



AUGUST 2020

# TEACHING ASSISTANT TRAINING AND SUPPORT

---

FACULTY OF ARTS AND SCIENCE | CENTRE FOR TEACHING AND LEARNING  
PREPARED BY SOFIA I. MELENDEZ, KARALYN MCRAE, SUE FOSTATY YOUNG, AND JILL ATKINSON

Queen's University



# REPORT OVERVIEW

	Page
• Preface: Messages from our leadership	2
• Context: Problem definition	3
• History: TA preparation and support at Queen's University	5
• Elements: Barriers and facilitators	8
• Program alignment: Teaching and learning centres across Canada	9
• Moving forward: Environmental scan of TA training and support at Queen's University	11



## PREFACE

### MESSAGES FROM OUR LEADERSHIP

TAs are an essential part of the instructional team. Not only do they provide students with much needed disciplinary guidance, their close familiarity with the student experience places them in the role of a mentor. As class sizes grow and we incorporate more experiential learning, we rely even more on TAs to work on the front line with our students. I want to extend my gratitude to all TAs, past, present and future for your valuable role in shaping our undergraduate and early graduate students. We undertook this work to ensure that we do our very best to support you in your important work.

*-Dr. Jill Atkinson,  
Associate Dean of Teaching and Learning  
Faculty of Arts and Science*

TAs play a pivotal role in undergraduate students' academic lives. Having recently completed their own undergraduate experience, they are often in a unique position to understand and anticipate students' learning needs from a 'user perspective'. TAs often serve as undergrad students' first line of contact. That means that in addition to their teaching support roles, they also tend to function as liaisons between students and instructors. In a very real sense, they work to manage that middle ground and that is a huge responsibility. We owe TAs educational support that is commensurate with our expectations of them and the CTL is committed to collaborating with Faculties and Departments to provide that support.

*-Dr. Sue Fostaty Young, Director of the Centre for Teaching and Learning*

## CONTEXT

### PROBLEM DEFINITION

Queen's University is committed to promoting excellence in the quality of teaching and learning that students and instructional teams experience. Teaching assistants (TAs) are essential members of the instructional team, and several university policies since 1993 have aimed to support TAs by implementing effective teaching assistant (TA) training and regulations surrounding training. The most recent analysis of these policies was published in 2002 (SCAD), but the role of TAs has become increasingly complex and demanding since then. Queen's University, has seen the emergence of Faculty-embedded teaching units, and a greater focus on topics such as decolonizing the curriculum, inclusive pedagogies, aligning assessment practices, and effective use of active and technology-enhanced learning (Centre for Teaching and Learning, 2019). TAs must adjust their practices with these shifts while navigating their varied roles, the heavy workloads of their academic program, and acquiring employable skills to suit the market economy (Dimitrov et al., 2013; Irving-Bell et al., 2019; Pratasavitskaya & Stensaker, 2010; Stewart, 2013). Despite these pressures and the growing attention towards TA training, there is evidence to suggest that **TAs across Canada are not sufficiently prepared and supported in their teaching responsibilities** (Blouin & Moss, 2015; Hoessler & Godden, 2015; Kenny, Watson, & Watton, 2014). This problem is the primary focus of this project and the purpose of this report is to understand the problem's scope and historical context at Queen's University.



Deficiencies in TA preparation and support have existed for at least the last three decades at universities across Canada and the United States. More specifically, several studies show that TAs have only received cursory teaching support (Fox & Hackerman 2003; Golde & Dore, 2000; Marincovich et al., 1998) and reviews indicate that training for TAs in Canada and the United States is lacking (Park, 2004; Parker et al., 2015). A review by Hoessler and Godden (2015) outlined that most teaching supports for graduate students were fragmented with limited implementation, despite policy recommendations for programming that is flexible, broad, open-ended, and recognized. With limited or no formal training and support, TAs must learn from “on-the-job,” “sink-or-swim” experiences alone (Austin, 2002; Chadha, 2013; Gaia et al., 2003; Shannon et al., 1998; Wise, 2011). Without adequate preparation, it is not clear if TAs are able to meet the four overarching competencies outlined by the Canadian TA competency framework (see Figure 1; Canadian Association for Graduate Studies, 2008; Korpan et al., 2015).

