Ed Discussion Survey Report

Results of UW's Summer and Autumn 2021 Pilot

In summer and autumn quarters combined, 40 instructors from UW's three campuses utilized Ed Discussion in 65 courses. In addition, in the department of computer science and engineering (CSE) — where Ed Discussion is available to all — more than 50 courses used the course communication tool. Instructors and students were invited to provide feedback on their experiences with Ed Discussion via an end-of-quarter survey. In total over the two quarters, 90 instructors responded to the survey, as well as 468 students (from 54 different courses.)

Overall impression of Ed Discussion is positive

Instructors

Nearly all the instructors who responded to the survey had experience with other discussion boards before using Ed Discussion. Over half (52%) reported using Piazza previously, and 42% reported using Canvas. Others previously used Google groups, Catalyst GoPost, Slack, Discord, or Harmonize.

In general, instructors rated Ed Discussion favorably, with 91% rating it "good" (30) or "great" (35) as an educational tool. A very few instructors rated it as "fair" (5) and one "poor."

Asked to elaborate on their ratings, instructors described what they appreciated in the tool and what they found problematic. Their responses are summarized in the table below.

Liked	Did not like
- Easy-to-use, friendly, pleasant UI (28) - Ability to use LaTeX and code snippets (20) - Threaded capabilities (8) - Organization with categories and tagging (10) - Moderation and private messages with students and staff (10) - Anonymous posting (9)	- Hard to find new replies, student replies to instructor comments were not obvious (6) - Superscript or subscript available only in equation editor, not quick or easy (4) - Not able to save a draft post or schedule a post for later (4) - Preferred Piazza or Slack (6)

The discussion board is amazing, with its rich math and code block editors that make it very easy for students and instructors to collaborate in the conversation. Ed Discussion is great at facilitating student discussions since it doesn't have Piazza's model of a 'instructor answer' and 'student answer', but it lets instructors highlight a recommended answer. The tool is very simple to use, but gives instructors lots of customization to use 'Megathreads' to collect

questions about a day or topic and the ability to create template posts for students to complete to improve the quality of questions asked.

Much better experience than Canvas discussion board!...One annoyance - the only way I could find to do a superscript or subscript was through equation editor. Chemists need an easier way to handle superscripts and subscripts.

Functionality and organization are good. Visually appealing. Students seem to appreciate the option of posting anonymously while I still can get to the info if I need it.

Ed has a very smooth user interface for viewing and answering questions, and supports code formatting in effective ways.

LaTeX integration, ease of answering, searching, labeling, possibility for students to be anonymous. Love it TBH

The tagging feature, code and math (LaTeX) formatting is quite good…. The biggest problem is seeing whether there are new replies to old threads; I find myself frequently switching back and forth on the filter to see this, which is acceptable but not ideal.

In general it was easy to use, but in chemistry the ability to easily format fonts for subscripts and superscripts when posting/replying is important and the only way to do that in the posts was to create equations with the LaTeX math equation editor, which was laborious for chemical formulas, etc.

Students

Among student respondents, about half (49%) had used Piazza and two-thirds (66%) reported using Canvas discussion previously. Eight percent of students also reported using other tools for discussion, including Ed, Slack, Discord, Microsoft Teams, and Google Classroom. On the whole, instructors rated Ed Discussion more highly than students: 66% of student respondents rated Ed "good" or "great," while 34% rated it "fair" or "poor." Several students commented that they rated Ed Discussion "fair" because they did not use it.

Students' elaborations on their ratings often suggested that they were agnostic about the use of any specific discussion tool, though many had a clear preference for having all course work and activities in one system. Many students simply did not like having to learn a new tool, especially as they navigated online courses during the pandemic. Student comments indicating a preference for Canvas or Piazza often mentioned their previous familiarity with the tool. Student likes and dislikes are summarized below.

Students: Liked	Did not like
● Simple, easy-to-use interface (35) ● Categories, good organization (16) ● Ability to ask questions anonymously (11) ● Support for coding and LaTeX	● Inability to reply to a post anonymously (7) ● Delay in receiving notifications (11) ● Having to use a tool outside of Canvas (14)

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	● Logging in every time they check the board (3)

Some students' frustrations seemed due to how the tool was used in their courses, rather than the capabilities or limitations of the tool itself. Some students noted how well the discussion board was organized, making it easy to post and find responses, while others said the exact opposite. Many students commented that their TAs, professors, or peers did not respond quickly enough, or that the board was not active enough to be useful. Many students whose instructors used Canvas for course content and assignments were confused by the need to use (yet) another tool for discussion. Along the same lines, students from a CSE course that was also using the Ed platform for assignments indicated it was preferable to have all the course activities in the same system.

