

AC 2009-1026: TEACHING OPPORTUNITIES FOR GRADUATE ASSISTANTS(TOGA)

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Teaching Opportunities for Graduate Assistants (TOGA)

Abstract

This paper describes the evolution and components of a program designed to enhance the teaching opportunities and expertise of graduate teaching assistants in the Faculty of Engineering and Applied Science at Memorial University of Newfoundland. The primary focus of the program is to provide professional development to graduate teaching assistants related to teaching and learning. It is a collaborative initiative involving the Faculty of Engineering and Applied Science, the School of Graduate Studies and the Instructional Development Office in the Division of Distance Education and Learning Technologies.

Introduction

The Teaching Opportunities for Graduate Assistants (TOGA) program operating within the Faculty of Engineering and Applied Science at Memorial University is underpinned by three main guiding principles: to enhance the development of graduate teaching assistants with respect to teaching and learning; to more positively impact the learning of undergraduate students; and to support the ongoing mentoring of graduate students by individual faculty.

Currently, graduate programs in many North American universities include opportunities for graduate students to experience teaching-related activities and professional development opportunities related to teaching and learning. Many examples of this resulted from the Preparing Future Faculty initiative in the United States¹. Canadian universities such as The University of Waterloo, The University of Victoria, and the University of Western Ontario also offer such opportunities². Wulff and Austin (2004) argue that graduate teaching assistants should be given a variety of teaching assignments as part of a systematic process³. This is possible within the TOGA model.

Evolution of Model

The original model for TOGA that was piloted throughout our university from 2005 - 2007 encompassed three main categories of teaching assignments for graduate student teaching assistants (TAs). Teaching assistants at level 1 were considered to be beginning or novice TAs who would not provide much direct instruction to undergraduate students. At level 2, a graduate teaching assistant would be more involved in providing instructional support to undergraduate students and employed in such roles as tutoring, providing assistance in labs, or facilitating small group discussions. At level 3, graduate teaching assistants would be assigned such roles as being a course teaching assistant (teaching to a maximum of three hours), a professional development facilitator for TOGA 2 teaching assistants, or a course curriculum assistant. A systematic program of professional development was organized and provided for the graduate teaching assistants at the TOGA 2 and TOGA 3 levels. Completion of a professional development program designated at each level is required in order for the graduate student to be eligible for a TOGA 2 or TOGA 3 appointment. When a graduate student is assigned to the TOGA 2 or TOGA 3 level, he/she receives a stipend of \$250 or \$500, respectively, from the School of Graduate Studies in addition to the normal compensation for the TA task⁴.

Beginning in the Winter of 2007, the TOGA program was modified in the Faculty of Engineering and Applied Science to include a professional development program for TOGA 1 teaching assistants who were given teaching assignments that involved providing direct instructional assistance to undergraduate students. Students at the TOGA 2 level were given more teaching responsibility. For example, TOGA 2 TAs monitored the work of TOGA 1 TAs in labs.

It became clear that it was desirable to have an orientation program designed to help prepare graduate students for their first TA roles. Beginning in the Fall of 2007 another level was introduced – a Pre-TOGA level. There are now four levels within the TOGA program in the Faculty of Engineering and Applied Science:

- orientation to the role of teaching assistant (Pre TOGA)
- introduction to beginning TA positions (TOGA 1)
- more independent and experienced TA positions (TOGA 2), and
- advanced teaching apprentice-type positions (TOGA 3)

As of fall 2008, it is now mandatory for graduate students to attend the Pre-TOGA sessions in order to receive a TOGA 1 teaching assistantship and graduate students must attend the TOGA 1 professional development in order to be given a TOGA 2 teaching assistantship.

Professional Development in TOGA

A TOGA 3 TA who is supervised by a teaching consultant in the Instructional Development Office, coordinates and delivers the professional development program for the teaching assistants at all four levels in TOGA. To be eligible for the position of a TOGA 3 facilitator, the graduate student must either be enrolled in or have completed the Graduate Program in Teaching (GPT). A requirement of the GPT is that the student must be mentored by a professor in the student's discipline and regularly attend classes in an undergraduate course taught by the professor. The 'apprentice' student also teaches three lessons in the course. In addition, the graduate student must attend weekly three-hour seminars on teaching and learning for the entire semester. Graduate students receive a certificate of recognition and a transcript entry upon completion of the GPT. The GPT is organized by the staff of the Instructional Development Office and the teaching consultants involved in TOGA also act as the program facilitators. The GPT has been a very successful program for more than a decade.

Three sessions are offered to students at the Pre TOGA level: *The Role of the TA*, *Marking and Grading*, and *Safety Issues*. At the TOGA 1 level, students participate in three professional development sessions on the following topics: *Effective Interaction and Questioning Strategies*, *Marking and Grading*, and *Responsibilities and Challenges in the Role of the TA*. At the TOGA 2 level, graduate students are involved in approximately twelve hours of professional development. This involves attendance at two core workshops on student-centered learning and standards of professional practice. Students participate in three or four sessions organized on topics they identify. Students at the TOGA 2 level design a strategy for obtaining feedback from the undergraduate students they assist and also design a teaching strategy related to the professional development topics. Upon completion of the initial TOGA 2 professional development requirements, graduate students receive a certificate of recognition and the TOGA 2 fellowship. In subsequent semesters, graduate students must be in a TOGA 2 position and

complete three hours of professional development to be eligible to receive a TOGA 2 fellowship in that semester.