Having deficiencies in training and support is contrary to the pivotal role that TAs play for the university. They provide a primary point of contact for undergraduate students, lead laboratory and tutorial sessions, grade assessments, proctor exams, and hold office hours among other duties (Weidert et al., 2012; Senate Committee on Academic Development, 2002). In the sciences, it has been shown that TAs improve the quality of undergraduate education while also influencing student retention, especially among female and minority students (Gardner & Jones, 2011). The lack of adequate TA training may take an emotional toll on TAs by inducing anxiety as well as taxing their knowledge and confidence (Bond-Robinson and Rodriques, 2006; Flaherty & Overton, 2018). The quality of instruction and support given to essential players like TAs on the instructional team is one of the most tangible impressions of a university's commitment to education.

**Figure 1**

#### FRAMEWORK FOR TA COMPETENCY DEVELOPMENT



Adapted from Canadian Association for Graduate Studies (2008) as well as Korpan, Sheffield, & Verwood (2015)

Diving into the  
**CONTEXT**





# HISTORY

## TA SUPPORT AND PREPARATION AT QUEEN'S UNIVERSITY

To better address the problem of TA support and preparation, it is useful to understand the history and policy milestones related to TA preparation and support at Queen's University. Over 25 years, this topic has been the subject of various reports, reviews, collective agreements, media posts, and committees. An overview of these efforts is outlined in the timeline below. The remainder of this section details each of the time points.

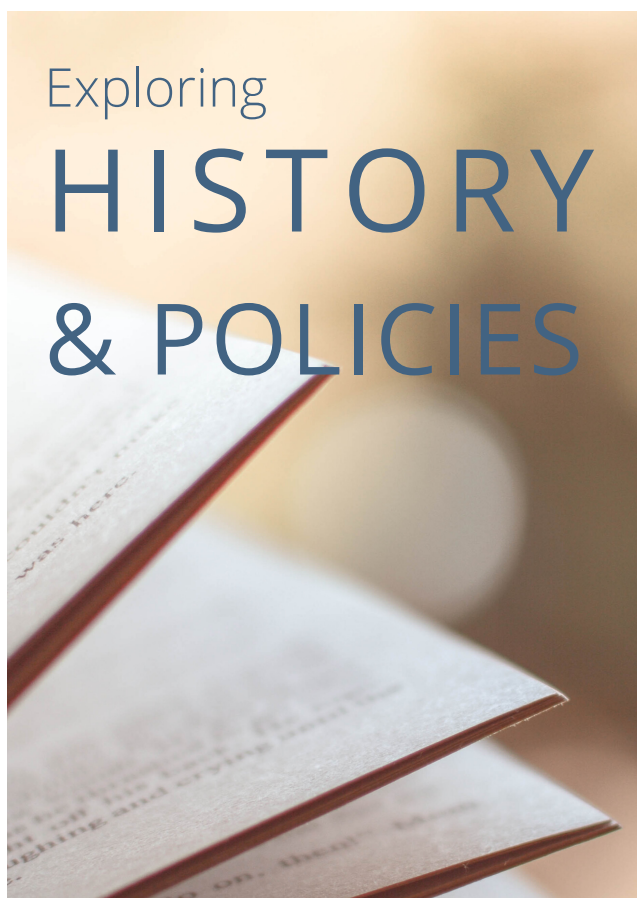
### TIMELINE OF HISTORIC AND POLICY MILESTONES