I think its a good way to ask questions because theres a way to be private or public and anonymous if you wanted to. I also like the fact that you can directly message TA's and get help from them fast. I also like how there's categories to sort all the information.

Ed discussion was very easy to use and everything was easily found. I feel like other platforms I have used have been sort of messy and was hard to find things.

I really think it is easier to ask when you can do it anonymously. There are even people who prefer not to ask if this function is not available, which is the case of Canvas.

It is a good and easy way to ask a question and get a response from anyone in the class within a reasonable time frame. Better then any other class communication site. Easily accessible and user friendly. Helped me out a lot when I needed a question answered.

Ed Discussion is a great way for peers to interact with each other and provide answers to people's various questions. The option to post anonymously is a great tool for those who may otherwise feel uncomfortable asking.

Works well, great organization, option to post anonymously or message instructors privately, can easily react to peers, search button helpful. Con-separate from Canvas, have to manually check it

Ed was nothing but another confusing app to learn how to use when all of our class work was on Canvas. I found myself questioning why we had to learn a new discussion program and then do our homework on Canvas rather than streamline the whole process and use just Canvas.

It was only fair because the instructor was not very active. As a result, questions were a lot of time unanswered or answered a few days after. If the teaching staff were active, the experience would be much better.
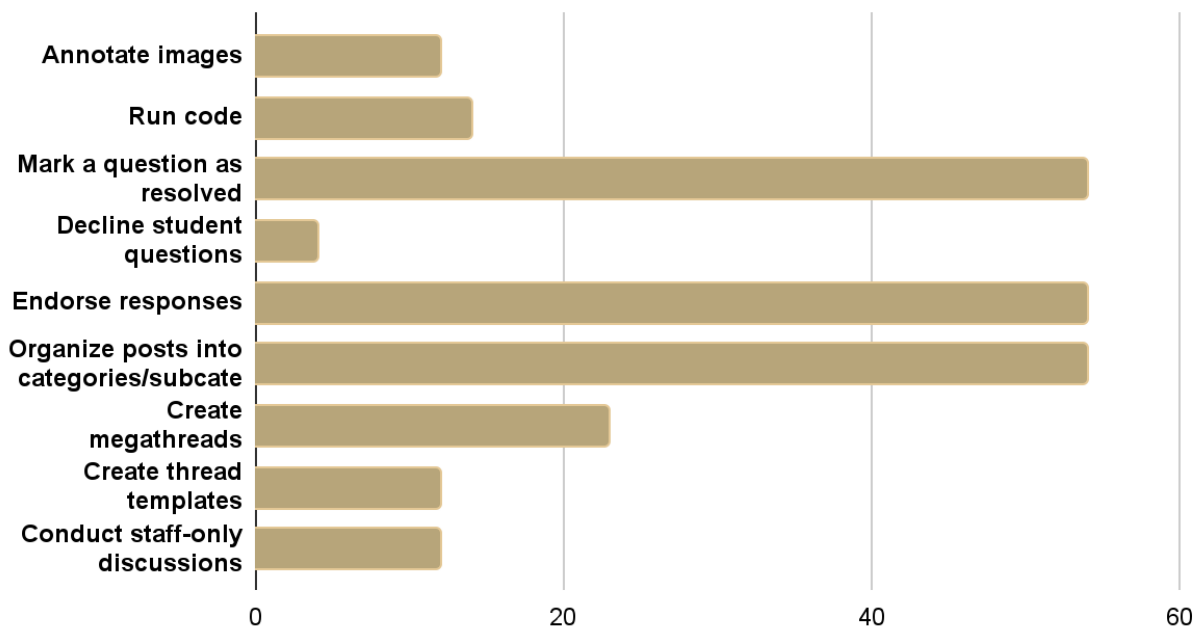
I think peoples' experiences on Ed will be dependent on how responsive the teachers/TAs are. I've used Ed before and the teacher wasn't too responsive so it made the experience not great but right now, my professor is super responsive so it has been a helpful tool.

