Supplemental Material CBE—Life Sciences Education

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Appendix A: Teaching Practices Items

- 1. The course has an assignment taking longer than two weeks and involving some degree of student control in choice of topic or design (such as paper or project).
- 2. I use student feedback (and results) to improve course delivery.
- 3. Assignments describe clear criteria for successful completion.
- 4. The final exam is less than 61% of the final grade.
- 5. I assure that students receive feedback on homework assignments and quizzes.
- 6. When I try new methods or materials, I evaluate objectively the effectiveness of the change.
- 7. I compare student performance across sections and/or semesters to improve course delivery.
- 8. Most class sessions include small group work or problem solving activities.
- The fraction of typical class period spent lecturing (presenting content, deriving results or presenting a problem solution) is less than 60%.
- 10. I provide course information to students that lists topic-specific competencies (skills, expertise, outcomes) that students should achieve (what students should be able to do).
- 11. I employ distinct activities that encourage students to make connections between the course material and their own lives
- 12. I ask students to evaluate and reflect on their own learning and study habits.
- 13. I assign multiple homework assignments or problem sets that (in total) contribute significantly to the course grade.
- 14. I assure that students receive feedback on low-stakes assignments or quizzes before they are tested or evaluated on their command of the material/skill.

- 15. I have students engage in reflective activities at the end of class, e.g. "one minute paper" or similar (students briefly answering questions, reflecting on lecture and/or their learning, etc.).
- 16. I provide students easy access to exam answer keys.
- 17. I employ distinct activities that help students evaluate their own learning and learn more effectively.
- 18. I provide students with opportunities that give them some control over their learning, such as choice of topics for course, paper, or project, choice of assessment methods, etc.
- 19. I encourage and facilitate students working collaboratively on their assignments.
- 20. Students receive feedback with an opportunity to revise or redo work to improve grade on major assignments.
- 21. Students see graded midterm exams/papers.
- 22. I assign students material for the upcoming class session and have them complete assignments or quizzes on it before or at beginning of class.
- 23. I employ distinct activities that can be used to improve student motivation and interest in the course materials.