab report. We, however, do not have enough time to implement this feature before the release.

In the time we have left, we feel it is most reasonable to change the language on this page to better direct users and add a graphic arrow directing attention to the prompt to begin a new lab.

- **Language is still too complicated for third graders.** The language used on the student interface may still be too complicated for third graders. Specific words, such as incorrect or selected, may potentially be above the third grade level.

With feedback from children and from a professor with experience in education, we plan to change some of the language we have used. For example, we plan to change the hints in the problem and conclusion section because the younger participants found these hints hard to understand. We also plan to change words like “incorrect” to “wrong.”

Exit Questions/User Impressions

The following tables contain responses for each of the 6 questions participants answered on the post-test questionnaire. It is noted when a response was verbally communicated or a response was not given.

Question 1: Describe your overall experience using Early Birds.

Participant No.	Response
1	Really slick interface, hitting enter didn't do what I thought it would but I'm also not a third grader.
2	It's very well designed and straightforward.
3	Very exciting
4	N/A - didn't provide answer.
5	Verbal communication - "Very nice, but still too complicated for third graders."
6	Verbal communication - "Yeah, I liked it."
7	Verbal communication - "Yeah, I liked that I could use it."

Most participants like the design and feel of the website. However, one participant argues the website is too complicated for third graders. Conducting the usability tests with children helped to identify areas on the website, such as beginning a lab report, that could be simplified for children.

Question 2: What did you like most about the website?

Participant No.	Response
1	-Transitions! -Shows lab report in word format.
2	The simplicity of the interface and procedures.
3	The visuals of the site were very professional and clean.
4	I enjoyed the way the website flowed. It was very visual and did a good job at keeping my attention.
5	Verbal communication - N/A
6	Verbal communication - "Writing a silly lab report."
7	Verbal communication - "The birds."

Participants enjoy the visual layout and using the website to write a lab report.

Question 3: What did you like least about the website?

Participant No.	Response
1	Couldn't alter lab report past submission.
2	I think the printed assignment sheet should be generated and have the assignment code pre-filled.
3	Some of the navigation aspects.
4	There were a few bugs with the site. Pressing enter to enter input seemed to reset the page itself. When viewing the pages to print them, like the labs, I think it would be better to have it open in a new window.
5	Verbal communication - "Too complicated for third graders, red text against blue screen."

6	Verbal communication - "The words. I don't get problem and hypothesis."
7	Verbal communication - "The submit button was confusing."

Participants do not like that you cannot alter a lab report after submitting it, but we will add a lightbox alert to confirm submitting a lab report. This alert will warn users they cannot edit lab reports after submission.

Several participants feel the language is still too complicated, and we plan to simplify our language. For example, one of the participants thinks the problem and conclusion hints are confusing, and we plan to change these sections.

Another participant found that hitting enter does not submit forms, and we will also fix this problem. We are aware that the "onclick" method is not triggered by hitting enter.

A few participants feel that the website is too hard to navigate when pages are opened in new tabs. As explained in the major findings and recommendations section, we plan to change these links to open in new windows.

One participant also suggests that the assignment code should automatically be inserted into the information sheet. We were hoping to implement this feature if we had the time, but we unfortunately do not have enough time before our final release.

Question 4: Did you find anything confusing or feel could be more straightforward?

Participant No.	Response
1	No.
2	Not Really.
3	When windows open up, navigating got confusing.
4	No, everything was pretty easy to navigate. There were a few pages that lacked a logout option which I feel should have it.
5	Verbal communication - "The language."
6	Verbal communication - N/A
7	Verbal communication - N/A

As explained in the major findings and recommendations section, we plan to change these links to open in new windows. One participant feels like there should be a logout option on the student hub. We have decided to implement a Save & Quit button, which will make exiting the website feel more natural for users.

Question 5: How did you feel about the colors on the website?

Participant No.	Response
1	Beautiful.
2	I like them a lot.
3	Very attractive.
4	They were very eye catching.
5	Verbal communication - N/A
6	Verbal communication - "They were cool."
7	Verbal communication - "I liked them."

Most participants like the colors on the website.

Question 6: Did you feel the atmosphere of the website would be appealing to third graders?

Participant No.	Response
1	Very much so. It's very straightforward to use.
2	N/A - Teacher test.
3	Yes.
4	Yes, I think the color scheme and the way the site visually moved from page to page would be very appealing to third graders.
5	Verbal communication - "It's still too complicated for third graders."
6	Verbal communication - N/A
7	Verbal communication - N/A

A few participants suggest the language is still too complicated for third graders, but many participants also feel the website is visually appealing to this age group.