1993	<b>Queen's Committee on Teaching Assistants</b> Report about the roles, responsibilities, training, evaluation, and funding of TAs. Work began in Fall 1991.
2000	<b>Queen's University</b> Conference report titled "TAs at Queen's: Realizing their Potential, Improving Teaching and Learning."
2000	<b>Queen's Academic Affairs Commission of the Alma Mater Society</b> Survey of departments, followed by a report on innovative approaches and recommendations.
Estimate 2000- 2002	<b>Exit Poll Survey</b> Student perceptions of TAs at Queen's University; not publicly available, but referenced in <a href="#">SCAD (2002)</a> .
2002	<b>Queen's Senate Sub-committee on the Training of TAs</b> <a href="#">Policy analysis</a> including nine recommendations that were approved by the Senate. Some were subsequently implemented.
2005	<b>Queen's Senate Sub-committee on the Training of TAs</b> Implementation of a <a href="#">policy</a> that includes a section on TA training and evaluation. Work began in 2003.
2005	<b>Queen's University Senate</b> The name of the 'Instructional Development Centre' is changed to the 'Centre for Teaching and Learning.'
2008	<b>Canadian Association for Graduate Students</b> <a href="#">TA competencies</a> developed: communication, management, teaching and knowledge transfer, as well as ethics.
2009	<b>Queen's Senate Sub-committee on the Training of TAs</b> <a href="#">Amendment</a> to the 2005 policy about TA training and evaluation.
2010- 2013	<b>Public Service Alliance of Canada Graduate Teaching Assistants and Teaching Fellows (PSAC 901, Unit 1) Union</b> First <a href="#">collective agreement</a> including TA training policies.
2012	<b>Graduate Student Professional Development Report</b> Comprehensive <a href="#">summary</a> of documents and surveys related to Canadian graduate student development
2013- 2017	<b>PSAC 901 Union</b> Second <a href="#">collective agreement</a> including TA training policies.
2016	<b>Queen's Educational Developers' Network (QEDN)</b> QEDN formed by the Centre for Teaching and Learning (CTL) to foster collaboration with staff in faculties.
2018- 2021	<b>PSAC 901 Union</b> Third <a href="#">collective agreement</a> including TA training policies.

In the Fall of 1991, Queen's Committee on Teaching Assistants began to assess the roles, responsibilities, funding, training, and evaluation of TAs. The report from this work was presented to the Dean of Graduate Studies and Research in April 1993, and many of the recommendations were implemented soon after. The report contains a section titled Training and Evaluation which outlines the following:

1. the importance of the Instructional Development Centre (IDC; renamed the Centre for Teaching and Learning in 2005) in training and evaluating TAs;
2. that individual departments should ensure that effective TA training takes place consistently; and
3. the requirement of English language fluency as a TA.

The report by the Academic Affairs Commission of the Alma Mater Society in 2000 surveyed departments across Queen's University. It found several issues relevant to TAs: marking, hiring, training, communication, innovative approaches, and recognition. The report also discussed English language proficiency and issues around making training mandatory.



From June 2001 to March 2002, the Senate Committee on Academic Development (SCAD) sub-committee on the Training of Teaching Assistants conducted a policy analysis regarding TA training at Queen's University. This analysis was partially motivated by the results of "Exit Poll surveys which indicate[d] a somewhat troubling level of dissatisfaction with Teaching Assistants among the undergraduate student population" (p. 1; SCAD 2002). The analysis outlined the role of TAs at Queen's, the TA training available, comparisons with other universities, and nine recommendations on how to improve TA training (see below).

#### POLICY ANALYSIS RECOMMENDATIONS: SUB-COMMITTEE ON THE TRAINING OF TEACHING ASSISTANTS

1. Review current TA training, roles, selection, mentoring, and evaluation practices by departments and faculties.
2. Designate an individual in each department to assess TA practices and provide an annual report to the Department Head, Faculty Dean, Dean of Graduate Studies and Research, and the CTL (then called the IDC).
3. Develop an annual report for the Vice-Principal (Academic) by the CTL regarding programming and TA training activities.
4. Include a section on TA training activities in all internal academic reviews and faculty annual reports.
5. Include specific duties and training requirements in all TAs contracts. Introduction of a mandatory TA training session of at least three hours before taking up assigned duties. Departments and/or Faculties organize these sessions with assistance from the IDC.
6. Implement the Program in University Teaching and Learning (PUTL) program (with certificate) at the CTL.
7. Develop a mandatory diagnostic assessment of English as a Second Language oral proficiency for new graduate students who took an English language proficiency test for admission.
8. Develop a course titled English Language Communication Skills for Teaching Purposes to be offered during the fall semester. This course should be mandatory for students those who took an English language proficiency test for admission.
9. Hire a CTL TA Development Coordinator to support training programs, act as a resource, and coordinate PUTL.

(SCAD, 2002).





