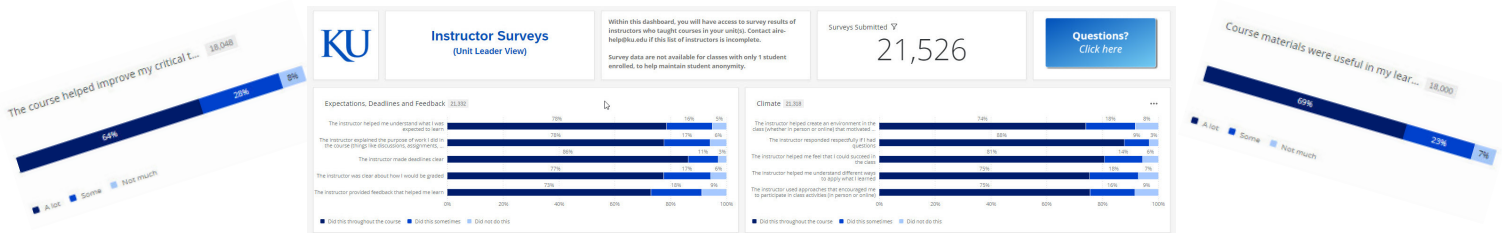


## Using aggregate data from student surveys of teaching

This guide supplements another CTE guide on interpreting and using the university's student survey of teaching. The other guide focuses on data for individual

instructors. This one focuses primarily on how chairs and other evaluators can use aggregate data to guide them in evaluating the teaching of individuals and their departments.



### Where to start

There are two primary ways to evaluate student survey data in the QClassroom dashboard:

- **Go go directly to data for individual instructors.** A separate CTE guide can help with that.
- **Evaluate department or school data** before moving to individual dashboards. This approach provides a broad perspective, allowing evaluators to identify strong areas of teaching and potential departmental challenges that may need to be addressed at the individual level.

Most questions in the revised survey are connected to teaching practices that have been shown to increase student engagement, retention, and learning. These include transparency, effective feedback, class climate, and application of course material. Other questions are intended to help instructors and evaluators get a sense of how much time students spend on coursework. For the survey data to make sense, though, a chair or other evaluator needs to have a clear sense of departmental, school, and university goals. For instance:

- What does the department value most in teaching?
- What range of scores suggests success (or potential problems) in these areas?
- How might this range differ across class sizes (large vs. small) or types (team-taught classes, required classes, electives, seminars, capstones)?

### Some things to keep in mind

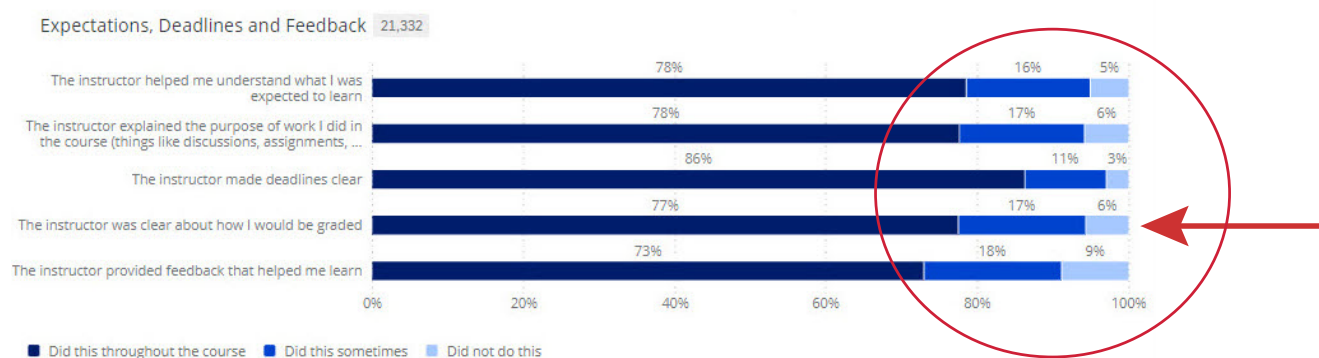
The revised survey eliminated a 5-point scale and comparisons to a department mean because those comparisons are prone to biases and have little meaning. The revised survey has just as many data points as the previous survey, but they take a slightly different form (a 3-point scale that focuses on the frequency of effective teaching practices). Using that data will take some adjustment in thinking, but the numerical portions of the survey should actually be more meaningful because students are asked more specific questions about instructors' approaches to teaching. Evaluators should keep a few things in mind, though, including:

