

GRADUATE STUDENT GUIDE

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Foreword

1st Edition

Welcome from the Taylor Institute for Teaching and Learning, Educational Development Unit (EDU)

On behalf of the Taylor Institute for Teaching and Learning, Educational Development Unit (EDU), I am happy to welcome new and returning teaching assistants (TAs) of all backgrounds and disciplines to the University of Calgary. A TA-ship is an exciting chapter in a graduate student's academic story. As you embark on this adventure, you engage in the heart of teaching and learning, assist with instruction in your department, and develop abilities and knowledge transportable to many academic and professional horizons.

The *Graduate Student Teaching Development Guide* is designed to empower TAs to engage in their role in ways that enhance their teaching and learning capacities, and promote student learning. All content is informed by theoretical literature and evidence-based research from the Scholarship of Teaching and Learning (SoTL). Each chapter provides practical information and strategies to use in real-time, and reflection prompts when considering how to best translate these elements into the classroom. Above all, you are encouraged to seek out the expertise and resources of the course instructor, your department and faculty, and across campus.

I wish you much learning and success!

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Introduction

The *Graduate Student Teaching Development Guide* is grounded in the values from two sources: the core beliefs of the Taylor Institute for Teaching and Learning's Educational Development Unit (EDU), and the *Framework for Teaching Assistant (TA) Competency Development* document by the Teaching Assistant Graduate Student Advancement (TAGSA) Special Interest Group of the Society for Teaching and Learning in Higher Education (STLHE).

EDU Core Beliefs

(From Educational Development Unit, 2015, p. 8).

Building capacity.

- We believe that teaching and learning expertise is distributed among colleagues and students.
- We learn from others and create opportunities for meaningful dialogue and action.
- We foster networks and build connections to strengthen our collective capacity to improve post-secondary teaching and learning.

Student-centered approaches.

- We believe that a student-centered approach leads to meaningful learning experiences and enhanced outcomes.
- We believe in creating learning environments that provide opportunities for students to actively construct and take responsibility for their learning.

Reflective practice.

- We believe that critical reflection is essential in fostering growth and improvement in teaching and learning, as well as professional practice.

Evidence-based practice.

- We believe in making decisions based on the best available information.
- We believe in sharing what we have learned to strengthen the practice and scholarship of teaching and learning.

Challenge.

- We believe it is important to explore complex problems and issues.
- We support a work culture where exploration and experimentation are valued and encouraged.

Framework for Teaching Assistant (TA) Competency Development

(From Teaching Assistant Graduate Student Advancement Special Interest Group, 2015.)

The Teaching Assistant Graduate Student Advancement (TAGSA) is a special interest group of the Society for Teaching and Learning in Higher Education (STLHE). Their goal is to promote dialogue across institutions about providing graduate student support, and enhancing their TA knowledge, skills, and abilities. The TAGSA's Framework for Teaching Assistant (TA) Competency Development has four elements:

1. **Reflection.** Once appointed as a TA, reflect on the skills and attributes brought from previous work and disciplinary experience.
2. **Knowledge.** Seek knowledge of your personal teacher identity, course content, teaching strategies, and learner-centered teaching.
3. **Skills.** Seek the skills required to perform the duties assigned, and how to navigate challenges.
4. **Abilities.** Develop professional abilities, and practice effective interpersonal communication.

Undergraduate Students at the University of Calgary

(Office of Institutional Analysis, University of Calgary, 2016.)

In the Fall 2016, the Office of Institutional Analysis reported that the University of Calgary had 23,785 full-time undergraduate students.

- Of the four largest faculties: 24% of undergraduate students are in the Faculty of Arts majors, 18% are in the Faculty of Science, 14% are in the Schulich School of Engineering, 11% are in the Haskayne School of Business;
- 53% of all undergraduates report their sex as female; 47% report as male;
- 7% (1,673) are International Students;
- 16.5% are new from high school; and
- 74.4% report their age as between 18-23 years old.

The Graduate Students' Association (GSA)

(Graduate Students' Association, University of Calgary, n.d.).