Use of Ed Discussion supports the 'Q & A' use case

Instructors

The features selected most frequently by instructors were the basic Q&A features — "mark a question as resolved," "endorse responses," and "organize posts into categories." Another feature used to organize questions by topic or sessions, known as "megathreads" was used fourth most frequently. Several instructors noted that they did not have time during spring quarter to dive deeply into the capabilities of the tool and hoped to use more features in the future.

Ed Discussion Features Used by Instructors

Feature	Value
Annotate images	~12
Run code	~14
Mark a question as resolved	~54
Decline student questions	~4
Endorse responses	~54
Organize posts into categories/subcate	~54
Create megathreads	~23
Create thread templates	~12
Conduct staff-only discussions	~12

Students

Top among the features students reported using were the ability to post anonymously, search/filter threads, select categories for a post, and mark a post resolved. The remaining features were selected by significantly fewer student respondents.

Ed Discussion Features Used by Students
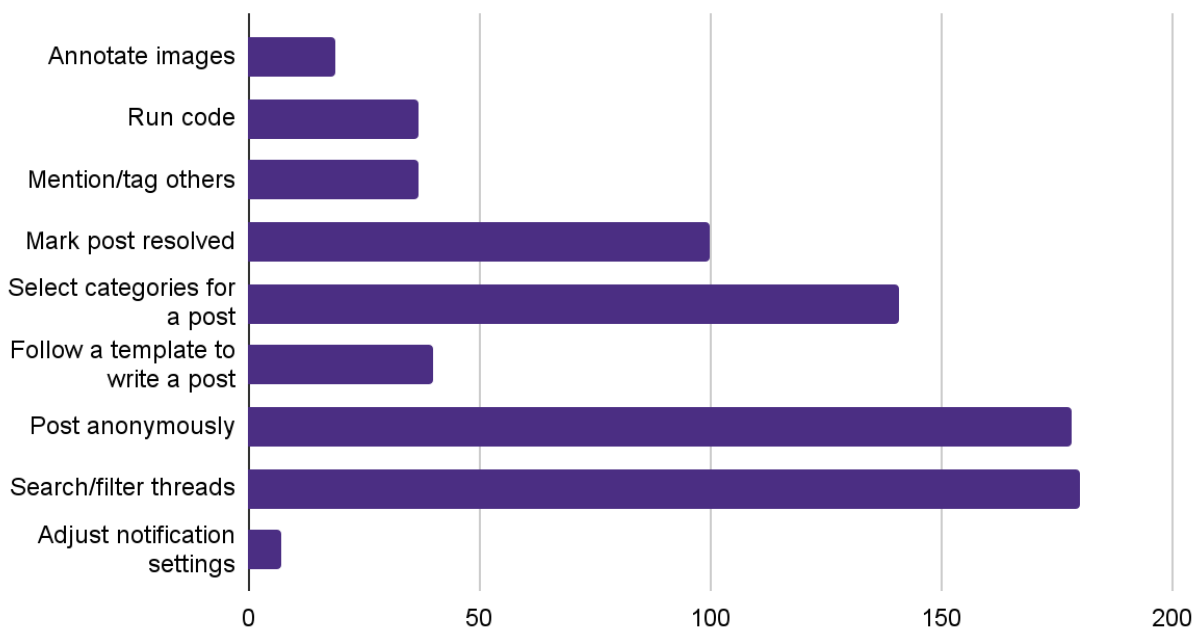
Types of Media Posted

When asked about the types of media they posted to Ed Discussion, the top selection for both instructors and students was images, followed by math. The third most reported category was code snippets, which represented a marked increase in usage of that feature compared to during the first first quarter of the pilot. The support for runnable code snippets is one of the distinguishing features of Ed Discussion, so it is interesting to observe growth in usage of this feature.

