
Usability Study | [All Questions Answered](#)

SECTION 1. SCENARIO

The *All Questions Answered* website is intended as a discussion forum for educators, with a focus on the kinds of questions one might ask a mentor, or the kinds of questions a mentor might ask. The site is predicated on the idea that there are some questions one doesn't like to ask face to face. It may be that there is no one available to act as a mentor for the site's user, or it may be that the user just doesn't want to ask his or her mentor. Similarly, there are some people serving as mentors who might want advice on how to deal with a problem in their mentoring relationship, but might not know who to ask.

Given the format, users can both ask and answer questions. Responses will be rated, as they are on sites like stackoverflow.com, giving forum users a way to judge the answers they're receiving, and a way for community members to build trust. Users can create login IDs and upload profile pictures, as well as enter profile information – if they want to. Users can also visit the site anonymously, though currently there is no capability to ask questions anonymously.

The target users for this site are tenure-track and tenured faculty members – or really anyone who has an interest in mentoring or being mentored. Discussion topics and comments will be moderated, but there will be no effort to limit the site to the faculty of one institution. Down the road, ideally, there would be different forums for different kinds of questions, and users would identify the forum that best suited their needs.

SECTION 2. METHODOLOGY

Three subjects were selected for this usability test, based on their teaching experience. While all subjects were women, and two were from the same institution, one is a tenure-track professor, one is a non-tenure track lecturer with a full-time appointment, and the third is an adjunct at a community college. One of the subjects has a formally assigned mentor, while the other two have had informal mentoring relationships at various times in their careers. Each subject completed a pre-test questionnaire that gathered baseline information about her level of computer experience, browsing habits, and information seeking with regard to mentoring questions. Following the test, subjects completed a post-test questionnaire which evaluated their attitudes toward the website. Subjects were also interviewed. Each subject used her personal computer to complete the test; two used Macs and one used a PC.

As the subjects were being asked to comment on a prototype of the site, each used a hybrid of silent and think-aloud while completing the tasks, and all tests were audio recorded. Following or during each task, the subject was asked to comment on the appearance and behavior of the screens, as well as to suggest what might make the procedure or task simpler.

2.1 TASK LIST

The tasks for this usability study focus on the basic elements of the system: creating a system identity, asking a question, answering a question, and searching for questions and answers. Again, because the system is a prototype, the tasks are somewhat simplistic, but the subjects were asked to go into greater detail with their comments as they completed the tasks.

1. Create an online identity and sign in. *This is an integral part of becoming an active participant in a discussion forum, as anonymous questions don't seem to get much response, and anonymous answers cannot earn the trust of other participants.*
2. Post a question. *Though there is much to read on a discussion forum site, users must also be able to post their own questions, or they will not be participants in the community.*
3. Answer a question. *Users must be able to easily answer questions on the site, which is predicated on the concept that the crowd has the answer, or at least an answer.*
4. Search for a question by its tag. *At present, tags are the primary means of organizing questions and their answers. Therefore, the user should be able to find questions in this way.*
5. Add a tag to a question. *Though this functionality is not available in the prototype, except as users create a question, it is an important part of user interaction, a way for users to comment on each other's questions without actually being able to answer them.*

Pre- and post-test questionnaires are included in the appendix.

SECTION 3. OBSERVATIONS

This usability study was conducted by observing the subjects as they completed the tasks, and through their responses to the post-test interview and questionnaires. All these methods provided useful data about the usability of the site.

3.1 PARTICIPANT INFORMATION

As noted earlier, the participants in this study were recruited based on their experience as teachers at the post-secondary level. All the participants use computers often and are very familiar with the Internet. Two identified themselves as very confident about finding information on an unfamiliar website, while the third described herself as not very confident. All have made use of discussion forums and social media sites in the past. All use the Internet to search for specific information several times a day. Two participants said they would be more likely to search for professional information online, rather than asking a mentor. One commented that there was no mentor close at hand who was familiar with her situation, and thus she looked online for information. The third subject said that she would be more likely to ask a mentor for information because she imagined the mentor would have more of her background, and be able to tailor responses to her specific needs, in a way that wouldn't be possible with an online response.

3.2 OBSERVATIONAL DATA

While all three participants commented positively on the simplicity of the design, each had difficulty at various times with a lack of feedback from the site. The site is organized around three

main screens, and for each user, those screens presented problems at various times. For example, the questions in every collection– whether organized chronologically or by tag – are represented with a brief teaser and a hyperlinked “Read More,” which brings the user to a full display of the question and a form for recording an answer. Two of the users, however, commented they weren’t sure where to go from the list of teasers; the hyperlinks did not provide enough of a cue. A related problem – lack of feedback – was evident when all three users tried to create a login identity. Each presumed that any information entered on the “sign in” screen would be transferred to the “sign up” screen, but that was not the case.

STUDY DESIGN PROBLEMS. Because the site is still a prototype, there isn’t enough functionality for users to really become accustomed to the site. It therefore seemed that there wasn’t much substance to the actual usability testing of the site. Five tasks does not seem sufficient to produce a valid test.

