

Visualizing Canvas Online Learning with the Student Activity Hub

Q&A

Question #1: How do you track the different student groups? Are student groups indicated in each course – how?

Answer #1: The data model the SAH has provided us is a combination of student demographic data and Canvas data. So, when you're talking about underrepresented students, first-gen students, etc. all of that is indicated in our Student Information System and that's blended in with the analytic data from Canvas.

Question #2: The dashboards don't seem to be specific to online courses. Have you used them with in person, or hybrid courses? Have you noticed differences in those modalities?

Answer #2: Right now, we are only using them for online courses because we have an instructional designer working with these courses. That way we can ensure that the course design can be represented correctly in the dashboard. Some hybrid and in-person courses also can use the dashboard. But for some in-person courses, they might not have submission due dates set up in Canvas and they might have other communication channels. Therefore, they might have less clickstream in that course. So, the dashboard can be used with all different types of modalities, it totally depends on the design of the course and the instructors' expectations of how students will participate in the course.

Question #3: The distribution of assignments weights is very different between Course A and Course B. Two questions:

- 1) Are these courses in the same field or in different fields?
- 2) For those who failed in these courses, what assignments were they more likely to fail in?

Answer #3:

- 1) Course A and Course B are both Social Sciences courses
- 2) We have a goal of correlating grades with these engagement dashboards but that's not the only indicator of student success. So, that's where we're at as far as whether to correlate grade and performance and succession. But for the coursework in Course A, where the midterm was 20% and the final was 20%, all we have is the survey data from the worst students who complained that they put a lot of effort into discussions and trying to improve their discussions, but they didn't do well on their exams. And that had a major negative impact on their final grade.

Question #4: How different are Course A and Course B? In terms of materials offered in each course and how often class meets per week?

Answer #4: Both Course A and Course B had in-video lecture and regular readings assigned each week. Course B did have synchronous meetings, which Course A did not. And that could have been a factor. But for Course B you can see that the workload was more evenly distributed, the

instructor was really active in the course with synchronous meetings and also timely announcements.

Question #5: Do these data reports exist for every course or are you building and customizing as requested?

Answer #5: Right now, we're designing the dashboards. Dashboards can be automatically generated for each course; however, the course design will affect the reliability of the dashboard. So, some of the dashboards might not be applicable for a particular course. Our process is to work with a particular course and design a custom dashboard for them. But if other courses also think it would be helpful for them, we will add their courses into the dashboard.

Question #6: How did you decide which Canvas data to visualize and what were some of the factors in your consideration?

Answer #6: So, deciding which elements to show is very important, it's essentially the first step of designing a dashboard. Because there are many considerations like: is the data available, is it related to learning outcomes and are there privacy concerns. In designing a dashboard, we need to understand what the goal of seeing this information is and how the client is planning to use that information to support their work. Working with a course designer and instructor we will choose the elements we think will best accomplish the goal of the dashboard.

Question #7: What were any challenges you encountered in the process of developing the visualizations and how did you overcome those challenges?

Answer #7: Scaling up and student privacy are some of the main challenges. We also have concerns about ensuring the accuracy of the data so that the dashboard does not have any misleading information. So, in one instance we saw that students submitted 90% of their assignments on time, but almost all the students submitted two specific assignments late. Working with the course designer we found that those two assignments were submitted by a third-party tool and that data was not syncing back with Canvas. We always try to validate the data by bringing the dashboard to our client and asking: does the data look good to them, does it meet their expectations, or are there any red flags? It's a working process between us and the clients to ensure the dashboard does not have any misleading data.