Types of Media Posted by Instructors and Students

Legend: Instructors, Students
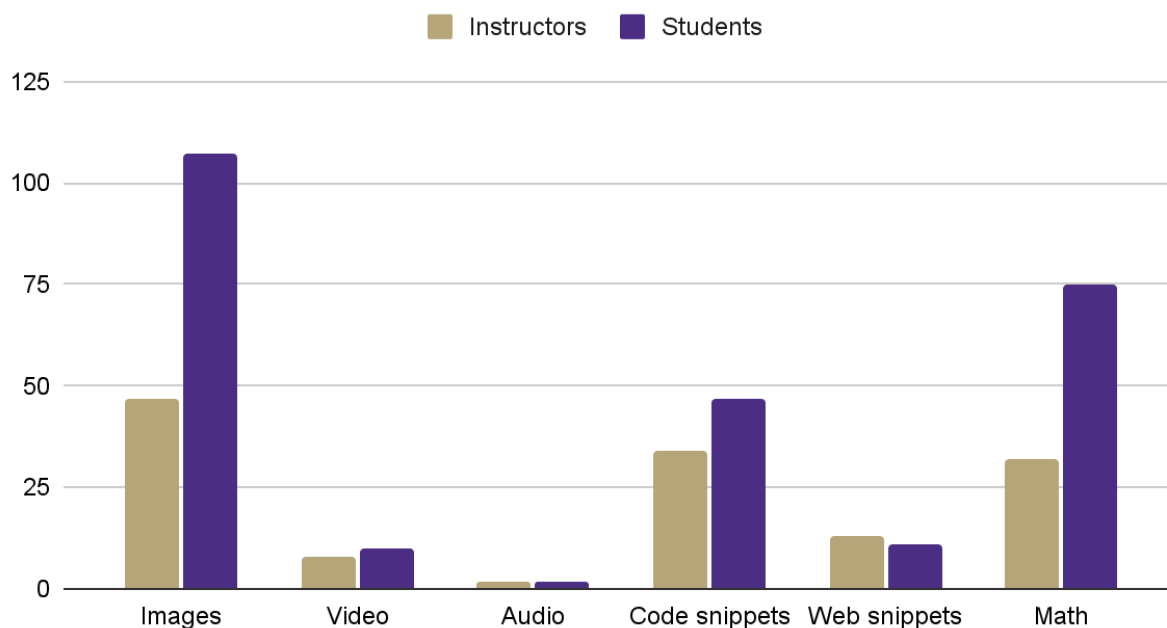
Ed Discussion stands out for organization and navigation

Instructors

When asked how well Ed Discussion helped them accomplish relevant tasks/activities in comparison to other discussion tools, most instructors rated Ed Discussion "about the same as other discussion tools" for almost every task. Ed Discussion rated higher than other tools for managing or facilitating discussion/Q&A.
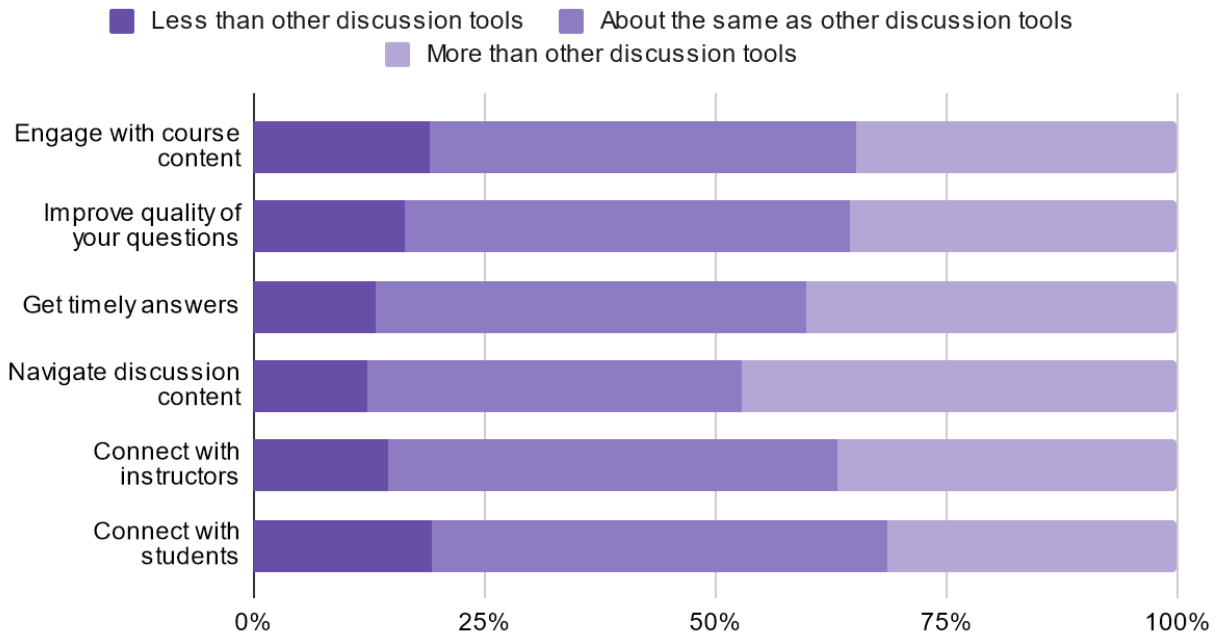
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Students

