



Supplemental Materials

for

In a “Scientist Spotlight” Intervention, Diverse Student Identities Matter

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RELEVANT PRE- AND POST-COURSE SURVEY ITEMS

Science Confidence Items (pre- and post-course surveys)

Please rate your level of confidence in your abilities to do each of the following.

	Not Confident	Slightly Confident	Mostly Confident	Very Confident
Understand and evaluate scientific literature (i.e. papers written by scientists published in scientific journals).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Analyze a set of observations, tables, or graphs to identify possible patterns.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pose questions about the observations that can be answered with an experiment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Develop a hypothesis related to a question that has been posed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Design a well-controlled experiment to test a hypothesis.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Make predictions about the results I could expect to get from an experiment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Collect, organize, and display the results of an experiment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Use statistics or other appropriate methods to analyze the results of an experiment.

Draw conclusions about a hypothesis based on the results of the experiment (taking into account possible sources of error in the experiment).

Explain an experiment, the results, and analysis orally.

Explain an experiment, the results, and analysis in writing.

Science Identity Item (pre- and post-course surveys)

People are complex! How well do the following describe the way you think of yourself?

	Not at all like me	Not much like me	Mostly like me	Very much like me
A Science Person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Questions about the Science Culture Quizzes in Biology 1003 (post-course survey only)

Did you read or listen to the podcasts?

- a. I read them
- b. I listened to them
- c. I read some and listened to some
- d. I read and listened at the same time
- e. I did not read or listen to any of the podcasts

Recall the Science Culture quizzes from this semester. I've included names and some keyword prompts below. Please comment on the level to which you were engaged by each podcast.

Rayshawn Ray (sociologist, Philando Castile, police bias training)

Marcelo Sayao (ecologist, cervical cancer, religion)

Jennifer Colbourne (evolution, religion)

Bill Harwood (police officer, forensics, chemist)

Rabiah Mayas (molecular biology, identical twin)

Neer Asherie and Deborah Berebichez (physicists in love)

Joe Normandin (neurobiology, biology of homosexuality)

Veronica Ades (obstetrician-gynecologist, South Sudan)

Wendy Suzuki (neuroscientist, prairie voles, acting)

Column options: I did not listen to or read this podcast/not at all engaging/minimally engaging/somewhat engaging/very engaging/among the most engaging

Please select the one (or one of the ones) that you found most engaging, and comment on what, specifically, about that podcast engaged you.

For whatever reason or reasons, which of the following podcasts did you connect with, or relate to, the most?

Rayshawn Ray (sociologist, Philando Castile, police bias training)

Marcelo Sayao (ecologist, cervical cancer, religion)

Jennifer Colbourne (evolution, religion)

Bill Harwood (police officer, forensics, chemist)

Rabiah Mayas (molecular biology, identical twin)

Neer Asherie and Deborah Berebichez (physicists in love)

Joe Normandin (neurobiology, biology of homosexuality)

Veronica Ades (obstetrician-gynecologist, South Sudan)

Wendy Suzuki (neuroscientist, prairie voles, acting)

Column options: I did not listen to or read this podcast/not at all relatable/minimally relatable/somewhat relatable/very relatable/among the most relatable

Please explain your answer to the question above.

Did listening to these podcasts change how you view *scientists*?

Not at all/minimally/somewhat/significantly/extremely

Please explain your answer to the question above.

Did listening to these podcasts change how you view *science* in general?

Not at all/minimally/somewhat/significantly/extremely

Please explain your answer to the question above.

Did you find this aspect of the course (“science culture”) valuable?

Not at all valuable/somewhat valuable/very valuable/among the most valuable aspects of the course

Please explain your answer to the question above.

Student Identities (post-course survey only)

What best describes your commute to campus? (Select all those that apply)

- I live on campus
 - I live within 1 mile of campus
 - I live within 5 miles of campus
 - I commute from within the Twin Cities
 - I commute from outside the Twin Cities
-

Which best describes your living situation?

- I live by myself
 - I live with other students
 - I live with my family
-

Which of the following terms best describes your sexual orientation?

- Gay
 - Lesbian
 - Bisexual
 - Queer
 - Bi-curious
 - Asexual
 - Straight
 - Pan
 - Prefer to self-identify: _____
-

To what extent do you consider yourself a religious person? Are you...

- Very religious
 - Moderately religious
 - Slightly religious
 - Not religious at all
 - Don't know
-

To what extent do you consider yourself a spiritual person? Are you...

- Very spiritual
 - Moderately spiritual
 - Slightly spiritual
 - Not spiritual at all
 - Don't know
-

Which of the following most closely describes your political affiliation?

- Very conservative
- Conservative
- Middle of the road
- Liberal
- Very Liberal
- I am not political
- Other (please specify) _____

THANKS FOR YOUR TIME!