The Graduate Students' Association (GSA) represents the collective interests of graduate students to the University of Calgary, Calgary's surrounding communities, and to all levels of Canadian government. The GSA advocates the social, academic, and well-being of graduate students by promoting career-based development through workshops and special events, and providing financial aid and support. *The Collective Agreement between the Board of Governors of the University of Calgary and the Graduate Students' Association: May 1, 2016 – April 30, 2018* (henceforth called *The Collective Agreement*) documents the results of ongoing consultations between the GSA and the

University of Calgary. These negotiations work to ensure that all graduate students receive fair treatment with regard to such variables as graduate appointments and contracts, place and style of work, administrative procedures, and payment.

***The Collective Agreement Between the Board of Governors of the University of Calgary and the Graduate Students' Association: May 1, 2016 – April 30, 2018* is available online via the GSA website.**

Assignment of Assistantship Duties. Graduate students receive a letter of offer for their Graduate Assistant (Teaching) appointment from their department prior to the beginning of the term. The appointment is governed by the GSA *Collective Agreement*, which defines a Graduate Assistant (Teaching) position as an “appointment to assist with instructional responsibilities in departments” (Graduate Students' Association, University of Calgary, 2016, p.7). The tasks that make up the TA role are as varied as the classrooms they support. Typical TA duties may include (Graduate Students' Association, 2014, p. 7):

- teaching and instructional support,
- lecturing assistance,
- laboratory supervision,
- being available for office hours,
- grading assignments,
- providing tutorial direction; and
- assisting in the preparation of demonstration and instructional aids.

In conjunction with the offer letter, TAs must complete an Assignment of Duties form with the course instructor. This form must be filled out prior to the start of the appointment, and outlines specific duties, expectations, hours, and work conditions for the semester.

How to Use This Book

Each section of the *Graduate Student Teaching Development Guide* begins with an introductory question, and then divides into chapters. Each chapter opens with a quote to define and characterize the subject. Next, discussion from theoretical literature and evidence-based research present a list of guiding principles. What follows is a collection of processes and strategies to help you translate these principles into your TA role. All chapters can be read individually or chronologically with the rest of the text.

The *Graduate Student Teaching Development Guide* is a resource for TAs independently seeking to improve their teaching and learning practices. Ideally, the contents are part of ongoing discussion between the TA and course instructor regarding student learning, and the TA's teaching development to date. The *Graduate Student Teaching Development Guide* supplements, but does not replace, discipline-specific TA training that may be offered in faculties, departments, and programs.

By the end of the guide, the reader will be able to:

- **describe** the teaching and learning context at the University of Calgary;
- **comprehend** the roles, responsibilities, and knowledge of a successful TA;
- **engage** and communicate in the relationships that TAs encounter;
- **identify** effective strategies and resources to support both student learning and graduate teaching capacity; and
- **reflect** on their classroom experiences meaningfully.

SECTION I – FOUNDATIONS OF EFFECTIVE TEACHING

Introduction: What Makes a Great Teaching Assistant (TA)?

TAs play an integral role in undergraduate teaching and learning in all disciplines. There are three factors that affect TA teaching success (adapted from Rikard & Hye, 1997):

1. **Knowledge of your role.** Just as with the start of any professional position, you must know what is expected of you, what your responsibilities are, who to report to, where to go for support, and how to collect feedback. Much of this information can be found when getting to know (a) the instructor's expectations, (b) the skills, abilities, and knowledge required to perform the assigned duties, and (c) your department's graduate teaching policies.

For a checklist of questions to ask the course instructor at the start of the term, see Appendix C.

2. **Skill development via departmental accreditation and resources.** Graduate programs, departments, and faculties have specific TA training requirements. Reach out to these experts, attend training and orientation days, and collect resources to learn about the best teaching and learning practices of your discipline.

For a list of TA training and resources at the University of Calgary, see Appendix A.

3. **Communication and administrative support.** A TA-ship is an opportunity for graduate students to perform diverse teaching tasks, and to develop knowledge, skills, and abilities necessary to perform the tasks again in the future. TAs also balance their academic work and personal relationships. Effective and regular communication with the course instructor and graduate administration are the best support in maintaining professional and academic balance in all arenas, and achieving (and surpassing!) expectations. It is ultimately the responsibility of the course instructor to communicate, regardless of how the department designates responsibility, all relevant information regarding TA-roles in the classroom (Tulane & Beckert, 2011).