Instructors' Comparison Ratings of Ed Discussion

■ Less than other discussion tools   ■ About the same as other discussion tools

■ More than other discussion tools
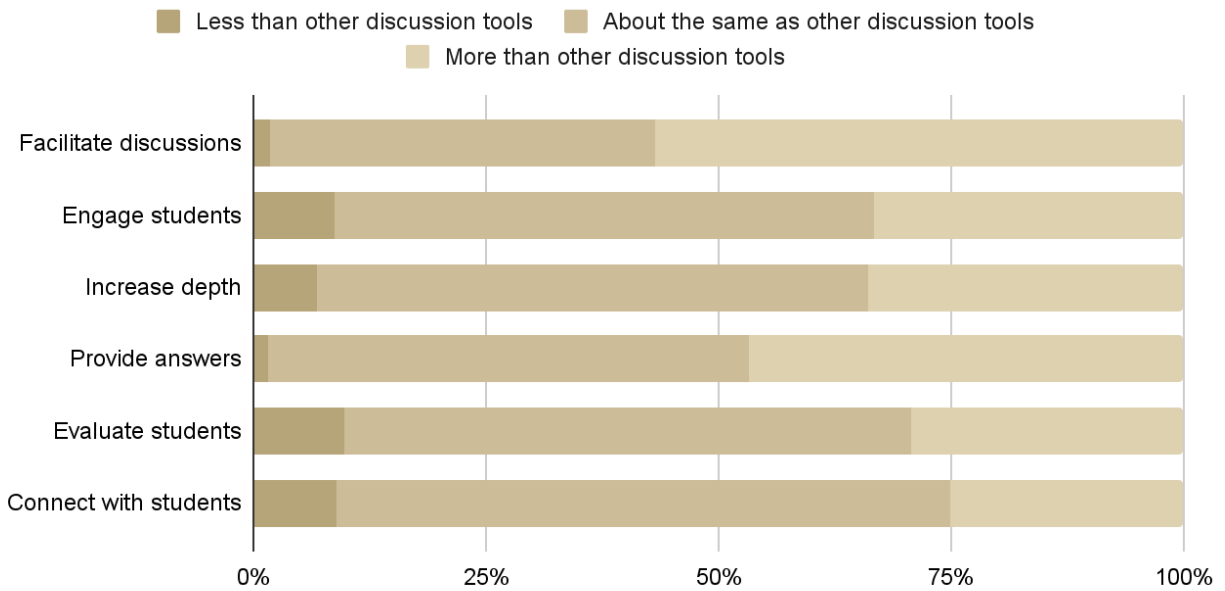
Similarly, when students were asked how well Ed Discussion helped them accomplish several tasks in comparison to tools they had used previously, the largest proportion rated Ed Discussion "about the same as other discussion tools" for every task, except for "navigate discussion content."

Students Comparison Ratings of Ed Discussion

Legend:
- Less than other discussion tools
- About the same as other discussion tools
- More than other discussion tools

Categories (horizontal bars, 0% to 100%):
- Engage with course content
- Improve quality of your questions
- Get timely answers
- Navigate discussion content
- Connect with instructors
- Connect with students

Ed Discussion is Easy to Use

Eighty-eight percent of instructors and 66% of student respondents rated Ed Discussion as "easy" or "very easy" to use. Only two instructors and 15 students (4%) found it difficult. Anyone (instructor or student) who rated the tool "neutral," "difficult," or "very difficult" was asked to elaborate on the difficulty. Instructors did not provide additional insight, beyond the need to get familiar with yet another tool.

