Teaching and Learning 2021-22 Results from the instructor survey in August 2022 October 2022

In August 2022, UC Berkeley instructors who taught the same course pre-pandemic and during the 2021-22 academic year (N = 1,187) were invited to participate in a survey about their experience. The survey was open from August 5 through August 31, 2022. There were 217 responses (18% response rate). Some respondents did not answer all of the questions; the count of responses for each question is included in the report.

Respondents were asked about their observations on: student engagement, student learning, student affect and behavior, student strengths and areas for improvement, challenges to learning, prior preparation, strategies for supporting student needs, and teaching experiences in a specific course. In this survey, "pre-pandemic" or "then" refers to Fall 2019 and earlier terms. Fall 2021 and Spring 2022 are referred to as Academic Year (AY) 2021-22. Respondents were asked to reflect on a specific course that they taught both pre-pandemic and in AY 2021-22.

Key findings

Student behavior, affect, and academic performance

- Instructors reported more engagement before the pandemic in several areas, such as attending lecture and turning in assignments
- Over half the instructors noted that before the pandemic they observed higher levels of resilience, initiative, organization, and time management
 - 37% of instructors reported increased empathy in students in AY 2021-22
- The majority of instructors reported that student performance was about the same or slightly stronger before the pandemic for all types of assessment
 - Performance was stronger before the pandemic, particularly on exams and in-class discussions

Challenges to learning and prior preparation

- Most instructors reported that barriers to learning were more of a barrier in AY 2021-22, particularly mental and emotional wellbeing, physical health, caregiving responsibilities, social support, and having space and time for course activities
- Two thirds of respondents believed incoming academic preparation was lower in AY 2021-22
 - The factors most often reported as causes of lower academic preparation were the mental/emotional impact of the pandemic and remote instruction
- Engagement, curiosity, and empathy were emphasized as student strengths, and time management, attendance, and work as areas for improvement, in free responses
- 60% of instructors reported spending more time on teaching in AY 2021-22

Observations on student engagement and learning

Many instructors observed **more student engagement before** the pandemic relative to AY 2021-22 (Figure 1). Over half of the respondents reported more engagement in the following areas before the pandemic: attending lecture sessions (63%), turning assignments in on time (58%), attending discussion/lab sessions (57%), attending office hours (55%), interacting with peers (53%), and active participation during class sessions (51%).

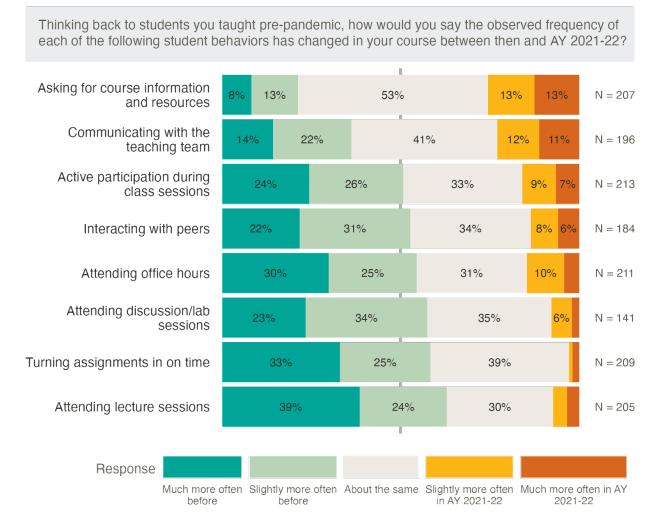


Figure 1. Instructors observe that student behaviors associated with engagement occurred more often before the pandemic or about the same amount before the pandemic and during AY 2021-22. The vertical gray line marks 50% of respondents, and the total number of respondents is listed to the right of each rating prompt.

These findings corroborate student reports from a <u>Spring 2022 survey</u>, in which about half of students said they attended lecture over 75% of the time, compared to pre-pandemic survey results when over three-quarters of students skipped class occasionally, rarely, or never.

Instructors most often reported that student communication about the course was about the same between the two time periods, including asking for course information and resources or communicating with the teaching team. Some instructors (23-26%) reported an increase in these types of engagement in AY 2021-22.