### **POLICY REPORT AND RECOMMENDATIONS**

In 2003, a new TA sub-committee of SCAD was created. By 2005 this committee published a policy report including a section on TA training and evaluation. The policies put in place aligned with several of the recommendations of the 2002 SCAD report. Specifically, each department was to provide a brief annual report on TA training to the Department Head, Faculty Dean, Dean of Graduate Studies and Research, and the CTL (recommendation 2 from SCAD, 2002). Additionally, all new TAs were required to participate in a paid three-hour training session unless there was ongoing training throughout the term of the teaching assistantship (recommendation 5 from SCAD, 2002). This part of the policy discussed the specifics of what content must be covered in the mandatory training, advised departments to offer training sessions longer than three hours, and outlined that TAs should be encouraged to participate in the Teaching Development Day. Following recommendation 7 from SCAD (2002), graduate students who completed an English language test for admission had to participate in an assessment of their oral proficiency in English before taking up TA duties requiring verbal communication. The report also outlined the need for a formal standardized system for assessing TAs and that supervisors should attend and evaluate one TA-led session per term. Finally, the report reviews the role of the CTL in helping TAs evaluate their teaching practices through feedback form templates and workshops.

### **PSAC 901 UNIT 1 UNION**

Beginning in 2010, all policies referring to graduate teaching assistants were superseded by the Collective Agreement governing Graduate Teaching Assistants and Teaching Fellows. This agreement was reached between the PSAC 901 Unit 1 and Queen's University. There have been three Collective Agreements that involve sections on TA training. The first agreement (2010 – 2013) only contains four mentions of TA training and states that “all employer-required training shall be compensated at the TA's regular rate of pay.” No recommendations from SCAD (2002) are found in this document. The second collective agreement (2013 – 2017) contains six mentions of TA training. It outlines the same policy as the first agreement and adds that “time for paid training must be within the TA's allotted TA hours.” The third (and current 2018 – 2021) agreement has 41 instances of TA training and it adds to the last two policies by outlining specific contextual policies of training (i.e., training that is not employer-required, union training, and health and safety training).

### **BUILDING COLLABORATIVE NETWORKS**

In 2016, the Queen's Educational Developers' Network (QEDN; Gaudreau, 2018) was re-introduced to enhance collaboration for institutional initiatives related to education. The director of the CTL, Dr. Sue Fostaty Young, sits on this network which discusses higher level teaching and learning initiatives. QEDN may be a powerful tool to leverage collaboration and coordination for TA preparation and support among the various academic units at Queen's University.

## SUMMARY OF THE HISTORY

The history of the policies at Queen's University have primarily focused on TA training and not on TA support or professional development as educators. Leading up to 2005, the policies for TA training became more specific, evidence-informed, and context-appropriate based on recommendations from SCAD sub-committees. With the introduction of the PSAC 901 Unit 1 Union in 2010, most of these training-specific policies were discarded, although it is not clear why the policies were not integrated as they seem to be complementary. Some common themes across the reports at Queen's University include the limited assessment of TAs, the shifts between mandatory to non-mandatory training, the role of the CTL to coordinate between academic units, and the need for departmental or faculty involvement in training.



## ELEMENTS

### BARRIERS AND FACILITATORS

Various elements may make it difficult for training and support to meet the needs of TAs:

- TA roles, training, and support vary widely across faculties, departments, and even classes (Parker et al., 2015).
- TAs come to training with different prior experiences, knowledge, and language abilities (Boman, 2013).
- Most TAs do not receive feedback or evaluations from students or instructors, making it difficult to identify what area of their teaching practice requires improvement (Senate Committee on Academic Development, 2002).
- The role of policies and collective union agreements may place restrictions on various aspects of TA training.

Various elements may facilitate the enhancement of training and support so that it may meet the needs of TAs:

- Collaborative networks across academic units, stakeholders, and within teaching teams.
- Implementing an annual environmental scan to assess the availability and quality of TA training across academic units (Hoessler & Godden, 2015)
- Established educative programming for graduate students through the Centre for Teaching and Learning.
- Existing scholarly literature on TA training and exemplary TA training programs at other academic centres.