## Some things to keep in mind (cont.)

**The data are not definitive.** They never have been. Students provide an important perspective on teaching, and survey questions are intended to gather feedback on areas of teaching that students are most qualified to judge. They see only one aspect of a course and an instructor, though, and numerous studies make strong cases that student survey results are biased against faculty of color, women, international faculty, and instructors who don't fit into students' perceptions of gender. The task force that created the revised survey tried to cut down on potential biases as much as possible, but no survey is perfect. **It is crucial that evaluators use multiple forms of evidence in evaluating instructors.**

**Aggregate results have further limitations.** Departmental results in the QClassroom dashboard combine responses from large and small classes, lectures and labs, introductory and capstone courses, and other variations of courses and teaching styles. In most cases, the departmental aggregate reflects the views of the same students multiple times across several classes. Large classes also skew the data, making generalization difficult. That has always been the case, though. **The aggregate data, as well as the individual data, are best used as an entry point for further exploration and conversation.** Here are some examples.

## Exploring the data



## Expectations, deadlines and feedback

This section focuses on how clear students thought instructors were in providing instructions and how they viewed instructors' feedback. The results above suggest that students who responded to the survey thought most instructors set clear expectations, provided timely feedback, and helped students understand the purpose of coursework. All the areas are worth monitoring, though, and worth exploring in more depth. For instance, 9% of students suggested that feedback from their instructors was unhelpful and 18% suggested that instructors provided effective feedback only some of the time.

To make the most of this data, a department should set goals for what it considers strong and weak scores



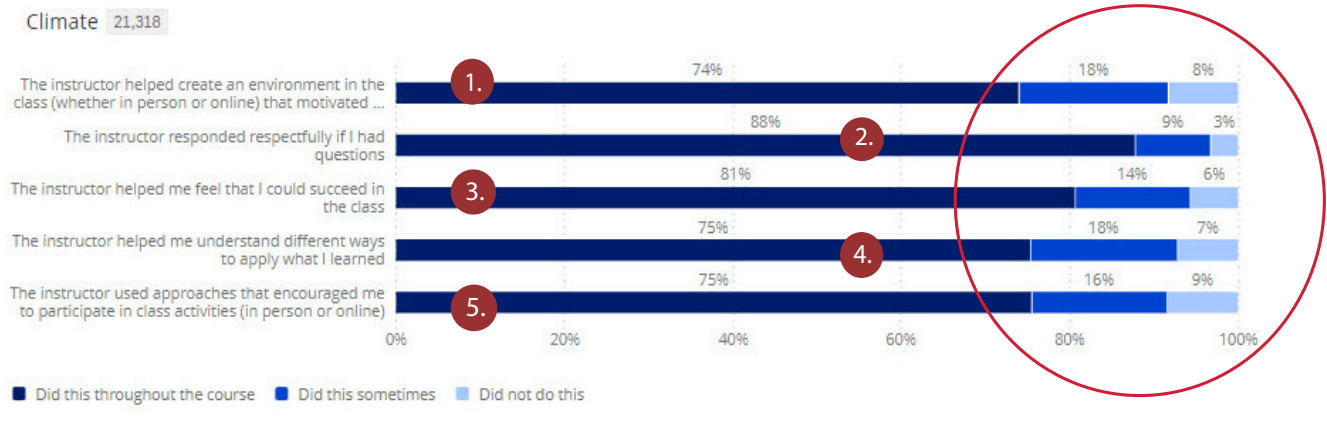
in this and other areas of the student survey. That gives chairs and other evaluators a benchmark to work with. Persistent low scores in these areas might suggest that the department needs to talk about ways to improve feedback and instructions to students.

If an individual instructor receives low scores, evaluators might review syllabi and assignment instructions to see whether they reinforce students' opinions. They should also look at student comments and talk with the instructor. Scores in any one semester often reveal little, though, and it will be more important to watch for trends in these figures over time.

## Class climate or environment



The example dashboard below suggests a positive climate in most classes but also some areas where a department may need to have discussions about how best to motivate students, provide a sense of belonging, and encourage participation. As with all student survey results, though, chairs and other evaluators should resist drawing immediate conclusions. Rather, they should consider these data as one of several perspectives that are crucial in evaluating teaching.



### Motivation and encouragement

1. Students who lack motivation are more likely to fail or drop out than students who feel that their instructors are guiding them meaningfully. Without further exploration, though, it is impossible to say whether the numbers above suggest a problem in pedagogical approaches, class format, instructor attitude, misperceptions among students, a combination of all of those things, or other factors. It is also impossible to say whether these scores represent a large portion of classes or only a few. They do offer potential areas for evaluators to explore at the individual level, though.

