Teaching Assistant Professional Development by and for TAs

Natasha G. Holmes, University of British Columbia, Vancouver, BC
Matthew "Sandy" Martinuk, Cognition Technology
Joss Ives, University of the Fraser Valley, Abbotsford, BC
Mya Warren, Center for Theoretical Biological Physics, University of California–San Diego, La Jolla, CA

In most large universities, much of the undergraduate teaching responsibility falls on graduate student teaching assistants (TAs), who are by then experienced students, but relatively inexperienced instructors. Institutions have a responsibility to offer quality instruction to undergraduate students and thus are responsible for preparing the TAs to teach. Unfortunately, many TA training programs fall short of effectively improving TAs' teaching skills because they lack sufficient practical skills training, opportunities for practice and feedback, and follow-up.[1] This paper describes a year-round TA professional development program that addresses these shortcomings by offering three complementary professional development programs: a core workshop, a mentor program, and a course-specific training program.

First, a core workshop during the first week of term aims to provide the new TAs with practical tools that they can immediately put to use in their classrooms. Many of the new TAs feel nervous about their new role, and this workshop helps to support them through this transition from student to educator. The 10-hour workshop, led by senior-level TAs over two days, is broken up into several modules, including the following:

- ***From Learning to Teaching:*** This module creates buy-in for active learning approaches by exploring TAs' positive and negative learning experiences. Remarkably, TAs almost universally value those learning experiences where they were active participants in their learning, which leads naturally to a discussion of student-centered approaches to teaching.
- ***Teaching by Questioning:*** In this module new TAs analyze videos of TA-student interactions from Maryland's Open-Source Tutorials DVD[4] and practice questioning to learn both the importance of understanding students' thinking and how to use questioning to guide students' learning.
- ***Learning Goals in the Lab:*** This module teaches TAs to mitigate some of the complexities of physics laboratories by clearly communicating the learning goals of each lab. In this module, TAs practice developing measurable, specific, and attainable learning goals that clearly communicate to students what they need to be able to do by the end of a lab activity and begin to develop introductions to present them.
- ***Creating Inclusive Classrooms:*** This module explores the student-TA relationship in the context of culture and identity, and examines how it can affect learning and teaching experiences. Introspective activities followed by a series of TA-focused case studies act as a basis for sensitizing TAs toward their own role in potential issues that may arise in the classroom around race, gender, and culture.

The second program provides course-specific training that starts with a three-hour workshop at the beginning of the term and continues with weekly meetings throughout the year. This program provides further practical teaching techniques, but also focuses on course-specific pedagogical content knowledge. For example a course-specific workshop might focus on effective marking strategies for a particular assessment or research-based teaching techniques used in that course (such as peer instruction). These sessions also provide TAs with an opportunity to reflect on and discuss their teaching with their peers.

Finally, a mentor program provides ongoing opportunities for training, reflection, and personalized feedback. New TAs are paired with a senior mentor TA who works with them individually throughout their first term of teaching. The mentor TA observes the new TA in class and meets with him or her afterward to provide feedback. This aspect of the TAPD program helps shift the training focus away from general tools toward the specific and complex circumstances of each TA's classroom.

As described earlier, the program aims to provide practical tools and ongoing follow-up opportunities, and the first two components of the program are designed to address these aims directly. It was deemed essential for new TAs to get access to concrete skills that they would be able to immediately employ in the classroom and also to provide support for their application throughout the year. If left without feedback and follow-up, new instructors often revert to the teaching methods that they are most familiar with.[5] The ongoing feedback provides the TAs with opportunities for continuous improvement and development of their teaching in practice.

Peer mentoring occurs in all aspects of this program: the workshop developers, workshop facilitators, and mentor TAs are all senior TAs in the department. This collaborative, peer-teaching approach engenders a sense that everyone is "in it together" as they develop a shared interest in teaching, a shared knowledge of teaching, and a shared identity.[2] One new TA expressed the advantages of learning from senior TAs: "I thought it was very helpful to have someone to talk with about TAing who'd once had the same questions and uncertainties as I did this year." The use of senior TAs to develop

and run the program means it is self-sustaining and has created a community of practice for TAs that care about teaching.[3] As an added benefit, participation in running the program also provides unique professional development for the senior TAs as they develop their skills in teaching, workshop development, management, and peer review.

Over all seven years of development and deployment, new TAs have reported that this program is both enjoyable and directly useful. Our department's instructors have also noticed the positive results of this program. One instructor remarked, "I have seen the positive influence of the TA training program. The [course] TAs tried hard to engage the students in class discussions and to get them to think about problems rather than just giving answers. From my perspective, this is very good."

Our year-long program addresses several shortcomings that are common to TAPD programs through focus on practical tools, and ongoing follow-up and feedback. The tructure of our program has also nucleated a teaching community of practice that supports ongoing collaboration, mentoring, and professional development of TAs. We hope this paper inspires other educators, departments, and TAs to engage in similar programs.

For more details on the program components and results of program evaluations, please see the full article online at: http://dx.doi.EPAPS URL.

References

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