Reflecting on Past Experiences

Whether you are a new or experienced TA, it's important to recognize the skills, abilities, experiences, and knowledge that you bring to the classroom. These unique elements make up your *teaching identity*, and reflect your discipline, personality, training, and professional characteristics (Dunn-Haley & Zanzucchi, 2012).

Use the questions below to reflect on your teaching and learning experiences to date (adapted from the TAGSA Executive Committee's *Framework for Teaching Assistant [TA] Competency Development* [2014]) Afterwards, review your answers, and reflect on what you wish to develop going forward.

1. **Your skills and abilities.** What kinds of skills and abilities do you bring to the classroom? For example:
 - Are you an engaging speaker, or comfortable speaking in front of groups?
 - Are you good at organizing and presenting information?
 - How would you describe your listening skills?
 - How have you navigated challenges in professional or academic contexts?
 - What strategies have worked for you in communicating clearly, seeking support, and maintaining boundaries?
2. **Your experiences.** What kinds of teaching, academic, and/or leadership experiences do you have? Is this your first teaching role in a university classroom, or one of many? For example:
 - **Teaching:** Have you worked as a tutor, as a volunteer, or been a member of a team or club? What values and goals informed past teaching and learning experiences? What kinds of values and goals do you wish to pursue in the future?
 - **Academic:** Have you presented academic research at conferences or poster sessions? Have you attended any teaching, writing, or public speaking workshops?
 - **Leadership:** Have you served as captain of a sports team, head cashier at a retail store, or an active member of a charitable or political cause? What kinds of strategies have you used in the past to facilitate your own success, and/or the success of others?
3. **Your knowledge.** What knowledge of the course content do you bring your role? For example:
 - Did you take this course (or a similar course) as an undergraduate student?
 - Have you had any previous interactions with the course instructor?
 - What kinds of tasks do you anticipate doing in your TA-ship? What kinds of knowledge and teaching strategies might you need to (re)acquire?
4. **Your emerging teaching practice.** How would you describe your teaching development to date? For example:
 - How have you interacted with students and instructors in the past? What has worked well (or not)? How has your approach to both changed over time?
 - What kind of feedback have you received about your teaching to date? What have you learned from this feedback?
 - What kinds of teaching, professional, and academic training or accreditation have you received to date? What additional training would you like to acquire?

Chapter 1: Understanding How Students Learn

*In this book, we define learning as a **process** that leads to **change**, which occurs at the result of experience and increases the potential for improved performance and future learning (adapted from Mayer, 2002). There are three critical components to this definition:*

- 1. Learning is a **process**, not a product. However, because this process takes place in the mind, we can only infer that it has occurred from students' products or performances.*
- 2. Learning involves **change** in knowledge, beliefs, behaviours, or attitudes. This change unfolds over time; it is not fleeting but rather has a lasting impact on how students think and act.*
- 3. Learning is not something done **to** students, but rather something students themselves **do**. It is the direct result of how students interpret and respond to their **experiences**—conscious and unconscious, past and present.*

(Ambrose, Bridges, DiPietro, Lovett, & Norman, 2010, p. 3)

Before delving into effective teaching practices, it's important to have a basic awareness of how students learn. This knowledge is essential to developing your teaching in ways that facilitates student learning, and builds your teaching capacities (Aspenlieder & Rawn, 2014).

Guiding Principles of How Students Learn

Ambrose, et al. (2010) outline seven principles that recognize learning as a developmental process that interacts with other developments in a student's life. Students enter the classroom with skills, knowledge, abilities, and social and emotional experiences that influence their values. These values inform their perceptions of themselves, others, and the means through which they will engage in the learning process. In Ambrose, et al. (2010), the seven principles of learning are as follows.

- 1. Students' prior knowledge can help or hinder learning.** If a student has accurate prior knowledge and the teacher activates it appropriately in the course, the student has a strong foundation upon which to build new knowledge. However, if their knowledge is insufficient or inaccurate, or the teacher activates it inappropriately, it can interfere with new learning.
- 2. How students organize knowledge influences how they learn and apply what they know.** When students make connections with pieces of knowledge in an accurate, organized, and meaningful way, they are better able to retrieve and apply their knowledge in the future. However, if knowledge is connected inaccurately, randomly, or inconsistently, students may fail to retrieve or apply it appropriately. Therefore, learning is not just *what* you know, but also *how you organize* what you know. Effective knowledge organizations are well matched to the learning task at hand, and can help new learners connect sparse knowledge accurately and efficiently.