# PROGRAM ALIGNMENT

WITH TEACHING AND LEARNING CENTRES ACROSS CANADA

TA preparation is offered at various interconnected levels that span across the institution, faculties, department, classes, and among peers. There are few published records outside of the institution-wide educative programming offered by the CTL at Queen's University. As such, this section will review the programming offered centrally by the CTL. Since its inauguration in 1992, the CTL has developed resources for graduate students which may benefit TAs: a conference, a professional development program, workshops, a graduate-level credit course, and student internships, in addition to the consultation services and resources available to all university educators (CTL, 2019).



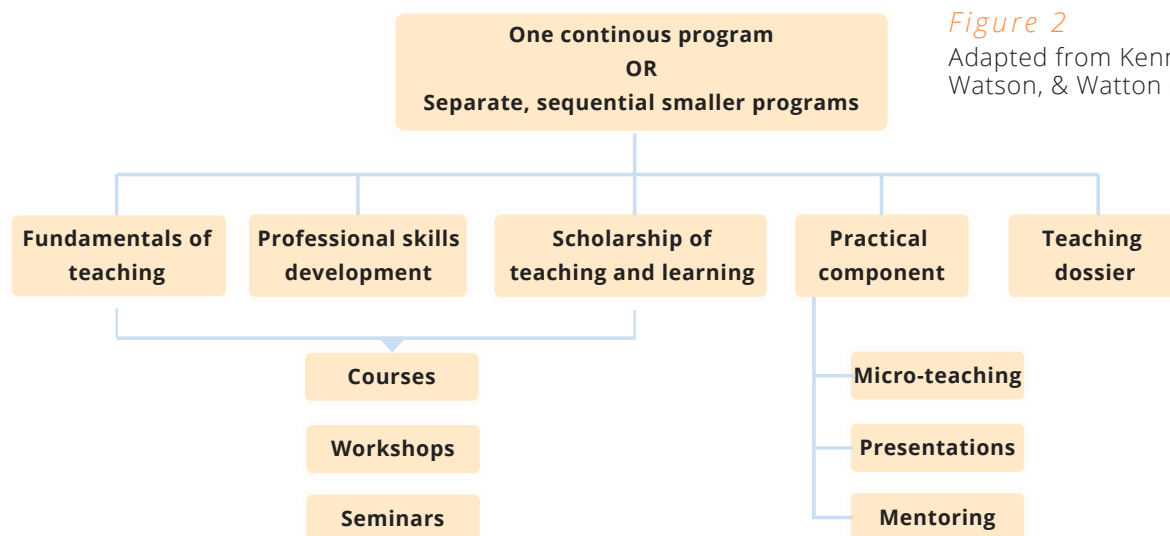
## TEACHING DEVELOPMENT DAY

Teaching development day is a free day-long conference held annually in September. In 2018, there were 35 sessions and poster presentations with more than 230 participants from interdisciplinary fields (CTL, 2019). Most institutions in Canada offer similar voluntary TA orientations (Parker et al., 2015) delivered over a half-day, full-day, multi-day, or week (Boman, 2013; Hoessler & Godden, 2015; Taylor Institute, 2019; Windsor Centre for Teaching and Learning, 2018; Teaching Assistants' Training Program, 2019).



## PROFESSIONAL DEVELOPMENT IN UNIVERSITY TEACHING AND LEARNING (PUTL)

PUTL is a self-paced non-credit program that has five components: foundations, practical experience, educational leadership, scholarship of teaching and learning, and accessibility. In 2018, the workshops hosted through PUTL had 46 participants (CTL, 2019). These components are similar to the certificate programs at thirteen other Canadian universities based on a content analysis by Kenny and colleagues (2014) who conducted an overview of common certificate program components (see Figure 2 below).



