

Supplemental Material

CBE—Life Sciences Education

Bauer *et al.*

Growth Mindset Inventory (Dweck, 1999)

For statements 1-16 of this survey, please show how much you agree or disagree with each "mindset" statement by clicking on the letter that corresponds to your opinion:

- A. Strongly disagree
- B. Disagree
- C. Mostly disagree
- D. Mostly agree
- E. Agree
- F. Strongly agree

1. You have a certain amount of intelligence, and you can't really do much to change it.
2. Your intelligence is something about you that you can't change very much.
3. No matter who you are, you can significantly change your intelligence level.
4. To be honest, you can't really change how intelligent you are.
5. You can always substantially change how intelligent you are.
6. You can learn new things, but you can't really change your basic intelligence
7. No matter how much intelligence you have, you can always change it quite a bit.
8. You can change even your basic intelligence level considerably.
9. You have a certain amount of talent, and you can't really do much to change it.
10. Your talent in an area is something about you that you can't change very much.
11. No matter who you are, you can significantly change your level of talent.
12. To be honest, you can't really change how much talent you have.
13. You can always substantially change how much talent you have.
14. You can learn new things, but you can't really change your basic level of talent.
15. No matter how much talent you have, you can always change it quite a bit.
16. You can change even your basic level of talent considerably.

Biology Self-Efficacy Instrument (select items from Baldwin et al., 1999)

For statements 17-39, think about how confident you would be in carrying out a given task and click on the appropriate letter. There are not right or wrong answers. These are just your own thoughts and feelings about these topics.

- A. If you are TOTALLY CONFIDENT that you can do the task.
 - B. If you are VERY CONFIDENT that you can do the task.
 - C. If you are FAIRLY CONFIDENT that you can do the task.
 - D. If you are ONLY A LITTLE CONFIDENT that you can do the task.
 - E. If you are NOT AT ALL CONFIDENT that you can do the task.
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- 17. How confident are you that after reading an article about a biology experiment, you could write a summary of its main points?
 - 18. How confident are you that you could critique a laboratory report written by another student?
 - 19. How confident are you that you could write an introduction to a lab report?
 - 20. How confident are you that after reading an article about a biology experiment, you could explain its main idea to another person?
 - 21. How confident are you that you could read the procedures for an experiment and feel sure about conducting the experiment on your own?
 - 22. How confident are you that you could write the methods section of a lab report (i.e. describe the experimental procedures)?
 - 23. How confident are you that after watching a television documentary dealing with some aspect of biology, you could write a summary of its main points?
 - 24. How confident are you that you will be successful in this biology course?
 - 25. How confident are you that you could write up the results to a lab report?
 - 26. How confident are you that after watching a television documentary dealing with some aspect of biology, you could explain its main ideas to another person?
 - 27. How confident are you that you will be successful in another biology course?
 - 28. How confident are you that you could write the conclusion to a lab report?
 - 29. How confident are you that after listening to a public lecture regarding some biology topic, you could write a summary of its main points?
 - 30. How confident are you that you would be successful in an ecology course?
 - 31. How confident are you that you could analyze a set of data (i.e., look at relationships between variables)?
 - 32. How confident are you that after listening to a public lecture regarding some biology topic, you could explain its main ideas to another person?
 - 33. How confident are you that you would be successful in a human physiology course?

34. How confident are you that you could tutor another student on how to write a lab report?
35. How confident are you that you could critique an experiment described in a biology textbook (i.e., list its strengths and weaknesses)?
36. How confident are you that you could tutor another student for this biology course?
37. How confident are you that you could ask a meaningful question that could be answered experimentally?
38. How confident are you that you could explain something that you learned in this biology course to another person?
39. How confident are you that you could use a scientific approach to solve a problem at home?