3. **Students' motivation determines, directs, and sustains what they do to learn.** Motivation refers to the amount of personal investment that a student has in reaching certain goals or outcomes. In the context of learning, motivation impacts the direction, intensity, and quality of students' chosen learning behaviours and decisions. When students find value and purpose in a learning goal or activity, they can more successfully achieve the desired learning outcomes.
4. **To develop mastery, students must acquire component skills, practice integrating them, and know when to apply what they have learned.** Students must learn both the *skills* and *knowledge* necessary to perform complex tasks. From there, students can learn when and how to apply their learning, and integrate it into different contexts with greater fluency and automaticity.
5. **Goal-oriented practice coupled with targeted feedback enhances the quality of students' learning.** Learning and performance are best facilitated when students engage in activities or processes that focus on a specific goals or criterion, and target an appropriate level of challenge. Each activity or process must include feedback that communicates some aspect(s) of students' performance relative to the target criteria, provide information on improving to meet those criteria, and be given in quantities and frequencies that are useful.
6. **Students' current level of development interacts with the social, emotional, and intellectual environment of the course to impact learning.** The classroom environment that teachers create has implications for ourselves and for students. A negative climate may impede student learning and performance, but a positive environment can energize and enhance it. While teachers cannot control students' developmental processes, they can create the intellectual, social, emotional, and physical aspects of the classroom in developmentally appropriate ways.
7. **To become self-directed learners, students must learn to monitor and adjust their approaches to learning.** Students often engage in a variety of metacognitive processes that monitor and control their learning, for example: task assessment, self-evaluation, application and monitoring of various strategies, and reflection on the success (or value) of their chosen approach. Students tend not to engage in these processes naturally, and require prompts to develop the skills for lifelong learning.

Active learning is the unifying element of the above principles. Active learning occurs when students participate in the learning process. Characteristically, active learning is *learner-centered*, and allows the classroom environment to be flexible to learners' needs (Cameron, 1999). **For discussion on creating a learner-centered classroom environment, see chapter 7.**

Chapter 2: Appreciating Diversity at the University of Calgary

Student diversity is multifaceted. Students do not fit simplistic constructions of traditional and non-traditional student. Inclusive strategies must be formulated to stretch and academically engage all students within a safe and collaborative learning environment. In so doing, they must address the needs and interests of all students.

(Hockings, Brett & Terentjevs, 2012, p. 239)

The term “diversity” takes on a variety of connotations when used within the context of higher education. Whether the term refers to the projected changes in global workforce demographics (Akombo, 2013), or the impact of multiculturalism in educational settings (Guo and Jamal, 2007), or to the responses to changing ethnic, age, race, gender, academic, religious, or linguistic metrics in the classroom (Davis, 2001), discussing diversity is not a matter of treating everyone the same or defining students by their “differences” (Guo and Jamal, 2007, p. 14). It’s about bringing the primary tasks of higher education (the construction, generation, and dissemination of knowledge) towards transforming curriculum to include multiple ways of knowing, and being inclusive to previously marginalized knowledges or groups (Guo and Jamal, 2007).

The University of Calgary’s *Eye’s High* strategic plan and *International Strategy* list globalization communication, collaboration, and excellence as four of eight core values in its vision to become one of Canada’s top five research universities by 2016. There are many offices, resources, and networks on campus accessible to all staff, students, and faculty that are committed to supporting this vision, and to fostering respectful learning and working environments for all persons. If you would like further information on official diversity policies at the University of Calgary, or would like to make a general inquiry, please consult:

- *Eye’s High University of Calgary 2011-2016 Vision and Strategy*;
- *University of Calgary International Strategy* (2013);
- The Office of Diversity, Equity, and Protected Disclosure (ODEPD);
- Human Resources;
- International Student Services (ISS).