Students also mentioned having to get used to a new tool. For some students, this was not a problem; for others, it was a source of frustration. Lack of a mobile responsive design or native mobile app challenged some students. A couple of students mentioned that the tool required them to log in multiple times, which discouraged their use. Others seemed to describe a board that didn't utilize the organization features, and so looking through all the posts was overwhelming.

> *The large volume of questions and answers being posted was overwhelming*
>
> *It was ok just annoying that its a whole differenet website and not embedded into canvas*
>
> *Sometimes it was a little hard to find discussion topics that might have been covered before*
>
> *I don't want to get used to a new platform*

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> *Nothing inherent to Ed was that difficult. The difficulties I had were adjusting to a new online platform, in the midst of a pandemic wherein navigating education in a virtual environment has been challenging in and of itself. Most students are probably familiar with canvas, as it is used to supplement traditional in-person classes, and is commonly used at other institutions (community colleges etc). I think students would have less issues with the Ed platform had it been implemented congruently with an in-person class. That said the comp-sci specific features (code editor, mark, run, debug, etc) are very appealing, and probably preferable for students with no programming background.*

Need for support

Three-quarters of instructors (78%) and over two-thirds of students (64%) said they did not need support with the tool. Twenty percent of instructors and an additional 33% of students said they were able to get support if they needed it, while two instructors and nine students were unable to get support. Asked to rate the amount of tech support their students required with Ed Discussion, 71% reported that their students "did not need support," 19% selected "very manageable – required little support" and the remaining 10% selected "manageable - required some support."

Future Use

Eighty-nine percent of instructors reported that they were either "likely" (15) or "very likely" (41) to use Ed Discussion for another course. When asked if there was anything they wanted to do with Ed Discussion but found they were unable to do, instructors indicated that they wanted the following capabilities:

- Save draft posts
- Schedule posts to go live at a selected time
- Push notifications (some in order to distinguish it from other email)
- Native mobile app
- Send private messages to individual students or student groups
- An emoji other than a heart for "liking" posts
- Merge duplicate questions
- Tag students in responses
- Access to their answers to questions from previous courses/boards, or a library of answers
- Inline editing for simple equations
- Financial symbol support in the equation editor

Students were asked if they felt it would be beneficial for all of their instructors to use Ed Discussion; 66% of student respondents said "yes" and 23% said "no." Many of the remaining students selected other, and indicated it depended on how much use the discussion board got in the course, and how responsive the professor/TAs were to questions.

Students would like Ed Discussion to have the following capabilities:

- Push notifications (highly preferred over email)
- Native mobile app
- Anonymous replies and comments
- View all starred posts at once
- Inline editing for simple equations

Other Findings

While not directly relevant to the evaluation of the discussion board software itself, the open-ended comments from both students and instructors reveal some other important aspects of online discussions.

- A course discussion board requires enough activity to be valuable to students; inactive boards were perceived as unhelpful to students, and experienced as frustrating by instructors.
- Discussion boards where students received timely responses, from either peers or teaching staff, were highly valued.
- Time spent structuring discussion boards with categories and labels was well spent; active boards that were organized with categories and labels provided a better experience to both students and instructors. However, active boards without organization were overwhelming to all.
- Some students just don't like online discussion, and prefer in-person discussion.
- Having multiple places or systems to check for course information or to go to complete assignments is more difficult for students. Many students appreciate having all course work and activities in one place.
- Peer to peer social connection is better supported by other, chat-based tools. Many students said they preferred the interactions they had in tools like Discord, and instructors observed that course discussion boards don't replicate that kind of social interaction.

Conclusion

Ed Discussion is a very good tool for a specific pedagogical use case for discussion, which we will call Q & A. In this use case, the discussion board can provide timely responses to students as they work through assignments and course material, whether those answers come from their peers or the teaching staff. In this use case, the capabilities of Ed Discussion help students to ask questions and get good and timely answers.

In addition, Ed Discussion has discipline specific features, including support for math, equations, code, and runnable code snippets.

Even for courses that don't need Q & A or these discipline-specific features, Ed Discussion is an easy-to-use discussion board. In these courses, the ease-of-use of Ed Discussion should be

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carefully weighed against the burden of asking students to navigate to an additional place to do course work, and the learning curve of using another tool.

Training required to effectively use Ed Discussion is minimal, with instructors requiring less than an hour's training to set up and use the discussion board. Instructors and students required little support to use the tool, and were able to get support they needed from the vendor.

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