

# Supplemental Material

*CBE—Life Sciences Education*

DeChenne *et al.*

**Note:** The original survey contained all the items below (blue and black). Black items were used in the analysis for this study. Those items dropped from the final analysis of this study are in blue. The dropped items are generally instruments not used in this study or items that did not load correctly (see manuscript text and DeChenne, Enochs, & Needham, 2012).

### **Modeling Factors for GTA Teaching Effectiveness**

Please fill in your complete name on the first side of the scantron using a number 2 pencil. We will assigned you an identifying number to keep the information provided by you and your students linked together. No one but the researchers will have access to that information. Your responses are completely confidential.

The questions on these five pages are about your relationship with your peers and your supervisor, teaching in your department, your facility with American English and customs, your confidence in your teaching skills and abilities, your TA training, and your teaching experience. Please fill in the corresponding bubble on page 2 of the scantron sheet for each question using a number 2 pencil.

Please rate the occurrence of the statements below on a scale from A to E: A=Rarely Occurs to E=Very Frequently Occurs. Fill in the letter on the scantron that best reflects the occurrence of the statement.

Supervisor refers to the person who is directly involved in supervising the teaching assistants.

GTA refers to graduate teaching assistant.

TA refers to teaching assistant.

1. GTAs help and support each other.
2. During meetings the supervisor explores all sides of a topic and admits that other opinions exist.
3. The supervisor treats all GTAs equitably.
4. GTAs respect the teaching competence of the other TAs.
5. The supervisor puts suggestions made by the GTAs into operation.
6. GTAs in this school exercise professional judgment.
7. GTAs accomplish their jobs with enthusiasm.
8. The supervisor is friendly and approachable.
9. The interactions between the GTAs are cooperative.
10. The supervisor is willing to make changes.
11. GTAs provide strong social support for other TAs.
12. The supervisor lets GTAs know what is expected of them.
13. The supervisor maintains definite standards of performance for the GTA.
14. GTAs “go the extra mile” with their students.

Please rate your agreement with the statements below on a scale from A to E: A=strongly disagree to E=strongly agree. Fill in the letter on the scantron that best reflects your agreement with the statement.

Supervisor refers to the person who is directly involved in supervising the teaching assistants.

Department refers to the department in which you are a TA.

15. The department is supportive of innovations that TAs wish to try in their teaching.
16. In the department, when a TA suggests an idea/procedure to enhance teaching, they are discouraged from pursuing them.
17. The department encourages TAs to experiment with newly learned teaching methods.
18. The department provides sufficient resources for me to be successful in carrying out my job (e.g. equipment, secretarial help, mentors, etc.)
19. Constantly changing teaching policies/procedures make it difficult for me to implement ideas learned in TA training.
20. In the department, TAs have freedom to conduct their teaching as they wish.
21. The department prefers that TAs use teaching strategies with which the department is familiar.
22. TA work in the department is often postponed until the last minute.
23. The department provides sufficient time to use newly learned teaching skills.
24. In the department, rules/administrative details make it difficult for new ideas of TAs to receive consideration.

Please rate the truth of the statements below on a scale from A to E; A=False, B=Partly False, C=Equally True and False, D=Partly True to E=True. Fill in the letter on the scantron that best reflects the truth of the statement.

25. I attend social functions with (Anglo) American people.
26. I speak English at home.
27. I know how to prepare (Anglo) American food.
28. I am familiar with important people in American history.
29. I think in English.
30. I speak English with my spouse or partner.
31. I feel totally comfortable with (Anglo) American people.
32. I understand English, but I'm not fluent in English.
33. I am informed about current affairs in the United States.
34. I like to eat American foods.
35. I regularly read an American newspaper.
36. I feel comfortable speaking English.
37. I feel at home in the United States.
38. I feel accepted by (Anglo) Americans.
39. I have many (Anglo) American acquaintances.

Please indicate how confident you are in your ability to accomplish the stated activities, from A=no confidence to E=complete confidence. Fill in the letter on the scantron that best reflects your confidence level.

How confident am I  
in my ability to...