The majority of instructors reported that **student performance** was **about the same** or **slightly stronger before** the pandemic compared to AY 2021-22 for all types of assessment listed (Figure 2). Additionally, for online discussions, 32% reported stronger performance in AY 2021-22. Most instructors reported about the same performance between the two time periods for several types of assessment: short writing assignments (53%), problem sets (52%), and lab/hands-on assignments (51%). Most instructors reported that student performance was slightly or much stronger before for exams (54%) and in-class discussions (54%).

Thinking back to students you taught pre-pandemic, how would you say the observed performance has changed for each of the following student assessments in this course between then and AY 2021-22?

Online discussions	11%	17%	2	40%	20%	12%	N = 119
Projects	12%	25%		47%		11% 6%	N = 113
Short writing assignments	9%	28%		53%	/ 0	8%	N = 131
Lab/hands-on assignments	13%	25%		51%	, o	7%	N = 102
Problem sets	14%	27%		52	2%		N = 96
Quizzes	10%	31%		49	9%	8%	N = 99
Oral presentations	14%	28%		44%	44%		N = 107
Longer essays/ research papers	19%	19% 26%		47%		6%	N = 122
Exams	22%	% 32%			37%		N = 145
In-class discussions	24%	4% 30		29%		13%	N = 195
Response							
Much stronger before Slightly stronger before About the same Slightly stronger in AY Much stronger in AY 2021-22 2021-22							

Figure 2. Instructors reported that student performance was largely the same or slightly stronger before the pandemic.

Students also reported difficulty with exams and collaborative work in a <u>Spring 2022 survey</u>. Seventy-six percent of students reported having trouble adjusting to in-person, timed assignments or exams after having more flexibility during remote learning, and 45% said that because they didn't have the opportunity to learn collaboratively with their peers during remote instruction, acclimating to academic rigor at Berkeley was difficult. These student reports, along with the faculty observations on performance, indicate that students are having difficulty adjusting to academic rigor after remote instruction.

Observations on student affect and behavior

Some instructors (37%) reported that students demonstrated **higher empathy in AY 2021-22** compared to before the pandemic. While about a fifth of the respondents reported higher resourcefulness and resilience in AY 2021-22, more respondents reported higher levels of these aspects before the pandemic (46% and 53%, respectively).

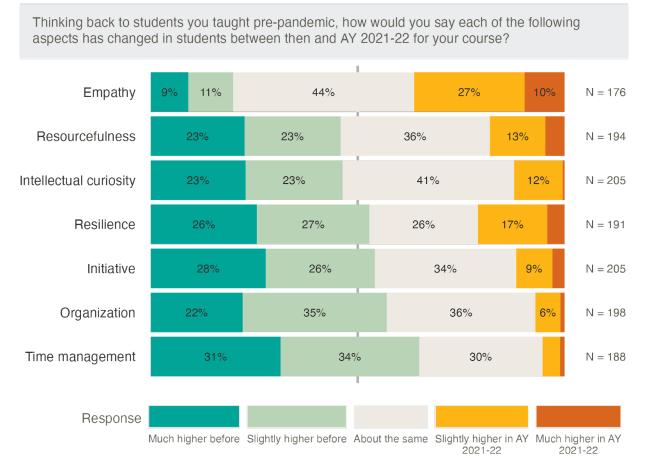


Figure 3. Instructors reported that many aspects of student affect and behavior critical to learning were higher before the pandemic, while empathy was the same or higher in AY 2021-22.

Most instructors also observed higher levels of initiative (54%), organization (57%), and time management (65%) before the pandemic. The changes in observed time management are likely another indicator of the difficulty students reported adjusting to the less-flexible in-person learning environment.

Student strengths and areas for improvement

Instructors were given the opportunity to write in their student's top strengths and areas for improvement for AY 2021-22. For student strengths, the most common ideas from the free responses (N = 418) were: engagement (n = 27), curiosity (n = 20), accessing online resources (n = 17), and empathy (n = 15). For areas that needed improvement (N = 429), the most common responses were: time management (n = 35), attendance (n = 33), turning in work on time (n = 20).