SITE DESIGN PROBLEMS. As mentioned above, subjects had a problem with lack of feedback. As one user commented, “it didn’t really tell me what to do... without you here, I would be wondering...” All three subjects commented on this lack in various ways. For example, the site has no real welcome or index page, and no content to explain its mission or purpose, which two of the subjects expected to find. Also, there are no shortcuts between the different pages. If the user is looking at the index page and wants to answer a specific question, it is not currently possible to jump straight to that question (unless it happens to be one of the three most recently added).

On the other hand, all three participants were positive about the website when asked to assign it a grade in the post-test questionnaire. In general, all appreciated the site’s simplicity. One subject commented “all the things you can do are right there in the bar.” Subjects also appreciated the color scheme and simple layout of the information.

SECTION 4. INTERPRETATION

4.1 SYSTEM STRENGTHS

The concept of an online discussion forum has been familiar to us from the earliest days of the internet. As imagined here, it combines the power of crowd sourcing with the convenience of asynchronous communication. The site’s design is very simple and traditional, which makes it easier for the user to locate information, but also draws the user in to concentrate on the information. There is little to distract on the site.

4.2 SYSTEM WEAKNESSES

It is essential to provide more user feedback on the site, as all three of the test subjects commented. Users need to know that their information has been recorded. Further, the site doesn’t offer much in the way of error trapping. If there is a problem with a form as the user has submitted it, the contents of the form should be retained so the user doesn’t need to retype the information.

Another weakness of the system is that there is currently no way to suggest the community of people asking and answering these questions. As one subject commented, there is no sense of shared purpose in the content of the site.

SECTION 5. SUGGESTED IMPROVEMENTS

In order of priority,

1. Add user feedback to all sections of the site. Examples are
 - a. Instructions for creating a login identity, and confirmation that the identity has been created. Explanation that the login identity is one of the tags on the questions, so users can anonymize it if they wish.
 - b. Display of a question once the question has been created.
 - c. Display of a question-answer group once an answer has been recorded.
2. Add explanatory content to index page so that it is immediately clear what sort of questions are being answered on the site.
3. Add a full-text search capability
 - a. Improve searching by tags so it is more intuitive
 - b. Order tags in the search list according to how frequently they are used
 - c. Add user ID to the tag list, so one can also view all the questions or all the answers created by a particular user

SECTION 6. CONCLUSION

As noted, the site is visually attractive and functions fairly well. However, in order to create a positive user experience, the site must provide more user feedback. Further, there are design elements which could increase the user's sense of community.

APPENDIX: QUESTIONNAIRES

Pre-Test Questionnaire: All Questions Answered

1. What is your age? ____ Gender? ____

Please circle the appropriate answer for each of the following questions:

2. How frequently do you use a computer?
 - a. Several times a day
 - b. A few times a day
 - c. A few times a week
 - d. A few times a month
3. What platform do you most commonly use?
 - a. Apple
 - b. Windows
 - c. Other
4. What kinds of software have you used? Please circle all that apply.
 - a. Word processing
 - b. Spreadsheet
 - c. Presentation
 - d. Database
 - e. Other
5. How frequently do you use the Internet to search for specific information (as opposed to scanning a newspaper or checking your facebook page)?
 - a. Several times a day
 - b. At least once a week
 - c. Several times a month
 - d. A few times a month
6. What kinds of information do you look for on the web (circle all that apply)?
 - a. Information for work
 - b. Information for school
 - c. Consumer information
 - d. Entertainment information
 - e. Other
7. If you are looking for professional information, such as assistance with grants or information about classroom management, would you be more likely to check
 - a. online
 - b. with your mentor
 - c. elsewhere

Please explain your choice:

8. Have you ever used a discussion forum site or other social media to seek information?
- a. Yes
 - b. No

Please explain the circumstances:

9. Have you ever visited the All Questions Asked website?
- a. Yes
 - b. No
 - i. If yes, how recently?
10. Rate your confidence level about finding information on an unfamiliar website:
- a. Very confident
 - b. Moderately confident
 - c. Not very confident
 - d. Unconfident

Post-Test Questionnaire

Please rate the following items using a scale of 1 to 5, where 5 is your strongest agreement and 1 is your strongest disagreement:

11. The site is attractive.
12. The site's graphics are pleasing.
13. The site has a good balance of graphics versus text.
14. The colors used throughout the site are attractive.
15. The typography (lettering, headings, titles) is attractive.
16. The homepage's content makes me want to explore the site further.
17. It is easy to find my way around the site.
18. I can get to information quickly.
19. It is easy to remember where to find things.
20. Information is layered effectively on different screens.
21. Information is easy to read.
22. Information is written in a style that suits me.
23. Screens have the right amount of information.
24. The information is relevant to my professional needs.
25. The site is well-suited to first-time visitors.
26. The site is well-suited to repeat visitors.
27. The site has a clear purpose.
28. It is clear how screen elements (e.g., pop-ups, scrolling lists, menu options, etc.) work.

Do you have any other comments about the site?