*Figure 2*  
Adapted from Kenny,  
Watson, & Watton (2014)

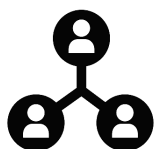
# PROGRAM ALIGNMENT

TEACHING AND LEARNING CENTRES ACROSS CANADA



## SGS 902 - TEACHING AND LEARNING IN HIGHER EDUCATION

Teaching and Learning in Higher Education (SGS 902; formerly SGS 901) is a course offered for graduate students and post-doctoral fellows through the CTL. In 2018, this blended course was held over one semester with 24 students across 16 departments (CTL, 2019). Similarities across 23 Canadian courses include developing teaching skills, using research as a basis for teaching practices, and gaining motivation for inward reflection (Aspenlieder & Kloet, 2014). Similar courses are offered at other academic centres; for example, the University of Windsor (2018) offers two full-semester courses on learner-centric teaching and course design as well as three half-semester courses on leading discussions, lecturing, scholarship, and online education. Dalhousie University developed a unique set up for its full-year nationally accredited course, the Teaching Assistant Enrichment Program (2019), as it is offered for both undergraduate and graduate TAs.



## EDUCATIONAL DEVELOPMENT ASSOCIATE (EDA) PROGRAM

The Educational Development Associate program is a five to ten hour per week internship for graduate students. Typically, there are three EDAs who collaborate to design and deliver programming to support TAs, graduate students, and post-doctoral fellows. The EDAs at the CTL offer consultations and classroom observations, which are two services that most other teaching support centres also provide (Hoessler & Godden, 2015; Parker et al., 2014). Classroom observation takes many forms such as video recording (Cahalan, 2013; Calonge et al., 2013), observations by multiple types of observers such as faculty and other TAs (Parker et al., 2015), and observing faculty teaching (Chadha, 2013; Gaia et al., 2003). Similar programs include the Student Educational Developer Program at the Macpherson Institute at McMaster University (2019) and the Graduate Formative Peer Review program at the University of British Columbia (Centre for Teaching, Learning, and Technology, 2019). These programs recognize the utility of formative and peer assessment (Falchikov, & Goldfinch, 2000; Yorke, 2003).

## RESOURCES FOR ALL HIGHER EDUCATION EDUCATORS



Online resources on the CTL website are open to all educators and they can complement TA programming. Resources focus on 12 topics that range from guest lecturing, marking, to student mental health. Having comprehensive support materials is one of the design features that TAs report most contributed to their development (Hardré & Burris, 2012). One of the most detailed [resources](#) was published by the Taylor Institute (2017) as it covers pedagogical foundations, tools, assessments, and documenting.



# SUMMARY

Over the past three decades, TAs have not been sufficiently supported or prepared for their teaching responsibilities (Blouin & Moss, 2015; Hoessler et al., 2015; Kenny et al., 2014). This problem has been the central focus of this report which outlined the problem definition, historical context, TA programming practices at Queen's University, and alignment with best practices from at other Canadian teaching support centres.

## MOVING FORWARD

ENVIRONMENTAL SCAN OF TA TRAINING AND SUPPORT AT QUEEN'S UNIVERSITY

Our research team launched an exploratory study in May 2020 that seeks to understand the state of the preparation, support, and supervision that goes into Teaching Assistantships at Queen's University. The study has two phases that build on each other in a manner similar to developmental program evaluation. In phase one, TAs as well as faculty and staff at Queen's University who are involved in TA training will be recruited to complete an online survey. The results of this survey will be used to develop questions that will be posed to four focus groups. The aim of this project is to use the results to improve the availability and quality of TA training programs across Queen's University.

### COLLABORATIVE SYNERGY

This project would not be possible without the collaborative effort and guidance of our partners and stakeholders at Queen's University: graduate students, graduate coordinators, the Associate Deans (Teaching and Learning, Graduate Studies and Global Engagement), the School of Graduate Studies, PSAC 901, the Centre for Teaching and Learning, and the Faculty of Arts and Science. A special thanks to Dr. Amanda Cooper and the members of our working group—Andrea Reid, Nevena Martinović, Yasmine Djerbal, and Julia Savage—for their continuous support and guidance.