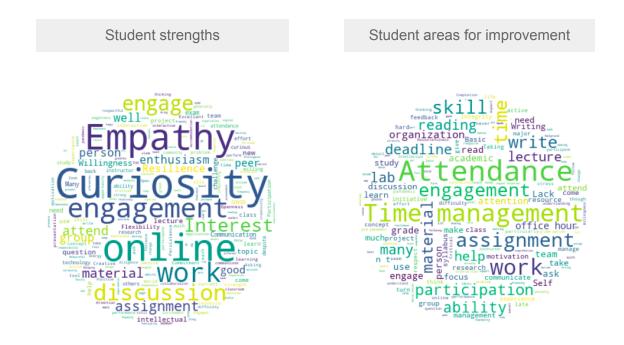


Figure 4. Instructors reported their students' top three strengths and top three areas that needed improvement in AY 2021-22. Text from all responses for each question (Strengths, N = 418; Areas for improvement, N = 429) were aggregated and the most common words were visualized.

Challenges to learning and prior preparation

High proportions of instructors reported that many of the proposed barriers to learning were **more of a barrier in AY 2021-22** than before the pandemic. Three-quarters or more of respondents reported that **mental and/or emotional wellbeing (83%)**, increased care-giving responsibilities (76%), and physical health and wellness (75%) were more of a barrier in AY 2021-22. Over half of the instructors also reported more of a barrier to learning in

AY 2021-22 due to: limited physical space devoted to coure-related activities (63%), lack of community/support network (63%), lower sense of belonging (60%), limited time devoted to course-related activities (60%), basic needs issues (59%).

Recall your interactions with students you taught pre-pandemic and in AY 2021-22. For each of the following possible barriers to learning, how would you say each barrier has changed between then and AY 2021-22 for students in your course?

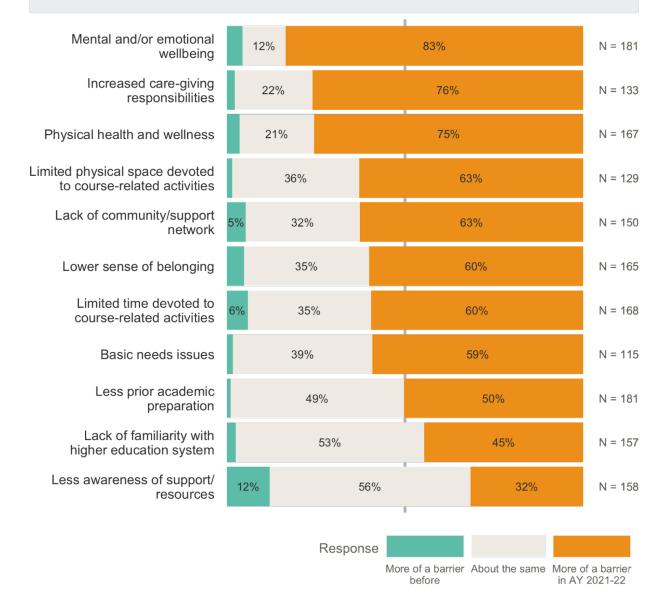


Figure 5. For most potential barriers to learning, a majority of instructors reported them as more of a barrier in AY 2021-22 compared to pre-pandemic.

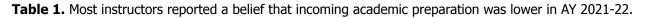
Most instructors (66%) believed that the overall level of **incoming academic preparation** for UC Berkeley students was **lower in AY 2021-22** compared to pre-pandemic, while 32% believed it was not different (Table 1).

Do you believe that the overall level of incoming academic preparation in UC Berkeley students differs in AY 2021-22 compared to pre-pandemic? N = 160

66% Yes, it is lower

32% No, it is not different

2% Yes, it is higher



Two-thirds of instructors believed academic preparation was lower in AY 2021-22 (Figure 6), and many pointed to the following factors: mental and/or emotional impact of the pandemic (83%), remote instruction (74%), differences in prior academic training (59%), and limited opportunities for growth during the pandemic (47%). Over one quarter of the respondents also cited lower standards for university admission as a factor (28%).

