

2-Day Summer TA Training Workshop for Geology Graduate Students

Leilani Arthurs and David Budd



Summer 2008 TA Training Workshop

Why have a department-level Summer TA Training Workshop?

The intent was to introduce the teaching assistants to the same best teaching practices that we were asking the faculty to embrace. These include:

- a. define your learning goals,
- b. focus your lecture and activities on accomplishing those goals, and
- c. be innovative in creating an environment where students learn through their own activities and thinking (i.e. don't simply lecture to the students or lead students through a "cookbook" exercise in labs).

The Summer TA Training Workshop was founded on four overarching goals.

- A. Introduce TAs to teaching pedagogy in preparation for this semester and in the future.
- B. Model good teaching practices.
- C. Foster a TA community of learners and future teachers.
- D. Have fun learning about teaching.

The agenda for the Summer 2008 workshop is included below.

Thursday, August 21, 2008

9:00 AM – 10:30 AM *Session 1: Introductions, Learning Experiences, and Teachers*

10:40 AM – 12:30 PM *Session 2: Teacher's Role & How Students Learn*

12:30 PM – 1:30 PM *Lunch*

1:30 PM – 2:50 PM *Session 3: Student Preconceptions & Questioning Tactics and Teaching Goals & Classroom Environment*

3:00 PM – 4:15 PM *Session 4: Bloom's Taxonomy, Learning Goals, and Assessment*

4:25 PM – 5:30 PM *Session 5: Writing Homework & Exam Questions*

Friday, August 22, 2008

9:00 AM – 9:50 AM *Session 6: Writing a Syllabus & a Lesson Plan*

10:00 AM – 12:00 noon *Session 7: Good & Bad Teaching Practices*

12:10 PM – 12:30 PM *Session 8: Introduce GTP Lead TA and Optional Dept'l TA Activities*

12:30 PM – 1:30 PM *Lunch*

1:30 PM – 2:30 PM *Meeting for GEOL 1030 TAs with Dr. Lon Abbott*


Each session followed the same general format or approach, as described below.

- A. Introduce session (i.e. goals & material).
- B. Students work independently on an exercise. Trainer circulates to probe thinking.
- C. Small groups of 2-4 students work on a collaborative follow-up exercise. Trainer circulates to probe thinking and facilitate small group discussion.
- D. Facilitate whole group discussion that addresses the intended take-home message(s) for the session.
- E. Students complete an evaluation form for the session.
- F. Session is followed by a 10-min to 1-hr break.

PowerPoint slides, individual worksheets, and group worksheets were prepared for each session.

BLOOM'S TAXONOMY OF THE COGNITIVE DOMAIN

- Provides a framework for the progressive contextualization of material.



- 1) Knowledge: recall information
- 2) Comprehension: relate information in own words
- 3) Application: use knowledge in new situation
- 4) Analysis: break down knowledge & show relationships among parts
- 5) Synthesis: bring together parts of knowledge to form a whole build relationships for new situations
- 6) Evaluation: Make judgements on the basis of given criteria.

Session 4

Figure 1. (Above) Example of PPT slide used during trainer's introduction to Session 4.

Session 4: Bloom's Taxonomy, Learning Goals, & Assessment

Individual Worksheet #5

1. Learning Goals ...

(a) Title of course you would like to teach in the future:

(b) Three overarching course-level learning goals:

(c) Title of a lecture that you would give for that course:

(d) Three lecture-level learning goals:

Figure 2. (Left) Example of questions on the individual worksheet used during Session 4. Note that some sessions involved more than one individual worksheet.

Student evaluation of the sessions and overall TA Training Workshop indicate that they were helpful.

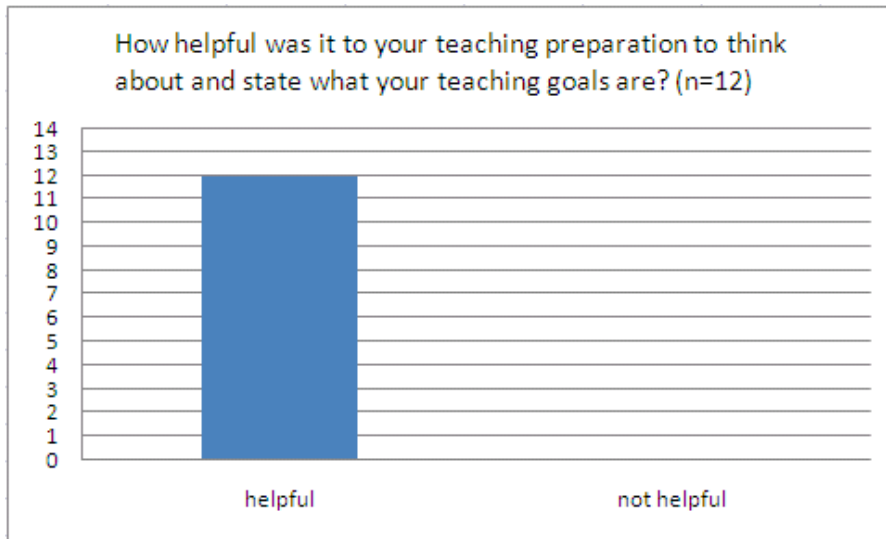


Figure 3. Example of student evaluation.

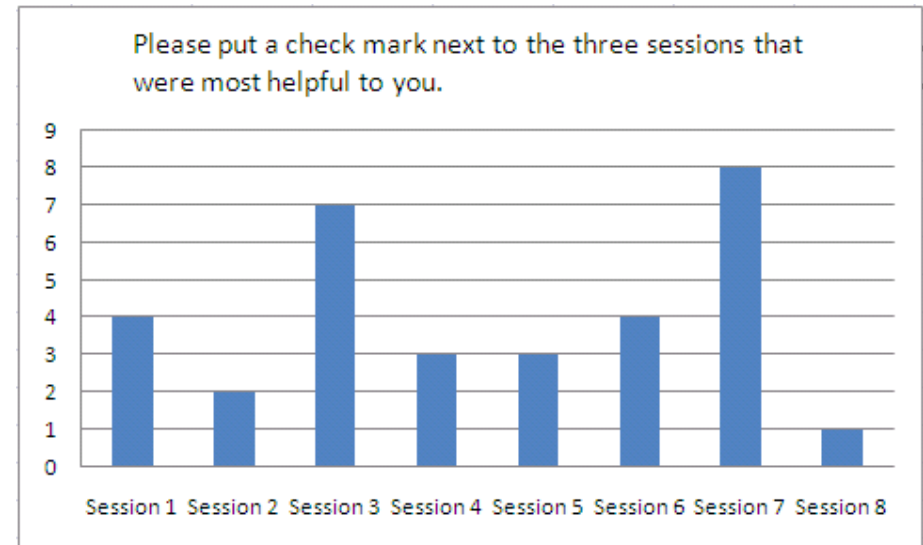


Figure 4. What sessions students found most helpful.

Students had one common suggestion for improving the TA Training Workshop.

- “Having the workshop after meeting with profs would be easier / more helpful.”
- “This would have been more useful after meeting w/ Profs and knowing the expectations for lab and the topics that need to be covered.”
- “Do the workshop after the TAs have a better idea of what they will be teaching.”

Figure 5. In free response comments, all students said that the workshop would have been more helpful if they had discussed their teaching assignments with their professors BEFORE attending the TA training workshop.