For inquiries, suggestions, and ways to get involved, please contact **CTL@queensu.ca** or our team leads:



Jill Atkinson, PhD  
jill.atkinson@queensu.ca



Sofia Melendez, BSCH  
sofia.melendez@queensu.ca



Karalyn McRae, PhD  
karalyn.mcrae@queensu.ca



Sue Fostaty Young, PhD  
fostatys@queensu.ca

## REFERENCES

- Academic Affairs Commission. (2000). Teaching assistant report by the Alma Mater Society.
- Austin, A. E. (2002). Preparing the next generation of faculty: Graduate school as socialization to the academic career. *Journal of Higher Education*, 73, 94-122.
- Blouin, D. D., & Moss, A. R. (2015). Graduate student teacher training: Still relevant (and missing?) 20 years later. *Teaching Sociology*, 43(2), 126-136.
- Boman, J. S. (2013). Graduate student teaching development: Evaluating the effectiveness of training in relation to graduate student characteristics. *Canadian Journal of Higher Education*, 43(1), 100-114.
- Bond-Robinson, J., & Rodriques, R. A. B. (2006). Catalyzing graduate teaching assistants' laboratory teaching through design research. *Journal of Chemical Education*, 83(2), 313.
- Canadian Association for Graduate Studies. (2008). Professional Skills Development for Graduate Students.
- Centre for Teaching, Learning, and Technology. (2019). Graduate Formative Peer Review. The University of British Columbia. <https://ctl.ubc.ca/programs/all-our-programs/graduate-formative-peer-review/>
- CTL, Centre for Teaching and Learning. (2019). Annual report 2018-2019. <https://www.queensu.ca/ctl/sites/webpublish.queensu.ca.ctlwww/files/files/Publications/Annual%20Report%202018-2019.pdf>
- Chadha, D. (2013). Reconceptualizing and reframing graduate teaching assistant (GTA) provision for a research-intensive institution. *Teaching in Higher Education*, 18, 205-217.
- Committee on Teaching Assistants. (1993). Teaching Assistants at Queen's University Presented to the Dean of Graduate Studies and Research.
- Dalhousie University Centre for Learning and Teaching. (2019). Teaching Assistant Enrichment Program (Graduate Students). <https://www.dal.ca/dept/clt/services/TAEP.html>
- Dimitrov, N., Meadows, K., Kustra, E., Ackerson, T., Prada, L., Baker, N., . . . Potter, M. K. (2013). Assessing graduate teaching development programs for impact on future faculty. *Toronto: Higher Education Quality Council of Ontario*.
- Flaherty, A. A., & Overton, T. L. (2018). Transforming laboratory teaching assistants as teaching leaders. *Higher Education Research & Development*, 37(7), 1380-1394.
- Fox, M. A., & Hackerman, N. (2003). Evaluating and improving undergraduate teaching in science, technology, engineering, and mathematics. National Academies Press.
- Gaia, A. C., Corts, D. P., Tatum, H. E., & Allen, J. (2003). The GTA mentoring program: An interdisciplinary approach to developing future faculty as teacher-scholars. *College Teaching*, 51(2), 61-65.
- Gardner, G. E., & Jones, M. G. (2011). Pedagogical preparation of the science graduate teaching assistant: Challenges and implications. *Science Educator*, 20(2), 31-41.
- Gaudreau, P. (2018, April). Inclusion in the classroom. *Queen's Gazette*. <https://www.queensu.ca/gazette/stories/inclusion-classroom>
- Golde, C. M., & Dore, T. M. (2000, April). Findings from the survey on doctoral education and career preparation. In *Re-envisioning the PhD Conference*, Seattle, WA.
- Hardré, P. L., & Burris, A. O. (2012). What contributes to teaching assistant development: differential responses to key design features. *Instructional Science*, 40(1), 93-118.
- Hoessler, C., Godden, L., & Hoessler, B. (2015). Widening our evaluative lenses of formal, facilitated, and spontaneous academic development. *International Journal for Academic Development*, 20(3), 224-237.
- Irving-bell, D., Moscrop, C., Saetnan, E. R., Collins, J., Leigh, J., & Brown, N. (2019). Negotiating higher education: Building confidence for graduate teaching assistants. *Graduate Teaching Assistant's Developers Forum*.
- Kenny, N., Watson, G. P., & Watton, C. (2014). Exploring the Context of Canadian Graduate Student Teaching Certificates in University Teaching. *Canadian Journal of Higher Education*, 44(3), 1-19.
- Korpan, C., Sheffield, S. L. M., & Verwoord, R. (2015). Teaching assistant competencies in Canada: Building a framework for practice together. *Collected Essays on Learning and Teaching*, 8, 219-230. <https://celt.uwindsor.ca/index.php/CELT/article/view/4246>