- |   |
|---|
| <p>40. Specify the learning goals that I expect my students to attain?</p> <p>41. Actively engage my students in the learning activities that are included the teaching plan/syllabus?</p> <p>42. Create a positive classroom climate for learning?</p> <p>43. Promote student participation in my classes?</p>   |
| <p>44. Prepare the teaching materials I will use?</p> <p>45. Promote a positive attitude towards learning in my students?</p> <p>46. Evaluate accurately my students' academic capabilities?</p> <p>47. Ensure that my students consider themselves capable of learning the material in the course?</p>   |
| <p>48. Clearly identify the course objectives?</p> <p>49. Maintain high academic expectations?</p> <p>50. Appropriately grade my students' exams/assignments?</p> <p>51. Think of my students as active learners, which is to say knowledge builders rather than information receivers?</p>   |
| <p>52. Provide support/encouragement to students who are having difficulty learning?</p> <p>53. Stay current in my knowledge of the subject I am teaching?</p> <p>54. Provide my students with detailed feedback about their academic progress?</p> <p>55. Calmly handle any problems that may arise in the classroom?</p>  |
| <p>56. Develop my teaching skills using various means (attending conferences, reading about teaching/learning, talking to other teaching assistants...)?</p> <p>57. Encourage my students to ask questions during class?</p> <p>58. Make students aware that I have a personal investment in them and in their learning?</p> <p>59. Evaluate the degree to which the course objectives have been met?</p> |
| <p>60. Let students take initiative for their own learning?</p> <p>61. Show my students respect through my actions?</p> <p>62. Be flexible in my teaching even if I must alter my plans?</p> <p>63. Make students aware of the relevance of what they are learning?</p>   |
| <p>64. Promote my students' confidence in themselves?</p> <p>65. Spend the time necessary to plan my classes?</p> <p>66. Select the appropriate materials for class activities?</p> <p>67. Encourage the students to interact with each other?</p>  |

For following two questions please indicate how effective your TA training was from A to E; A=Not effective and E=Very Effective. Fill in the letter on the scantron that best reflects your answer.

- 68. Overall, how effective has the TA training you have received been in preparing you to teach?
- 69. Overall, how effective has the TA training you have received been in preparing you to work with students?

Of the following teaching topics and skills, please rate how well you have learned these in TA training from A to E; A=Never Learned to E=Learned Well. Fill in the letter on the scantron that best reflects your answer.

- 70. Grading
- 71. Presenting material to a large group of students
- 72. Motivating students
- 73. Interacting professionally one-on-one with your students
- 74. Assisting distressed students
- 75. Teaching students with different skill/knowledge levels
- 76. Power/authority relationships in the classroom
- 77. Communicating with course lead instructor
- 78. Managing disruptive students
- 79. Facilitating group discussions
- 80. Learning styles
- 81. Teaching culturally diverse students
- 82. Harassment
- 83. Teaching styles
- 84. Developing quizzes/exams

For questions 85 to 87 please fill in the letter on the scantron that best reflects your answer.

<p>85. For the course in which you had the most responsibility as a TA, how much responsibility did you have?</p>	<p>Answer from A to E; A=No Responsibility to E =Complete Responsibility</p>
<p>86. Compared to other TAs in your department how much teaching experience do you have?</p>	<p>Answer from A to E; A=Less Experience to E=More Experience</p>
<p>87. How would you rate your own teaching experience?</p>	<p>Answer from A to E: A=Beginner to E = Expert</p>

This page contains information that will be entered later. Circle the answer or fill in the blank as required on this sheet (not on the scantron.) Please fill in your full name again as indicated in question 88 so that this information can be linked to your scantron later.

88. What is your full name? \_\_\_\_\_

Please circle the appropriate answer.

89. Gender	Male	Female
90. What degree are you pursuing?	MS	PhD
91. Are you interested in an academic teaching career?	Yes	No

For questions 92 to 98 please fill in the blank on this sheet for each question. Please use 0 if you have never done what is asked in the question.

92. Including this quarter/semester, how many quarters/semesters have you been a TA at all institutions you have attended?

\_\_\_\_\_ 10 week quarters

\_\_\_\_\_ 15 week semesters

93. For how many different courses have you been a TA at all institutions you have attended?

I have been a TA for \_\_\_\_\_ different courses.

94. How many years have you been a K-12 teacher?

I have been a K-12 teacher for \_\_\_\_\_ years.

95. How many years have you been a college instructor, other than as a TA?

I have been a college instructor for \_\_\_\_\_ years.

96. Please estimate the number of hours you have spent in the following types of TA training in all institutions you have attended.

\_\_\_\_\_ Hours university-wide training

\_\_\_\_\_ Hours departmental training

\_\_\_\_\_ Hours in course(s) for college/university credit

\_\_\_\_\_ Hours in other TA training (please specify) \_\_\_\_\_

97. What is your country of citizenship? \_\_\_\_\_

98. In which department are you pursuing your degree? \_\_\_\_\_