Guiding Principles for TAs and Diversity

TAs play an unusual role in the context of diversity. On one hand, diversifying curriculum development and implementing institutional strategic planning fall beyond the scope of a TA-ship. Instructors, departments, faculties, and institutions have the authority and responsibility to reflect on, challenge, and engage with the assumptions and discourses upon which their curriculum content is based. On the other hand, TAs are both producers and products of the University of Calgary’s teaching, learning, and workplace communities. It’s important to be cognizant of the impact of diversity on your role, and to be aware of its complexities and opportunities in all levels of higher education—from the classroom you are TA-ing in, to our institution’s strategic plans. **Above all, practicing effective and enthusiastic teaching translates into all classrooms.** Davis (2001) indicates that there are no universal solutions for responding to diversity in the classroom. The overriding principle for all teachers is to be

thoughtful and sensitive, and to do what you think is professional, ethical, and best supports the needs of all learners.

Within the specific context of the TA role, diversity and teaching translate to...

1. **engagement in inclusive teaching practices.** *Inclusive teaching* refers to the design and delivery of teaching, curriculum, and assessment through learning activities that are accessible to all. When you teach inclusively, you view diversity as a learning opportunity that can enrich the lives and learning of others (Hockings, 2010), and do not accidentally or intentionally exclude students from opportunities to learn (Centre for Learning, University of Washington, n.d.). Strategies for engaging in inclusive teaching practices are outlined in this chapter.
2. **the design and delivery of accessible classroom materials.** Use academic accessibility and universal instructional design (UID) (outlined in this chapter) to create learning materials and tasks supportive of the learning goals they are trying to achieve.
3. **a commitment to continuous improvement.** Embody this commitment by critically reflecting on your actions, language, and teaching strategies.

For discussion on engaging in critical reflection, see chapter 3.

Inclusive Teaching Practices

Strategies for inclusive teaching practices include:

Being aware of any biases or stereotypes that you may have absorbed. What kinds of assumptions do you hold about students' motivations to study? For example: do you assume that students taking a course in Religious Studies are all religious, or discourage female students from engaging in quantitative work?

Conveying the same level of respect for all students. This includes showing equal respect for students' academic capabilities (Davis, 2001).

Not making one person the spokesperson for an entire group, or trying to "protect" any group of students. These behaviours can have negative implications on students' performance, and for the classroom environment as a whole. Angry, defensive, or apathetic responses from the teachers' or students can undermine the teacher-student relationship, discourage future participation, and disrupt all students' abilities to engage with the course material thereafter (Ambrose, et al. 2010).

Using inclusive language. Your language and demeanor have a powerful impact on your relationships with students and the instructor. As a general rule, handle language around age, race, sex, disabilities, and religion thoughtfully, and only identify people or groups by their differences when

relevant to the course material (University Relations, University of Calgary, 2014). When translating inclusive language into your teaching, consider the following strategies:

- consult your department for discipline-specific language practices and conventions;
- use gender-neutral pronouns;
- draw case studies, resources, and examples from a variety of social and cultural contexts; or
- refer to the University of Calgary's inclusive language policies. This information can be found in item 5.08 of the University Relations' *Visual Identity Standards*.

Academic Accessibility

Academic accessibility refers to the design and presentation of course materials that are accessible to the widest possible audience, including but not limited to students with disabilities or those who use assistive technologies. Student Accessibility Services (SAS) at the University of Calgary works collaboratively with people and resources across campus to create an accessible, equitable, fair, and supportive learning environment for all students. The SAS has a number of resources available in hard-copy and online to help students that are considering registering with their office, and to inform instructors about strategies to support diverse learning needs in the classroom (Student Accessibility Services, n.d.).

For more information, including resources on designing accessible course materials, refer to the SAS website (<http://ucalgary.ca/access/>), or visit their office at the MacEwan Student Centre, 452.

Universal Instructional Design (UID)

Universal instructional design (UID) is a strategy for designing tools and materials that are flexible, consistent, accessible, clear, and supportive of the teaching and learning goals they are designed to achieve. UID is not about ensuring accessibility only for students with disabilities, but about considering the potential needs of all learners when planning and delivering course material. By utilizing the principles of UID, you and the course instructor can plan how to best support learning for all students in the classroom. You can also more effectively identify and eliminate barriers to learning, and minimize the potential need for special accommodations (Palmer & Caputo, 2003).