## REFERENCES

- Marincovich, M., Prostko, J., & Stout, F. (1998). *The Professional Development of Graduate Teaching Assistants*. Anker Publishing Company.
- Park, C. (2004). The graduate teaching assistant (GTA): Lessons from North American experience. *Teaching in Higher Education*, 9(3), 349-361.
- Parker, M. A., Ashe, D., Boersma, J., Hicks, R., & Bennett, V. (2015). Good teaching starts here: Applied learning at the graduate teaching assistant institute. *Canadian Journal of Higher Education*, 45(3), 84-110.
- Pratasavitskaya, H., & Stensaker, B. R. (2010). Quality management in higher education: Towards a better understanding of an emerging field. *Quality in Higher Education*, 16(1), 37-50.
- Public Service Alliance of Canada. (2010). PSAC 901 Collective Agreement for Graduate Teaching Assistants and Teaching Fellows 2010 – 2013. <https://www.queensu.ca/facultyrelations/teaching-assistants-and-fellows/collective-agreement>
- Public Service Alliance of Canada. (2013). PSAC 901, Unit 1 Collective Agreement for Graduate Teaching Assistants, Graduate Teaching Fellows 2013-2017. <https://www.queensu.ca/facultyrelations/teaching-assistants-and-fellows/collective-agreement>
- Public Service Alliance of Canada. (2018). PSAC 901, Unit 1 Collective Agreement for Graduate Teaching Assistants, Graduate Teaching Fellows, Graduate Research Assistants, and JD and MD Teaching Assistants 2018-2021. <https://www.queensu.ca/facultyrelations/teaching-assistants-and-fellows/collective-agreement>
- Rodriques, R. A. B., & Bond-Robinson, J. (2006). Comparing faculty and student perspectives of graduate teaching assistants' teaching. *Journal of Chemical Education*, 83(2), 305.
- SCAD, Senate Committee on Academic Development. (2002). Report of the Sub-Committee on the Training of Teaching Assistants at Queen's University to the Senate Committee on Academic Development. [https://www.queensu.ca/secretariat/sites/webpublish.queensu.ca.uslclwww/files/files/policies/senateandtrustees/RprtttoSCAD\\_TASubComm.pdf](https://www.queensu.ca/secretariat/sites/webpublish.queensu.ca.uslclwww/files/files/policies/senateandtrustees/RprtttoSCAD_TASubComm.pdf)
- SCAD, Senate Committee on Academic Development. (2005). Report of the Sub-Committee on the Teaching Assistants at Queen's University to the Senate Committee on Academic Development. <https://www.queensu.ca/secretariat/policies/senate/teaching-assistants#IX>
- Shannon, D. M., Twale, D. J., & Moore, M. S. (1998). TA teaching effectiveness: The impact of training and teacher experience. *Journal of Higher Education*, 69(4), 440-466.
- Stewart, D. W. (2013). Programs help prepare graduate students for a range of careers. *The Chronicle of Higher Education*. <http://chronicle.com/blogs/letters/programs-help-prepare-graduate-students-for-a-range-of-careers/>
- Taylor Institute. (2019). Conference on Postsecondary Learning and Teaching. <https://taylorinstitute.ucalgary.ca/students/graduate-students/conference2019>
- TATP, Teaching Assistants' Training Program. (2019). The University of Toronto. Retrieved from: <https://tatp.utoronto.ca/>
- Weidert, J. M., Wendorf, A. R., Gurung, R. A., & Filz, T. (2012). A survey of graduate and undergraduate teaching assistants. *College Teaching*, 60(3), 95-103.
- Windsor Centre for Teaching and Learning. (2018). Annual Report. The University of Windsor. <http://ctl.uwindsor.ca/ctl/sites/uwindsor.ca.ctl/files/ctl-annual-report2018.pdf>
- Wise, A. (2011). Supporting future faculty in developing their teaching practices: An exploration of communication networks among graduate teaching assistants. *International Journal of Teaching and Learning in Higher Education*, 23(2), 135-149.