Supplemental Material CBE—Life Sciences Education

Schussler et al.

Supplemental Materials

GTA Professional Development Survey Text Questions used in the analyses are marked with an asterisk (*)

BIOLOGY GRADUATE TEACHING ASSISTANT PROFESSIONAL DEVELOPMENT PRACTICES

** To be answered by the person or persons at your institution with the best understanding of how *biology* graduate teaching assistants are prepared for their teaching duties. Please forward the survey to that person if it is not you! Also feel free to pass this survey on to those at other institutions who prepare biology GTAs to teach!

General Information

- *1. Your name
- *2. Your job title
- *3. Select type

Faculty Staff

- *4. Your institution
- *5. Department, program, course(s) you represent (if applicable)
- *6. What is the extent of the biology GTA professional development program you are responsible for? Check all that apply.

Institution-wide
College-wide
Multiple departments in the sciences
Department (or division)-wide
Specific course or courses within a department
Course(s) covered (if applicable) (open response)

*7. If you prepare GTAs for a course or lab at your institution, what level is the course or courses?

Introductory
Upper-level
Both introductory and upper-level
Not applicable

*8. What is the nature of the labs or courses that you prepare GTAs for? Select all that apply.

"Cookbook" or technique-intensive Guided-inquiry Open-inquiry Not applicable Other (please specify)

Professional Development Details

*9. What programs for biology GTA professional development are offered at your institution or department? Select all that apply, specifying whether participation in the program is mandatory or optional.

For each option below:

Not offered Offered, participation mandatory Offered, participation optional Uncertain about availability

For each option, total length of session(s):

Less than 2 hours 2-5 hours 6-10 hours 10-20 hours more than 20 hours variable unknown

Options:

Institution-wide (or college-wide) pre-semester seminar or orientation
Department-wide pre-semester seminar or orientation
Pre-semester orientation for a specific course or courses
Institution-wide teaching workshops or seminars during semester
Departmental teaching workshops or seminars (outside of lab prep meetings)
during semester

Institutional teaching certification (or other designation) program for GTAs Professional development offered as part of regular lab preparation meetings Clarifications of any of the above responses (open response)

*10. How many hours of professional development do biology GTAs participate in per year, at minimum, at your institution? (open response)

*11. What topics are your GTAs currently taught about at their various professional development activities or what do you wish they were taught about? You may select both options if you think that your current offering could be improved. Please provide additional information in the "other" box as necessary.

For each, select:

What is provided and/or What you WISH were provided or improved

Options:

Policies for teaching

Classroom management

Student learning theory

How to teach specific course content (biological concepts)

Specific teaching techniques (leading discussions, asking questions, writing quiz questions)

Planning and designing lessons

Other (please specify)

*12. What other programs or resources does your department provide for biology GTA support and development? Select all that apply.

For each option:

Not offered

Offered, participation mandatory

Offered, participation optional

Options:

Peer mentoring program in which experienced GTAs meet with newer GTAs Peer mentoring program using online forums or blogs

Faculty mentoring program in which university faculty mentor GTAs about their teaching

Supervision or observation of GTAs in the classroom or lab, with feedback provided to GTAs

Discussion of, or feedback about, student course evaluation results (midsemester or end of semester)

Clarifications or other support programs (open response)

Institution and GTA-specific contextual factors

13. We are interested in the "contextual factors" that may differ at institutions and impact GTA teaching. What is the status of these four factors at your institution?

For each option:

Yes, they have this Sometimes

No, they do not have this

Options:

GTA choice in teaching assignment

GTA consistency in teaching assignment

GTA autonomy over the content and manner of teaching

GTA teaching support from faculty, administrators, and/or peers

Clarifications or other factors that affect Biology GTA teaching at your institution (open response)

14. How do these four factors impact GTA instruction at your institution?

For each option:

Positively

Negatively

Variable

Options:

GTA choice in teaching assignment

GTA consistency in teaching assignment

GTA autonomy over the content and manner of teaching

GTA teaching support from faculty, administrators, and/or peers

Other factors? (open response)

Evaluating and improving GTA professional development

*15. What assessment tools are used at your institution to evaluate the effectiveness of biology GTA professional development programs? Check all that apply.

Surveys of GTAs assessing their satisfaction with professional development programs Student surveys evaluating GTA teaching

Observation of GTA instruction

Unknown or not applicable

Other assessments (open response)

- *16. What assessments of GTA professional development do you think need to be available to those who run these programs? (open response)
- *17. How would you characterize the level of support from the department and administration for Biology GTA professional development programs at your institution, and your overall level of satisfaction with the program(s)?

Choices for each option: Very low, Low, Average, High, Very high

Options:

Level of support for Biology GTA professional development at your institution Your overall satisfaction with the Biology GTA professional development at your institution

Comments? (open response)

- *18. In one sentence, what single thing are you most proud of about how biology GTA professional development is done at your institution? (open response)
- *19. In one sentence, what single change would you make that would improve GTA professional development at your institution, if time and money were no object? (open response)
- 20. Next year, the steering committee will be submitting a funding proposal for a five-year research coordination network on GTA professional development. Would you be interested in this, and if so, what would you find most helpful, including resources, conferences, contacts, or other ideas, for improving GTA professional development at your institution? (open response)
- 21. Thank you for participating in our survey! May we list you as part of our GTA professional development network? We would send you the compiled results of this survey and occasionally keep you informed about other resources.

Yes, please (provide an e-mail contact) No, thanks