Evaluation of TOGA

From the beginning of the pilot phase, TOGA 2 graduate students completed feedback forms for each workshop as well as a final questionnaire designed to ascertain feedback about their participation in TOGA. Questions were included regarding a variety of aspects of TOGA such as the time allotment, obtaining feedback from undergraduate students, the professional development sessions, the ‘lead’ facilitator, and impact on undergraduate student learning.

Beginning in the Spring semester of 2006, students were asked to rate a statement related to the overall benefit of TOGA. In Table 1 below, the total TOGA 2 TA ratings for the statement “TOGA is a beneficial program” are given for the time period of Spring 2006 to Winter 2009. The rating scale used was a five point scale where 1=Strongly Disagree; 2= Disagree, 3=Somewhat Agree; 4=Agree; and 5=Strongly Agree.

Table 1
TOGA 2 TA Ratings for Statement 6 on Final Questionnaire: Spring 2006–Winter 2009

Term	# Respondents	# Responses for each Rating				
		1 SD	2 D	3 SWA	4 A	5 SA
Spring 06	8				3	5
Fall 06	7			1	3	3
Winter 07	9	1	1		5	2
Fall 07	7				1	6
Winter 08	8				4	4
Spring 08	9				2	7
Fall 08	6				2	4
Winter 09	8				3	5
Total	62	1	1	1	23	36

As is evident in Table 1, an overwhelming majority of the TOGA 2 TAs found the program beneficial.

Beginning in the Spring semester of 2008, a final questionnaire was completed by the Pre TOGA and TOGA 1 TAs. In Table 2 the total ratings given by the Pre TOGA TAs are given for Statement 1 “ Providing graduate students with professional development related to possible future teaching assistant roles is worthwhile” for Spring and Fall semesters, 2008 and Winter semester 2009.

Table 2
Pre TOGA TA Ratings for Statement 1 on Final Questionnaire: Spring 2008-Winter 2009

Total # Responses	# Responses for each Rating				
	1 SD	2 D	3 SWA	4 A	5 SA
41				16	25

The ratings in the above table strongly indicate that the graduate teaching assistants support the program. This is also evident in the ratings given by the TOGA 1 TAs for the same statement and time period as shown in Table 3.

Table 3
TOGA 1 TA Ratings for Statement 1 on Final Questionnaire: Spring 2008-Winter 2009

Total # Responses	# Responses for each Rating				
	1 SD	2 D	3 SWA	4 A	5 SA
45			3	23	19

The results in the tables above for Statement 1 on the final questionnaire clearly show that the graduate students in Engineering find the professional development program beneficial and support this initiative.

Administration of TOGA

At the beginning of each semester the Graduate Program Administrator in Engineering assigns graduate students to teaching assistantships in consultation with the Associate Dean of Graduate Programs in Engineering after first verifying that the student has completed the professional development component. The application submitted by graduate students for teaching assistantships to the Associate Dean includes a section where students indicate the professional development completed for each level of TOGA. Once teaching assistantships have been assigned, a list of TAs for each level of TOGA is forwarded to the appropriate teaching consultant who initiates the hiring process for the TOGA 3 TA. The teaching consultant responsible for the overall coordination of the professional development program and supervision of the TOGA 3 TA sends an attendance record for the TAs involved in the program to the Graduate Program Administrator at the end of each semester. An electronic record of attendance for the TAs is kept in a database in the Instructional Development Office. The teaching consultants submit the names of students eligible for the TOGA 2 and TOGA 3 fellowships to the School of Graduate Studies.

Conclusions

At least once a year a committee meets to review the TOGA program and to consider changes and improvements for the next semester. This initiative has demanded close communication and

collaboration among the Faculty of Engineering and Applied Science, the School of Graduate Studies, and the Instructional Development Office. To date, student response regarding their participation in a mandatory program has been positive. It is worth noting that at the Pre TOGA and TOGA 1 level there is no monetary aspect. Also, it should be pointed out that even though participation in the program is mandatory, not all eligible students necessarily always receive a TOGA 2 teaching assistantship even though they may be eligible. The assigning of TOGA 2 assistantships is dependent on the number available and the match between need, graduate student interest and graduate student expertise.

This program as is currently designed is still at a ‘fledging’ stage having been in effect for three semesters. We anticipate that there will be continual revisions and improvements.

References

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- [2] Crocker, E. *Teaching Opportunities for Graduate Assistants (TOGA) Initiative: Report of Pilot Study – Winter 2005*, Appendix 3: Survey of TA Professional Development Programs in Canadian Universities. Instructional Development Office, Memorial University of Newfoundland, April 2006.
- [3] Wulff, D.H. and Austin, A.E. (2004). Future Directions: Strategies to Enhance Paths to the Professoriate. In D.H. Wulff, A.E. Austin and Associates (Eds.), *Paths to the Professoriate* (pp.267-292). San Francisco: Jossey-Bass.
- [4] *Teaching Opportunities for Graduate Assistants (TOGA)*. Memorial University of Newfoundland, School of Graduate Studies. Available online at: <http://www.mun.ca/sgs/current/toga/>