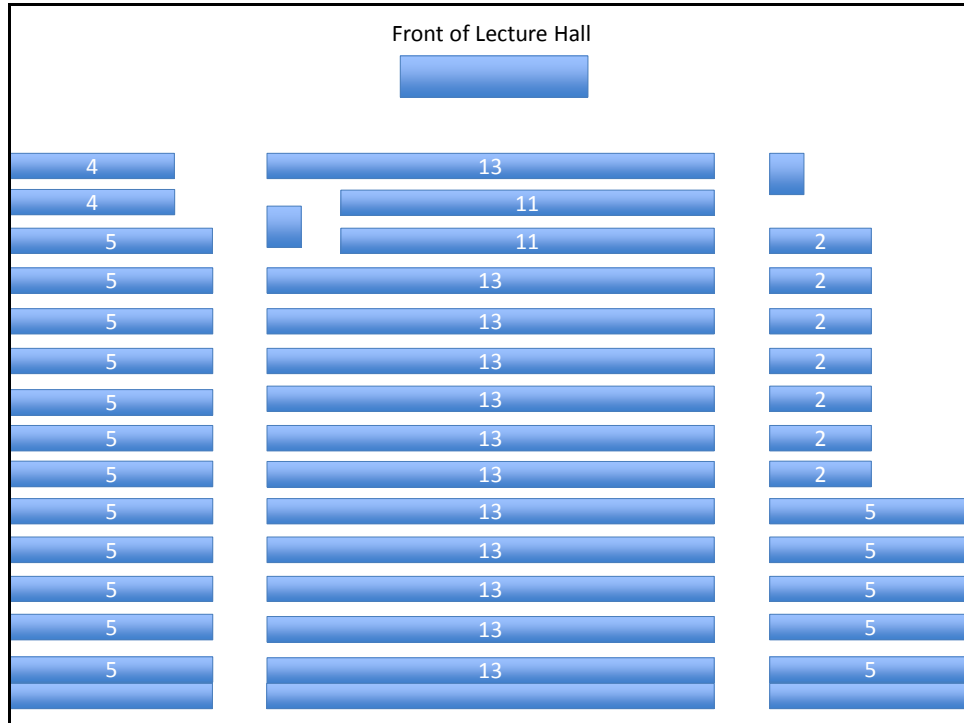


# Supplemental Material

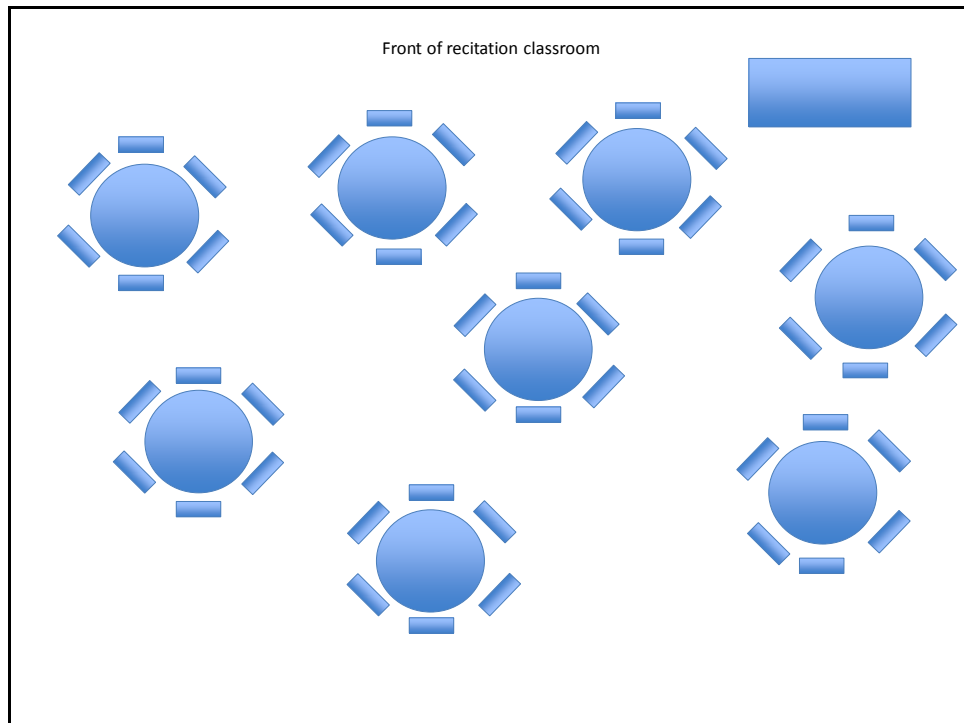
*CBE—Life Sciences Education*

Cooper *et al.*

## Layout of lecture hall



## Layout of scale-up recitation classroom



## Pre course survey

1. Is this your first semester taking a large enrollment biology course at this institution? A large enrollment biology course refers to a course with 50 students or more.
  - Yes
  - No

If students answered no, they were asked to answer the following question

2. Considering all large enrollment biology courses that you have previously been enrolled in at this institution, how likely is it that your professor knew your name during the course?

very unlikely                  unlikely                  likely                  very likely

All students were asked the following demographic questions:

3. I most closely identify as
  - Female
  - Male
  - Other (please describe) \_\_\_\_\_
  - Decline to state
4. I most closely identify as a
  - First generation college student whose parents' highest level of education is a high school diploma or less
  - Non-first generation college student (at least one parent has some college)
  - Non-first generation college student (at least one parent has finished college)
  - Decline to state
5. I most closely identify as
  - American Indian or Alaska Native
  - Asian/Pacific Islander
  - Black or African American
  - Hispanic, Latino, or Spanish origin
  - White/Caucasian
  - Other (please describe) \_\_\_\_\_
  - Decline to state

## Post course survey

1. Which of the following instructors do you think knows your name? If you think they know your name, how do you think they learned your name? Please circle all that apply.

