One literature review and two questionnaires were used to collect data test the research question explained in A2 (the user experience of online knowledge-sharing communities). The participants for the first questionnaire were 13 UofT students and the participants for the second questionnaire were 5 professors/TAs. Hence, a total of 18 valid responses were received. For both the student sample and the professor/TA sample, the participants were asked questions based on Piazza, because it is a very popular knowledge-sharing website among UofT students and staff. The article that was reviewed was also based on knowledge-sharing communities. For the rest of this document, I will call the student questionnaire "Questionnaire A" and the professor/TA questionnaire "Questionnaire B."

Sample Statistics for Questionnaire A:

In the student sample, there were a mix of computer science specialists/majors/minors, math specialists/minors, statistics specialists/minors or a combination of the programs mentioned. All of the participants use or have used Piazza. 61.5 percent of the participants are aged between 17 to 20 and 38.5 percent of the participants are aged between 21 and 30. 61.5 percent of the participants are male and 38.5 percent are female. 8 out of 13 participants spoke English as their first language, 2 spoke Mandarin, 1 spoke German, 1 spoke Hindi and 1 spoke Cantonese. 69.2 percent of the participants considered themselves to be "quite good" at using technology and the rest considered themselves "extremely advanced" at using technology.

Note: More demographic information was received, but those are used mainly to correlate types of persons to their Piazza experience and issues.

Sample Statistics for Questionnaire B:

In the professor/teaching assistant sample, all participants use or have used Piazza. 3 out of the 5 participants are aged between 21 and 40 and the rest are aged between 41 and 60. 3 out of the 5 participants are male and the rest are female. 3 out of 5 participants spoke English as their first language, 1 spoke Mandarin, 1 spoke Korean, and 1 spoke Tamil. 3 out of the participants considered themselves to be "quite good" at using technology and the rest considered themselves "extremely advanced."

Discussion for Questionnaire A:

All students found Piazza to be either "extremely helpful" or "helpful." The majority of students (69.2%) said they only use before an exam or when an assignment is due. More interestingly, when starting an assignment, a significant portion of the students (23.1%) use Piazza to browse posts about the assignment, even before looking at the assignment itself. Of course, a majority (46.2%) look at the assignment first and 23.1% look at the assignment and Piazza at the same time. Also alarmingly, 66.7% of the participants said they have had questions they could ask on

Piazza but hesitated. Another interesting statistic is that 53.8% of the participants post and answer questions anonymously, and 46.2% do it publicly. We also collected interesting information about the attitudes of our participants: 53.9% of the participants trusted the competence of the students who might answer their questions and the rest do not trust their competence as much. Moreover, 30.8% of the participants said that competition prevented them to answer questions on Piazza (this is only among students who are doing computer science.) The problems that were reported were consistent among all participants. Of all 13 participants, the major theme of the problems they have with Piazza is time consumption. All 13 participants either said that the search bar was inefficient, the posts are cluttered and disorganized or the notifications are not designed to be helpful. Everyone felt that Piazza was user-friendly.

Some interesting correlations are to be noted. As expected, the students who used Piazza the least often were less likely to trust the integrity, benevolence and competence of other users. All participants who post publicly to the platform also said that their contribution to Piazza benefits them socially. Also, language constrained some participants (who do not speak English as their first language) to use Piazza.

Discussion for Questionnaire B:

Among the professors and TAs, only information about the problems were received. They also reported similar problems. They said that the search bar was inaccurate and the posts were too disorderly. One TA reported that the forum statistics could be more useful. Everyone felt that Piazza was very user-friendly.

Implications:

Since many students lack trust in the competence in their peers, a points system could be designed to build trust and prove competence. For students who were constrained by language, a translation software could be built in or there could be an option for students to ask for translation to other students who speak their language. Most people reported that the search bar was inefficient. To combat this, we could develop a better way to sort through and categorize the posts/threads or we could better the search algorithm. Many even found it uncomfortable to browse through posts since the post listing is too cluttered and disorganized. Clearly, we need to make the posts more organized, and even more visually clear and pleasing. Some participants found that the notifications were done poorly, so we must the notification system more organized and designed to be more helpful than annoying.

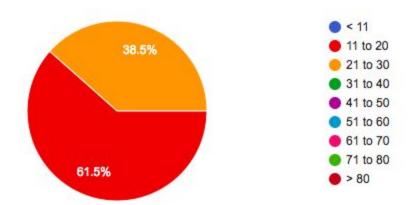
Limitations:

Since all participants are studying something science-related, the results of this study are bound to be biased. To solidify the findings of this study, more responses need to be recorded.

