

**Development of Teaching Assistant Support Materials and Training
Workshop for the Nicholas School of the Environment and Earth Sciences**
CTLW Graduate Teaching Mini-grant

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The goal of this project entitled “Development of Teaching Assistant Support Materials for the Nicholas School of the Environment and Earth Sciences” was to improve the teaching assistantship (TA) resources in the Nicholas School of the Environment and Earth Sciences. The major products of this grant were: (1) TA orientation for incoming and new TAs, (2) website with TA information, help sheets, and resources, and (3) course surveys and TA evaluations.

One of the goals of this mini-grant was to bridge the gap between the environment, ecology, and earth and ocean science students. Because the environment and ecology students are located in the same building (LSRC), there were strong lines of communication between the graduate students and administration in these two programs. The earth and ocean science students were often separated from the students and activities that took place in the LSRC because of distance and a lack of knowing students. The experience was similar for students in the LSRC that have rarely taken advantage of the resources in Old Chemistry. As a result of this divide, I have been conversing with a number of graduate students in all three programs on how to improve communication between and programs for all the M.S. and Ph.D. students affiliated with the Nicholas School. The beginning of the student collaboration was the TA training in August 2003. These collaborations continued, however, real progress was made when I recently received the verbal support of graduate students in environment, ecology, and earth and ocean sciences to collaborate on the orientation activities for the incoming students. The upcoming orientation in August 2004 points to positive changes in both the social and educational opportunities offered to the incoming students in all three of these departments.

I will be working with students in environment, ecology, and earth and ocean sciences to improve the orientation activities for 2004. We will determine what activities could be combined and what activities need to be department specific. This way we can maximize our resources and the amount of time that all of the students spend together in the first couple of days of arriving. If the students get to know each other early in their graduate career, opportunities for interdepartmental collaboration and conversations are more likely. The start of this change was the TA training that was held in August 2003. Prior to this event, there had been no joint events between all of the departments during orientation week. The change that started last year is progressing into more joint events. There is no way to make drastic changes over a single year; however, positive changes, in part because of the joint TA training are leading to a more unified graduate student body.

The first TA orientation was completed in August 2003 during orientation week. All incoming environment, ecology, and earth and ocean science students were required to attend. The orientation consisted of two parts: a discussion with current graduate students about responsibilities

and information about common TA tasks. For the first time hosting such an event, the orientation was fairly successful. The event included a question and answer period with current graduate students that have served a wide range of TA activities, lessons on setting up the proxima and using blackboard, and representatives from the department and outside (CTLW) that shared how they can provide assistance for TAs or for their students. Based on comments received informally and during lunch discussions, the second training will be improved upon to better provide information to the students in the form of help sheets and provide more inclusive and comprehensive information.

The training will be organized so that it will be beneficial to current graduate students that have not been TAs and incoming students that are still learning their way around the department. The training will be organized in two sessions that will be held on the same day. The first session will be an introduction and tour of places that are commonly used by TAs, such as the audiovisual equipment room, the copiers, and the reading room. After lunch, the training will focus on discussions and a question and answer period with current graduate students that have served as TAs and professors that have used TAs in their classroom, presentations by organizations at Duke that can provide support or pedagogical training (i.e. CTLW), and logistical support departments within the Nicholas School (i.e. IT, Dean's office). I anticipate the training lasting a total of 4 hours from 11 am to 3 pm. I will largely be in charge of organizing the second orientation, but after this summer, these tasks will be delegated between other graduate students and staff members.

To best provide logistical information to TAs, a website that is linked from the main Nicholas School website is in the process of being created. The website consists mainly of logistical information; pedagogy and other resources are provided by other organizations on campus and can be linked from the TA resource website. The reason a website was developed instead of a paper manual was so that the information could be easily updated by staff, the information could be easily accessed by students, and the cost of upkeep would be minimal. The website is in the intermediate phase of completion. Many of the resources have been compiled; however, they need to be created in a help sheet format (as suggested by one of the graduate students that has not TAed yet). Additionally, space has not been officially allocated on the website. Since the semester is near completion, it is likely that this project will receive priority in the next several weeks. At the latest, the website and help sheets will be available August 2004. When the URL (which will be linked from the Nicholas School website) is provided, I will present that information to the CTLW. These help sheets will be referenced during the TA training during orientation week, and the website will be sent to students via email on a semesterly basis to remind students of the location.