Use Table 1 to guide the design and assessment of learning materials and activities (adapted from Palmer & Caputo, 2003; and Teaching Support Services, University of Guelph, 2002.) Use your own strengths as a starting point, and then continue to build and reflect on the learning tasks and on your effectiveness in facilitating them (Palmer & Caputo, 2003).

Table 1

Seven Principles of Universal Instructional Design for Teaching Assistants

Instructional materials and activities should...

| <u>UID Principle</u> | <u>Qualities</u> | <u>Questions to Consider</u> | <u>Sample Strategies</u> |
|---|--|---|---|
| <i>...be accessible and fair</i> | Identify and remove barriers to accessing course material, taking part in learning activities, or seeking assistance from the instructor. | <p><i>Will students have difficulties accessing course materials, participating in classroom activities, or seeking my assistance?</i></p> <p><i>Are the materials easy to access, understand, and interpret?</i></p> | Consider the time and location of office hours (virtual or in-person), times for easy-access to resources, length of learning activities, and when you will be available by email. |
| <i>... be flexible in use, participation, and presentation</i> | Present course materials and learning activities in multiple forms, and with multiple means of accessing, understanding, and interacting with them. | <p><i>Am I choosing the most effective medium to communicate information?</i></p> <p><i>Are there images, texts, or graphs that would make the course material or learning activities clear or interesting?</i></p> | Experiment with an appropriate combination of images, spoken explanations, and text. |
| <i>... be straightforward and consistent</i> | <p>Communication with students and the instructor are clear, truthful, and consistent with the course syllabus.</p> <p>Reduce or remove unnecessary verbal or visual complexity that may be distracting to student learning.</p> | <i>Are there any areas of confusion or inconsistency in your expectations and/or how the course material is presented?</i> | <p>Confirm due dates, assignment expectations, learning outcomes and other course details with the instructor in advance.</p> <p>When students come to discuss the course, draw from resources given by the instructor to ensure that everyone is getting the same (and correct) information.</p> |

| | | | |
|--|---|--|--|
| <i>...be explicitly presented and readily received</i> | Present information in appropriate and compatible medium(s). For example, consider creating a worksheet to accompany a video or PowerPoint. | <p><i>Do the instructor or I have to repeat information?</i></p> <p><i>Is the course material presented in a format that may be difficult to see or hear for some students?</i></p> | <p>Speak clearly and maintain eye contact with your audience.</p> <p>Display the discussion question or instructions for the learning activity in a visible space. For example: on an overhead, poster, whiteboard, or PowerPoint with large, clear lettering.</p> |
| <i>... provide a supportive learning environment</i> | Encourage academic growth by creating an inclusive classroom environment that promotes positive risk-taking, learning from one's mistakes, and lifelong learning. | <p><i>Are students comfortable expressing their ideas and asking questions in the classroom (virtual or physical)?</i></p> <p><i>Am I respectful and professional when interacting with students and the instructor?</i></p> <p><i>Are classroom interactions free from anything that would impact academic discussion or student learning, such as discrimination, bullying, or plagiarism?</i></p> | <p>Be friendly, approachable, and professional in your attitude, words, and actions.</p> <p>Welcome the diversity of backgrounds, language, and experiences in your classroom.</p> |
| <i>...minimize unnecessary physical effort or requirements</i> | Recognize that students come from a wide range of backgrounds, physical characteristics, and personal circumstances. | <i>Are there any physical obstacles to participating in the learning activities of the course? If so, how can they be reduced or avoided?</i> | Ensure that any hands-on work is physically comfortable for students. At times, this may require partnering people when conducting classroom tasks or giving presentations, and arriving to the classroom with enough time to set up the activity. |
| <i>...ensure learning spaces that accommodate both students and instructional methods</i> | Design the learning space in ways that support full student participation, and aligns with the essential learning tasks of the course. | <i>Is there anything in the design of a learning space that would prevent full student participation (for example: seating arrangements, time-sensitive access to online materials, etc.)?</i> | Ensure that the spaces, materials, and technology required for your classroom are booked or prepared ahead of time. |

Chapter 3: Engaging in Critical Reflection

Critically reflective teaching happens when we identify and scrutinize the assumptions that undergird how we work. The most effective way to become aware of these assumptions is to view our practice from different perspectives. Seeing how we think and work through different lenses is the core process of reflective practice.

