

**2007 EDC Grant Final Report:
“Development of teaching measures and web-based questionnaires for study of the effectiveness of the
Teaching Assistants’ Training Program’s Certificate Program”**

PROJECT OVERVIEW

This project launched in August 2007 with the hiring of Emily Gregor-Greenleaf, a PhD Candidate in the Higher Education Group at the Ontario Institute for Studies in Education. In her first two months as this project's Research Assistant, Emily conducted a literature review of practices and research in program evaluation, evaluating post-secondary teaching effectiveness, evaluating teaching by graduate student teaching assistants, and evaluating TA training programs. Emily also reviewed the outcomes of TA training programs at peer institutions across Canada. Through October and November, the research team met to design outcomes for the TATP at the University of Toronto and to design items for the web-based questionnaire. In December, the team ran two focus groups with a total of 27 graduate students who helped clarify the items. The questionnaire was then refined, the online questionnaire was created using Survey Monkey™ and the pilot testing of the questionnaire, which took 35 minutes to complete and included 108 items, launched in 2008. Three iterations ran in late January, early February and early May. Prior to launching the questionnaire, participants for the pilot study were sought through the listserv of the School of Graduate Studies: 100 students registered to participate through an online registration system. Of these 100 registrants, 98 completed the first iteration, 76 completed the second iteration and 56 completed the third and final iteration—this despite the offer of \$30.00 for completion of all three questionnaires. The 56 study participants who completed all three iterations were paid \$30.00 each in May. In June, the research team attempted to draw statistically significant results from the completed questionnaires and decided to attempt a confirmatory factor analysis (CFA) of the responses. Emily Gregor-Greenleaf and Megan Burnett presented on this at the Society for Teaching and Learning in Higher Education (STLHE) conference at the University of Windsor on June 20th, 2008. In July, the CFA was abandoned as the sample size proved too small to produce statistically meaningful results.

OUTCOMES ACHIEVED

Unfortunately, this project was unable to produce a validated questionnaire. In analyzing the statistical results of the 56 questionnaires that were successfully submitted, it was discovered that the wide variance in TA populations who completed all three questionnaires was too great to produce statistically significant results. Also, the process of external validation through observing the in-class teaching of a select group of TAs involved in the pilot study was rejected due to research that suggests one in-class observation of teaching cannot provide a meaningful assessment of teaching effectiveness—even if a brief list of observable teaching behaviours is used. Further, the number of TAs who participated in the pilot study who were also enrolled in the TATP Certificate Program (and therefore were able to agree to an in-class observation) was too small (only 11 students) to provide a statistically relevant sense of whether or not the Certificate Program was having an impact on their in-class teaching. What *has* been a successful outcome of this project is the understanding that the TATP must have clearer outcomes and that as many components of our programming as possible must have some means of assessment built into them. Emily Gregor-Greenleaf and Megan Burnett are actively working to develop new evaluation forms, questionnaires and assessment techniques that can be used in TATP workshops and provided to Certificate Program registrants to better assess TAs’ learning as they move through TATP programming.

FUTURE DIRECTIONS

The qualitative data from the focus groups and from the questionnaires will be written up and shared with the EDC community at the EDC Conference in Oshawa in February 2009. At this point, the research team hopes to also present a revised and shortened version of the questionnaire that ran during the pilot study. The goal of examining and tracking the impact of the Certificate Program on the in-class teaching of TAs at the University of Toronto has not been completely abandoned. Plans to ask 2008-09 Certificate Program registrants to agree to three in-class observations over the next three years are in the works. Over the next 8 – 10 months, the TATP will be re-designing its Certificate Program to incorporate assessments such as pre- and post-surveys in its workshops, and the submission of statements of teaching philosophy from students both when they enroll in the program and when they exit the program. Also, Emily Gregor-Greenleaf has been hired as a paid Research Assistant for the Office of Teaching Advancement (OTA) and the TATP at the University of Toronto, and will continue to process the results of this project. Emily's hiring and interest in continuing the research begun through the EDC-funded study represents perhaps the greatest achievement of this whole endeavour as well as one of the main goals of the EDC Grants Project: to encourage students to pursue research activities and career opportunities in educational development.