Instructor A. If so, how?

Instructor B. If so, how?

2. Please explain why instructors knowing your name is or is not important to you.

## **Interview questions**

1a. Do you think that Instructor A cares about your success in this course? Please explain why or why not.

1b. Do you think that Instructor B cares about your success in this course? Please explain why or why not.

2a. Do you think that Instructor A built relationships with students? If so, how?

2b. Do you think that Instructor B built relationships with students? If so, how?

3a. Do you think that Instructor A built a classroom community? If so, how?

3b. Do you think that Instructor B built a classroom community? If so, how?

4a. Do you think that Instructor A structured the class so that all individuals could succeed? If so, how?

4b. Do you think that Instructor B structured the class so that all individuals could succeed? If so, how?

5a. Do you think that Instructor A cares about your success after this course? Please explain why or why not.

5b. Do you think that Instructor B cares about your success after this course? Please explain why or why not.

6a. Do you think that Instructor A knew your name? If so, how do you think they learned your name?

6b. Do you think that Instructor B knew your name? If so, how do you think they learned your name?

7. Please explain why instructors knowing your name is or is not important to you.

8. What is your opinion of the name tents?

**Supplemental Table 1.** Student reasons as to why having their names known by an instructor is important to them were coded into nine categories.

<b>Category</b>	<b>Description of category</b>
<b>Student feels more valued</b>	Student states that an instructor knowing their name makes them feel valued as an individual, that they are an important part of the class, that they are not just a “number to grade,” or that they are not just a “face in the crowd”
<b>Student feels more invested in the course</b>	Student states that they are more willing to go to class, they want to pay attention more in class, they do not want to disappoint instructors, or they feel more accountable for their performance in the course when an instructor knows their name
<b>Student feels more comfortable getting help</b>	Student states that when an instructor knows their name they feel more comfortable or more likely to ask questions, attend office hours, or seek help with course content
<b>Student feels more comfortable talking to the instructor</b>	Student reports that when an instructor knows their name they feel more comfortable or more likely to talk with the instructor(s) about topics unrelated to content such as schedule conflicts or concerns
<b>Student feels enhanced performance in the course or confidence in the material</b>	Student states that an instructor knowing their name helps them learn better, increases their confidence in the material they have learned, or improves their performance in class
<b>Student feels an instructor cares</b>	Student states that an instructor knowing their name shows that the instructor cares about student success, has interest in their education, or wants the student to do well in the course.
<b>Student feels it builds student-instructor relationships</b>	Student reports that the instructor knowing their name builds a more personal relationship between the student and instructor
<b>Student feels it builds classroom community</b>	Student reports that when an instructor knows their name the class feels smaller and more comfortable or they feel more like a part of the class or member of the classroom community.
<b>Student feels that instructors are more likely to provide student with letter of recommendation or mentoring</b>	Student states that instructors knowing their name helps when asking for recommendation letters, research opportunities, career advice, or mentorship.

**Supplemental Table 2.** Student perceptions of how instructors learned their name categorized into students whose names were actually known by the instructor and students who perceived their names were known, but were not actually known by an instructor<sup>a,b</sup>

<b>Student perception of how instructors learned their name</b>	<b>% Responses of students with name known (n=88)</b>	<b>% Responses of students who perceive name is known, but is not (n=45)</b>
Name tents	45.5%	46.7%
Interactions during class	36.4%	28.9%
Interactions during recitation	10.2%	17.8%
Interactions before or after class	12.5%	11.1%
Sitting near the front of the classroom	6.8%	4.4%
Student attends office hours	40.9%*	20.0%*
Email exchange between student and instructor	10.2%	17.8%
Student attends journal club for honors students	8.0%	4.4%
Extenuating circumstances	3.4%	11.1%
Student was previously known by an instructor	6.8%	0.0%

<sup>a</sup> There were no significant differences in how the two groups of students perceived their names were learned by the instructor with one exception. Significantly more students whose names were actually known by an instructor ( $p = 0.02$ ) perceived that their names were learned in office hours, compared to the students whose names were not actually known by an instructor.

<sup>b</sup>\* Denotes a statistical difference ( $p < 0.05$ ) between the percentage of students who perceived their names were known and were actually known by an instructor, and the percentage of students who perceived their names were known but were not actually known by an instructor.

**Supplemental Table 3.** Results of logistic regression exploring the impact of students perceiving that their names were known at the end of the semester on overall exam performance in the course.<sup>a</sup>

	Regression coefficient $\pm$ SE	p value <sup>b</sup>
Intercept	197.1 $\pm$ 16.4	<b>&lt;2e-16</b>
Student perception of having their name known Reference level: name not known	3.7 $\pm$ 0.78	0.641
Prior GPA	57.0 $\pm$ 11.4	<b>&lt;2e-16</b>

<sup>a</sup>We ran a linear model to determine whether a student's total exam points (500 possible exam points) was predicted by student perception of whether an instructor of the course knew their name, controlling for prior GPA. We found that student perception of whether an instructor knew their name did not significantly predict their total exam points.

<sup>b</sup>Bolded *p* values are significant.