Finally, one of the changes that have been partially implemented with mixed success is the survey. A survey was developed, with the assistance of a fellow graduate student Caroline Good, to begin collecting data about the amount of time that TAs spend completing their duties for a particular class. The goals were: (1) to begin developing a database that could be used by other students to better plan their semester after they were assigned a particular class and instructor, (2) inform the professor of the time commitments of a particular course to determine if additional (or fewer) TAs are needed to complete the necessary duties, (3) to encourage fair allocation of Teaching Assistantships so that certain individuals did not always receive easy or difficult TA assignments.

The TA survey was successful in that showed the range of TA duties and time commitments within the Nicholas School. The response rate of the survey was fairly high (26 respondents from

environment, ecology, and earth and ocean sciences). It is too early to assess whether the information will be utilized and how the graduate students serving as TAs will use it.

I will summarize some of the results of the survey. These results should not be considered statistically valid since the sample was taken from only one semester. Surveys developed over time will lend more insight and may prove to meet the goals for which the survey was developed. The respondents TAed for both undergraduate and graduate courses. The average amount of time that the students spent per week on their TA assignment ranged from 0-5 to 20+, though most students spent between 5-15 hours per week. Most students felt qualified to highly qualified to TA the course they were assigned. Other students did not feel as qualified to perform the duties they were assigned. The response regarding TA training was mixed. Some received training; of those students some felt it was helpful and some did not. Of the students that did not receive training, some would have found training helpful and some did not find it useful. In general the TAs feel they performed their duties well, but the response was mixed regarding whether the experience was useful in preparing them to teach and mentor students.

Though the goals of the survey were clear, it was unknown how the survey information would be used by individuals to complete these goals. To be effective, the information needed be used as feedback for professors that had unreasonable expectations for their TAs. The problem that arose is that there was only one or two TAs per course; the identity of the person who wrote the survey could be easily inferred. As a result, comments that were shared to instructors (by faculty members that had access to the surveys) had the potential of seeming like the TA was being a “tattle-tail.” Additionally, feelings that there was a lack of confidentiality was expressed when the survey comments were shared without the permission of the TA. Students expressed concern that the results of the survey would be used to make harsh comments to instructors, which would ultimately harm the TA professionally (letters of recommendation, rumors in the department, etc.). As a result of these problems, the survey was not continued in the Spring 2004 semester. Since the survey was to be used primarily for TAs to aid them in planning their semester and knowing better what to expect, it needs to be made clear by the graduate students how the information should be used in the future. I hope that these problems will be worked out and that the survey can be continued next year. Additionally, I hope that additional surveys (primarily a TA evaluation form to be filled out by students) will be developed and implemented next year. Ideas have been generated during lunch discussions to address both of these future goals.

This summer I will be in conversations with graduate students, administration and faculty to assure that the work that I have started is continued and expanded. These conversations would additionally discuss how work done by previous students that have received mini-grants could be continued or re-started. One great suggestion that came from the lunch discussions to assure that these programs are successfully continued was to have one graduate student, who has had at least one year of TA experience, serve as an organizer for all the TAs. The duties of this person would be similar to the role that I played this year. These duties include: organizing the TA training for all the incoming students, managing the surveys, updating the website, organizing discussions focused around TA issues or professional development, and serving as liaison between the students and the Director of Graduate Studies and Dean. The student would serve a one-year TA position while completing these duties and this responsibility would take the place of a traditional TA position. It is unclear whether such a position will be made available, but it is apparent from conversations with

graduate students that a person in such a role would fill a vital void that has previously been filled by outside grant assistance or volunteer time.

In summary, I believe that the proposal was successfully implemented beyond the scope of the original proposal. I was able to begin bridging the gap between the graduate students in the environment, ecology, and earth and ocean sciences programs. Additionally, I was able to break down some of the incorrect notions that professional development for teaching was unimportant and “you can’t develop the [teaching] skills until you are thrown in front of a classroom as a junior faculty member.” It is my hope that the projects that I have started and implemented in the Nicholas School of the Environment will continue and expand through new graduate student leadership, support from staff, and recognition by the faculty members.