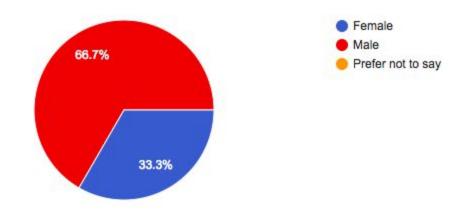
<u>Appendix</u> (all figures are labeled by the question asked and number of responses)

What is your age?

13 responses

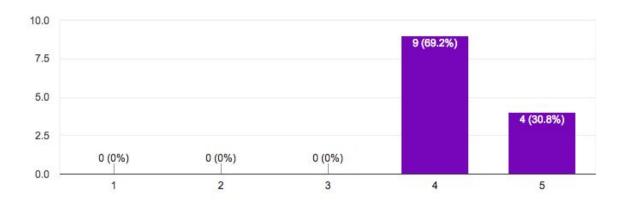


Sex:

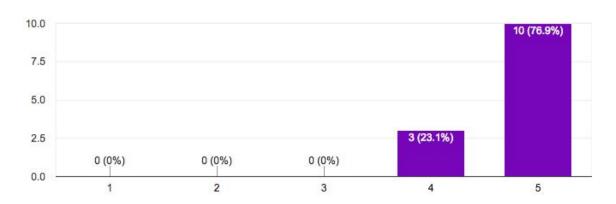


How proficient are you at using technology?

13 responses

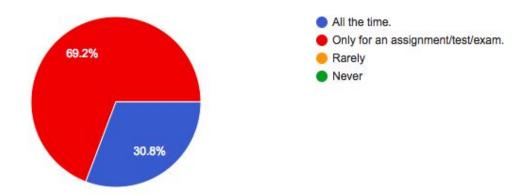


How useful is Piazza to you?

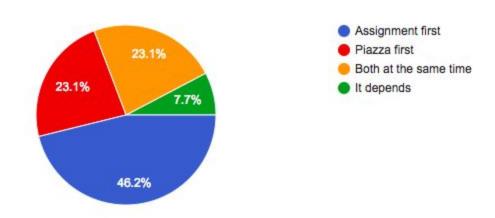


How often do you use Piazza?

13 responses

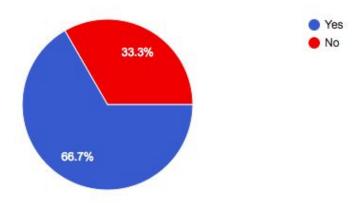


If you have an assignment due soon, do you start work on the assignment first or do you look at Piazza first?

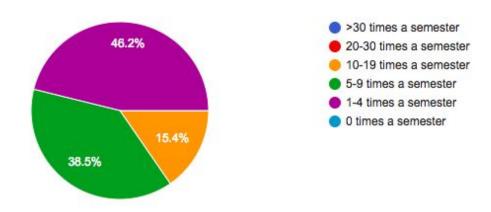


Have you ever had a question you could put on Piazza, but hesitated to ask?

12 responses

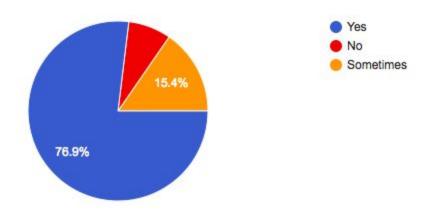


How often do you post questions?

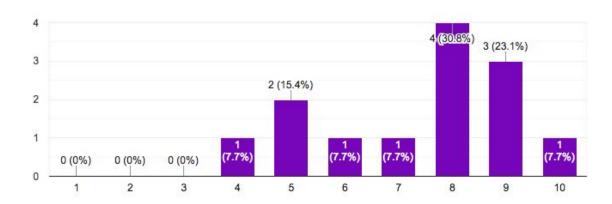


Do you assist other Piazza members without the expectation of reciprocation or them returning the favour?

13 responses

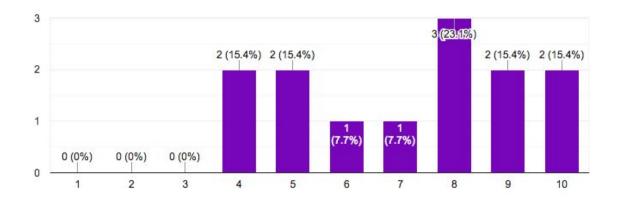


If you are posting a question to Piazza, how much do you trust the integrity of students who can answer your question?

