

Supplemental Material

CBE—Life Sciences Education

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DELTA Survey

The DELTA Survey was originally designed and distributed in Qualtrics. Because the responses we collected were used for research purposes, we included a consent form, information about the study, and a question designed to check that the participant is aware that their responses would be used for research. If you are not intending to share these responses outside of the department from which they are collected, then you can remove these items.

Block 1: Introduction

This survey is a part of the Departmental Action Team (DAT) project at CU Boulder and CSU Fort Collins. This research project deals with institutional goals and institutional change. This brief survey will help us understand where your department is and where it would like to be regarding education. The survey will take approximately 15 minutes to complete. Your candid responses are sincerely appreciated and important to the success of this project. The first set of questions focuses on teaching in your department. The second set focuses on how you interact with your colleagues about issues of change in the department. The third (and final) set of questions asks you to compare your current (actual) department and your ideal (imagined) department in terms of education and governance. All responses are strictly confidential. Your name will not be shared with anyone outside of the research team. Any information shared with the department or elsewhere will be provided in aggregate form only.

The consent form and additional info about our study is given here (*insert link to relevant documents*).

Q1. I am willing for my anonymized data to be used for research purposes.

- Yes
- No

If respondent selects "No," then exit the survey.

Block 2: About You

Please provide your name, department, role in the department, and email address. We will not share your responses linked to your name with anyone outside of the research team. This information will allow us to contact you if we need to for any reason, and it will also allow us to relate your responses on this survey to potential follow-up surveys. Finally, this information is required for social network analysis, in which we consider the interactions between different members of the department.

Q2. Your full name:

Q3. Your current department:

Q4. Your role in the department (e.g., assistant professor, academic advisor, graduate student):

Q5. Your email address:

Block 3: SCII

Q6. Instructors in my department...

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Frequently talk with one another.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discuss the challenges they face in the classroom with colleagues.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Share resources (ideas, materials, sources, technology, etc.) about how to improve teaching with colleagues.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Aspire to become better teachers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use teaching observations to improve their teaching.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Value teaching development services available on campus as a way to improve their teaching.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Are assigned a mentor for advice about teaching.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Are “ahead of the curve” when it comes to implementing innovative teaching strategies.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q7. The following statements refer to the “department chair.” Please respond to these statements in reference to the individual who is the formal leader of your department.

The department chair...

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Encourages instructors to go beyond traditional approaches to teaching.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has a clear vision of how to improve teaching in the department.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Implements teaching-related policies in a consistent and transparent manner.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inspires respect for his/her ability as a teacher.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is receptive to ideas about	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

how to improve teaching in the department.

Is tolerant of fluctuations in student evaluations when instructors are trying to improve their teaching.

Is willing to seek creative solutions to budgetary constraints in order to maintain adequate support for teaching improvements.

Q8. If you could change ONE element of your department to better support teaching improvement, what would it be?

Block 4: Social Networks

The following questions will ask you about interactions with others in your department. The purpose of these questions is to understand how members of the department interact with one another (e.g., what subgroups exist). All names will be removed in final representations of the data, so each member of the network will not be identifiable.

For each question, please list the full names of all relevant department members (e.g., faculty, staff, students), separated by commas.

Why are we asking for names? (click to expand)

This text goes in a collapsible "click to expand" box: We are asking for names as they are required for Social Network Analysis (SNA). SNA produces representations of individuals in a community (points) and connections between them (lines). This analysis will help us understand the structure of connections within a department and make comparisons across departments. SNA is now becoming a common method in the study of academic departments. While names are required to construct network graphs, once the graphs are generated, they are independent of the individual names provided, and thus become anonymous.

Q9. I discuss making changes about undergraduate education in the department with the following department members (list full names):

Q10. I also discuss making changes about undergraduate education with the following people outside of the department [list full name, role (e.g., spouse, mentor/advisor), and institution (e.g., MIT)]:

Q11. I consider the following department members to be influential in the department (list full names):

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Q12. You may use the space provided to elaborate on your answers or to make any additional comments.

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Block 5: Core Commitments

The following statements focus on undergraduate education and governance in your department. For each statement, first think about how well the prompt characterizes the current state of the department you work in. Then, think about how well the prompt characterizes your ideal department (i.e. the one that you think would be most effective for undergraduate education).

Q13. Students actively contribute to departmental decision-making around undergraduate education.

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Current department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ideal Department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q14. Faculty and staff actively seek out student input about the department on an ongoing basis.

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Current department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ideal Department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q15. Students see themselves as having a say in how departmental decisions are made.

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Current department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ideal Department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q16. Department members use a shared vision to guide work aimed at achieving change.

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Current department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ideal Department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q17. The process of developing the department's vision includes a diversity of relevant stakeholders.

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Current department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ideal Department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q18. The department revisits and updates its vision over time.

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Current department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ideal Department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q19. The department collects multiple forms of evidence about undergraduate education on an ongoing basis.

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Current department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ideal Department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q20. Data collection, analysis, and interpretation inform departmental decision-making about undergraduate education.

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Current department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ideal Department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q21. Department members actively and regularly identify and avoid bias (e.g., confirmation bias, relying on anecdote) when interpreting data about undergraduate education.

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Current department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ideal Department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q22. All department members are collaborators with equitable access to contribute to decision-making.

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Current department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ideal Department (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q23. The department develops community through activities such as eating together and having celebrations.

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Current department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ideal Department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q24. Department members interact with one another in functional and productive ways.

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Current department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ideal Department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q25. Department members view change as an ongoing process rather than an event (e.g., they believe that complex problems require continued attention to stay solved).

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Current department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ideal Department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q26. When making changes to the department, department members explicitly attend to the long-term sustainability of those changes.

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Current department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ideal Department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q27. Department members regularly reflect on how the department can be improved.

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Current department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ideal Department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q28. The department intentionally recruits a diverse membership (e.g., with respect to gender identity, race, ethnicity).

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Current department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ideal Department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q29. Department members consider the impact of their decisions on underrepresented populations.

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Current department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ideal Department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q30. Department members feel a sense of personal responsibility toward improving inclusion in the department.

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
Current department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ideal Department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q31. You may use the space provided to elaborate on your answers or to make any additional comments.

Block 6: Demographics

Why are we asking for demographic information? (click to expand)

This text goes in a collapsible “click to expand” box: Within our project, we plan to report aggregated demographic information. In the future, this will enable comparisons between our study and other contexts with different demographics. This will also enable meta-studies of research contexts and participant populations in the education literature. We choose to allow participants to self-identify their demographic information, to allow for a broader range of responses than would be available from a pre-selected set of options.

Q32. What is your gender?

Q33. What is your ethnicity?

Q34. Do you identify as LGBT+? (If you are comfortable, please specify)

Q35. Do you have a disability? (If you are comfortable, please specify)

Q36. Are you a veteran? (If you are comfortable, please specify)

Q37. Are there other aspects of your identity that you wish to share?

Q38. Would you feel comfortable participating in an interview about your experiences in the department?

- Yes
- No