3. For examples, large majorities of students give their instructors positive marks in these areas. Even so, more than a quarter of students said the environment in their classes provided motivation only some of the time or not at all (1), and a similar percentage suggested that their instructors didn't always encourage them to participate in class activities (5). About 80% suggested that their instructors helped them feel that they could succeed; however, 20% said this didn't always happen (3). Perfect scores in these areas are nearly impossible to achieve, though, so departments should establish goals.

### Instructor responses to questions

2. This section has the highest score among the class climate questions, with 88% of students saying that their instructors took student questions seriously throughout the course and answered them in a respectful way. That is worth noting and congratulating instructors on.

### Participation in class activities

4. Again, this is worth keeping an eye on. Only 7% of students said the instructor didn't help them apply their learning, but 18% said this happened only some of the time.



## Course-focused questions on design, content, and student time

Students answer this part of the survey only once, but they complete other areas of the survey for each instructor in a course. In many cases, the course results will apply to an instructor, especially if that instructor was involved in creating and choosing course materials. In other cases (as with GTAs and part-time faculty), some of these results won't apply because someone else developed the course. Even then, these results can

provide important information to department leaders. Courses need constant revision and can easily go stale if no one is assigned to update them frequently. Students' impressions of course materials and their own critical thinking are imperfect measures, but they do provide a useful perspective that can help chairs and instructors evaluate course materials and methods of instruction.

### Critical thinking

The course helped improve my critical t... 18,048



### Course materials

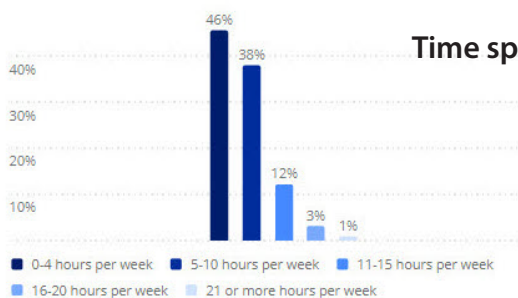
Course materials were useful in my lear... 18,000



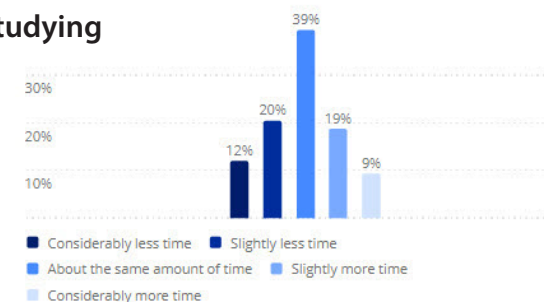
These examples could be read two ways: More than 90% of students found their courses thought-provoking and their course materials useful at least some of the time. On the other hand, only about two-thirds thought that their classes consistently improved their critical thinking and that course materials were consistently useful. Students are generally poor judges of lasting gains in their learning and are not

experts in course materials. Perceptions are important, though, and students pass on those perceptions to peers and parents. Departments should **not** base course decisions solely on what makes students happy. However, they should constantly monitor student perceptions for clues that course materials and instructional approaches need refreshing. That makes these data especially useful over time.

Outside of scheduled class meetings and ex... 18,046



Compared with other classes you have taken... 17,946



These figures are best used to monitor for any drastic changes over semesters or academic years. They are also useful for gauging differences in study time in different sections of the same course, in introductory vs. capstone courses, and in comparisons of courses that have been transformed. There is no right or wrong. Rather, these figures can help guide departments in thinking about curricula, course materials, and study habits, and in considering how they can guide students in taking an active role in their learning.

## Additional considerations when reviewing the dashboards

In addition to the previous guidance on limitations in and use of the data, chairs and other evaluators should also consider these areas:

**Put the results into context.** An instructor may get high survey scores while using pedagogical approaches that force large numbers of students to withdraw or that don't help students learn in meaningful ways. Similarly, an instructor who adopts innovative approaches to teaching often receives lower scores, at least initially. Understanding how an instructor approaches a class and how pedagogy fits into departmental goals will make the data fairer and more meaningful.

**The survey separates results for courses and instructors.** This was done to reduce repetition of questions for students in courses with multiple instructors. It also helps evaluators gain a clearer perspective of instructors who had no role in creating the courses they teach. Even so, the comments from students may provide insights into both the course and the instructor.

**Pay attention to response rates.** The number of students completing end-of-semester course surveys remains stubbornly low, and evaluators need to keep that in mind when reviewing survey data. High or low scores on surveys in which low percentages of students participated have little meaning. Rather than drawing heavily on student ratings, evaluators should use multiple forms of evidence in the evaluation process.

**Monitor the data over time.** Student surveys provide only a snapshot of opinion at a particular point each semester. The data become more meaningful when used to gauge changes over time, especially as a curriculum changes, as new courses are created, and as instructors try new methods of engagement.