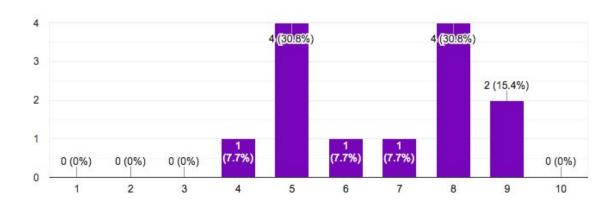


If you are posting a question to Piazza, how much do you trust the benevolence of students who can answer your question?

13 responses

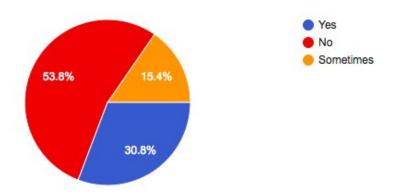


If you are posting a question to Piazza, how much do you trust the competence of students who can answer your question?

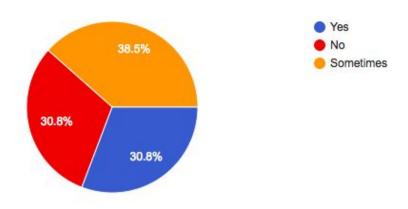


Do you believe that asking or answering questions on Piazza benefits you socially?

13 responses

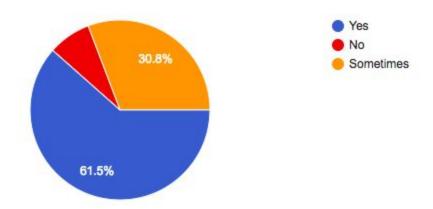


Does competition prevent you from asking or answering questions on Piazza?

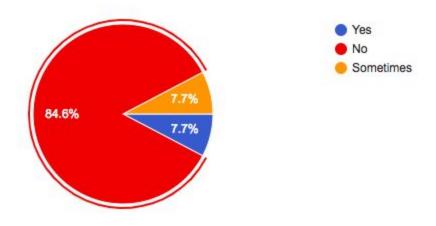


Do time constraints prevent you from using Piazza?

13 responses

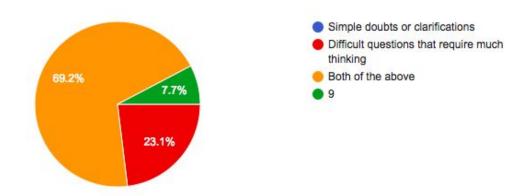


Do language/communication constraints prevent you from using Piazza?

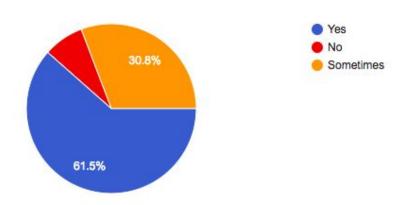


What types of questions do you usually post on Piazza?

13 responses

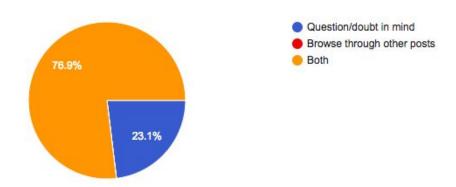


Normally, do you use the search bar to search for similar questions before you post your own?

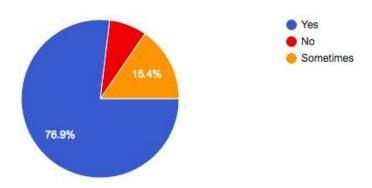


When you login to Piazza, do you often have a question/doubt in mind or do you just want to browse through other posts?

13 responses

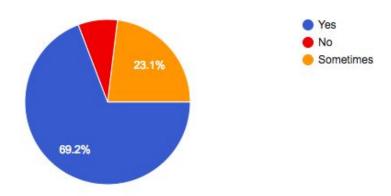


Do you willingly give your time to help other Piazza members who have problems?

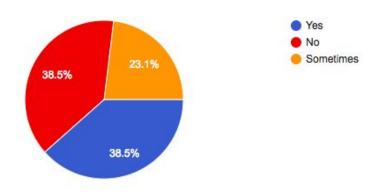


Do you share personal experiences to other Piazza members to help them?

13 responses

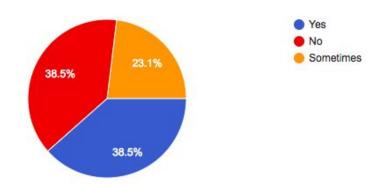


Do you attend to questions that are not required to answer but help the Piazza community image?



Do you attend to questions that are not required to answer but help the Piazza community image?

13 responses



How would you rate Piazza's user-friendliness?