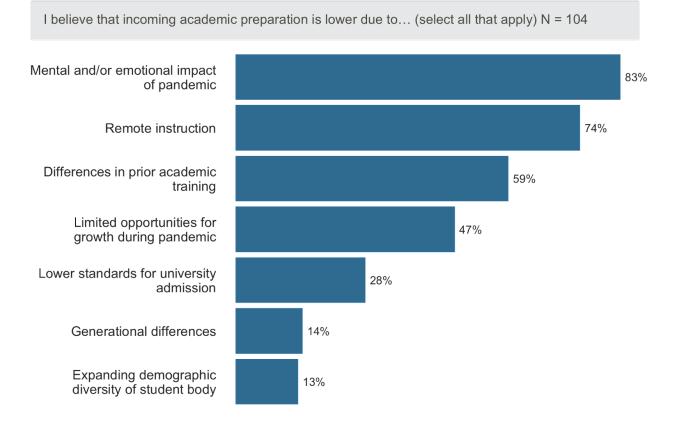


Figure 6. Instructors reported they believed that several factors were leading to lower incoming academic preparation.

Teaching experiences and motivations

A majority of instructors (60%) reported they spent more time on their course in AY 2021-22 compared to before the pandemic (Figure 7). About one-third reported spending **much more time** teaching. However, some also reported spending the same amount of time (21%) or more time teaching the course before the pandemic (20%).

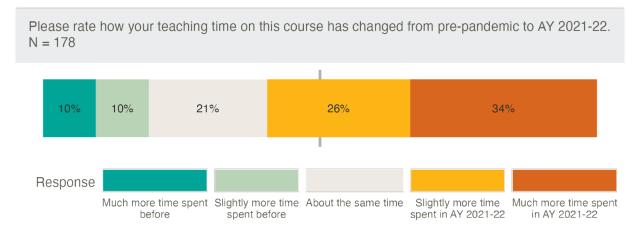


Figure 7. Instructors rated the amount of time they spent teaching a course in AY 2021-22 compared to before the pandemic. A majority said they spent slightly or much more time in AY 2021-22, though some also reported spending the same amount of time or more time before the pandemic.

Changes to course design or teaching strategy are time-consuming. When asked why instructors spent time on these changes, many responded with **student-centered reasons for change**: students learn more when I teach this way (45%) or students like my teaching better this way (36%) (Figure 8). Instructors also selected personal and practical reasons for making changes, including: I like my teaching better this way (32%) and it is more practical to do it this way (31%).

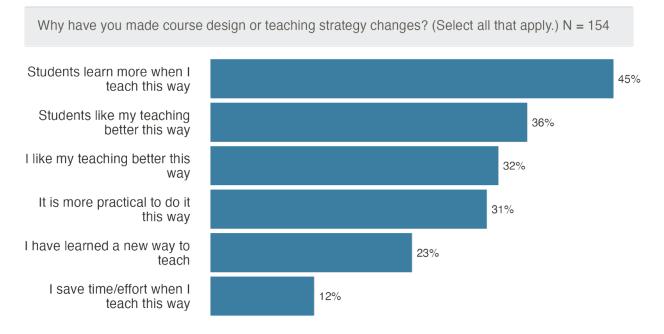


Figure 8. Reasons that instructors made course design or teaching strategy changes.

Appendix: Divisional representation of course taught by survey respondents

Survey respondents chose a course to evaluate. The divisions of the selected courses are presented in the table below.

Division of Course	Responded (N = 217)	Invited (N = 1,187)
L&S Arts & Humanities Division	20.7%	24.9%
L&S Social Sciences Division	16.6%	18.0%
College of Engineering	11.5%	12.2%
L&S Biological Sciences Division	9.2%	8.4%
L&S Math & Phys Sciences Division	8.8%	8.2%
L&S Undergraduate Studies Division	7.8%	3.7%
Rausser College Natural Resources	7.4%	7.7%
College of Chemistry	4.6%	3.2%
Haas School of Business	4.1%	4.8%
College of Environmental Design	2.3%	2.3%
School of Information	1.4%	0.4%
School of Law	1.4%	1.3%
FPF	0.9%	1.3%
Computing, Data Science, and Society	0.9%	0.3%
School of Social Welfare	0.9%	0.3%
Berkeley School of Education	0.5%	0.8%
Goldman School Public Policy	0.5%	0.5%
School of Public Health	0.5%	1.2%