(Brookfield, 1995, p. xii-xiii)

Reflection is common process in everyday life where we look back and consider an event, a conversation, or a personal action. *Critical reflection* is when we reflect on our assumptions, and reevaluate our previous ideas, beliefs, intentions, values, and feelings in a specific context (Mezirow, 1998). The benefits of engaging in a critically reflective teaching practice include:

- **Fostering a lifelong love of learning.** Critical reflection equips you with new insights, and informs and enables better actions in the future (Watson & Kenny, n.d.).
- **Actively engaging with your own teaching and learning practices.** The process of critical reflection connects present values, new knowledge, and previous experiences (Mann, Gordon, & MacLeod, 2009).
- **Developing your professional and academic identity.** Together, the ability to critically reflect on your experiences and to learn from them are the foundations of your professional, academic, and teaching development (Mann, Gordon, & MacLeod, 2009).

Guiding Principles for Critical Reflection

Take a moment and consider the following: when do you think about how you are performing as a graduate student? Who do you talk to? Do you like to reflect in a casual way, or do you prefer a more structured means, such as journaling? Regardless of your preferences, guiding principles for practicing critical reflection are:

1. **“Step back.”** The process of forming a critically reflective teaching practice begins with stepping back, and looking at what we do from as many unfamiliar perspectives as possible. Brookfield (1995) identifies four potential lenses to engage in this process:
 - a. ***Our autobiographies as learners and teachers.*** Looking at our autobiographies as lifelong learners puts us in the role of the “other”, and helps us to identify the assumptions that inform how we work. Once we know what they are, we can start to test their accuracy and validity.
 - b. ***Our students’ eyes.*** Seeing ourselves through our students’ eyes can help question what students take from our teaching, and determine if it aligns with our intended outcomes and values.
 - c. ***Our colleague’s experiences.*** Asking instructors for feedback, and engaging in

discussions about teaching with fellow TAs can emphasize elements of your teaching practice that you hadn't considered before.

- d. **Theoretical literature and evidence-based research.** Reading, discussing, and reflecting on scholarship can foster multiple interpretations of familiar classroom phenomena. These diverse insights can help us look at our experiences in new ways, and spark a new appreciation for everyday events and processes in a classroom.
2. **Keep it short.** However you decide to bring critical reflection to your TA-role, it should not feel like an add-on or a stressful activity (Aronson, 2011).
3. **Maintain some kind of record.** This will help you keep track of your experiences and learning to date, and will be a useful resource when preparing your teaching portfolio.
4. **Share with others.** Sharing your critical reflections with others helps you to benefit from their experiences, and to look at your own experiences in new ways. Sharing can also prevent isolated thinking, and unhealthy self-criticism (Smith, 2011).

Forms and Models of Critical Reflection

Smith (2011) outlines four main forms of critical reflection to consider when determining how critically reflective practice suits you as a teacher and learner: personal, interpersonal, contextual, and meta-critical. Each form is outlined below, and is adapted with the addition of a complimentary model of critical reflection.

Personal. Personal forms of critical reflection revolve around one's thoughts and actions in relation a specific event, or a broad teaching practice. Journal activities such as **teaching logs** can help you focus on acknowledging and realizing significant personal thoughts and actions, and interpret them in a meaningful way.

A teaching log is a record of important events, and of your reflections on them. As you review your log entries over time, you can learn more about the values, practices, and assumptions that inform your teaching and learning. There is no "wrong" way to do this exercise. The goal is to identify the elements of the event that are meaningful to you. As often as you like, take ten minutes to jot down answers to one or more of the following questions as a teaching log "entry". If you wish, create your own questions, or simply record what happened (Brookfield, 1995).

- *When did I feel the most engaged or affirmed as a TA, a learner, and aspiring scholar in my discipline – the moment(s) that I said to myself "this is what teaching and learning in my discipline are all about"?*
- *When did I feel the most disconnected, frustrated, or bored as a TA, a learner, and aspiring scholar in my discipline – the moments that I said to myself "I'm just going through the motions here", or "I'm in over my head"?*
- *Which situation caused me the greatest anxiety or self-doubt – the kind of situation that I kept replaying in my mind or criticizing myself for? How did I respond?*
- *Which event took me by surprise – caught me off guard, or made me unexpectedly happy?*

- *Of everything that happened, what would I do differently if I had the chance to do it again?*
- *Of everything that happened, what do I feel the proudest of? Why?*

Interpersonal. Interpersonal forms of critical reflection focus on your interactions with others, and ask questions about how group dynamics, disciplinary norms, and professionalism influence in a given context. **Rolfe's framework for reflective practice** (2001) is one possible means for individuals and groups to reflect on such variables within a specific interaction. For each level of Rolfe's framework, jot down points, themes, or considerations in answer to each question listed. Next, step back from your notes and look for common themes, issues, or unanswered questions (Rolfe, Freshwater, & Jasper, 2001).

Level 1: "What?" *What happened? What was my response? What was I trying to achieve? What did I expect?*

Level 2: "So What?" *Why does it matter? What are the consequences? How does this experience link to my academic, teaching, professional, and/or personal development?*

Level 3: "Now What?" *What am I going to do from now on? What has worked in the past? How will I apply what I have learned? How will I know that any changes are successful?*

Contextual. Contextual forms of critical reflection consider how a different frame of reference, way of thinking, or motivation would influence the interpretation of a specific event or correspondence. The **RSQC2 model** provides a means to identify, organize, and prioritize the information that contextual forms of critical reflection require. Individually or as a group, make headings for each stage of the RSQC2, and address them in the order outlined (Angelo, 1993):

Recall. Make a list of the most important things that happened. After you have finished your list, take a moment and rank these points by significance.

Summarize. Summarize the most important points in 1-2 sentences.

Question. Ask: what went well? What can be improved on? How did students respond to the activity or material? Jot down 1-2 answers for each question.

Comment. Look at your questions and answers, and think of an evaluative comment or two. For example: "What I enjoyed the most/least was..." or "What I found most/least useful was..." or "During most of the class, I felt..."

Connect. Step back from what you have written, and highlight the main points that stand out. How are these points related to one another? How do they relate to your role as the TA, and to student learning?

Meta-critical. Meta-critical forms of critical reflection examine the discursive boundaries of common thinking or practice. The ultimate goals are (a) to address privileged interests, knowledge, and agendas, (b) reflect on how and why they came to be, and (c) address the impact had on the participants (or outsiders). The **DEAL Model for Critical Reflection** can be effectively used to address each of these points. This model is unique in that it *ends* with the question “*what did I learn?*” (rather than beginning with it) because it uses critical reflection to both apply and generate learning. The DEAL model has three sequential steps (Ash & Clayton, 2009):

Describe. As best you can, *objectively* describe the situation or context under reflection. This is not as simple as it sounds, as it’s often tempting to fast-forward to interpretation or meaning-making. Questions to prompt an objective description can include:

- *When and where did the situation, event, or correspondence take place?*
- *Who was (and was not) present?*
- *What did I do (and not do)? What did others do (and not do)?*
- *What did I see or hear (or not)?*

Examine. Examine your experiences in the situation in correlation with the desired objectives or learning outcomes. For example: if the intention of a meeting was to stimulate discussion and raise questions, what activities did (or did not) support obtaining these objectives? Questions to prompt examination may include:

- *What was I (or someone else) trying to accomplish?*
- *Of the actions taken, was the focus on symptoms of the issue, or the cause of it? How might I (or others) focus on these points in the future?*
- *What are the sources of power, privilege, or underlying assumptions in this situation?*
- *What is in the interests of the common good in this situation?*

Articulate Learning. Use the following four prompts to articulate the learning generated by the first two steps:

- *What did I learn?*
- *How did I learn it?*
- *Why does it matter?*
- *What do I do in light of it?*

Celebrating Your Successes

It is essential to recognize, appreciate, and celebrate your successes, big and small, that happen throughout your TA-ship. This includes anything from accomplishing a goal, to having a positive interaction with a student during office hours. Throughout the term, take note of the experiences, conversations, and events that go as planned, better than you expected, and surprise you. Such milestones are key moments to reflect on, and are empowering learning opportunities.

Chapter 4: Establishing Professional Boundaries

Boundaries are the basic ground rules for the professional relationship. They add a structure to mentorships that provides guidance regarding appropriate actions and interactions for mentors and protégés.

(Barnett, 2008, p. 5)

Both students and instructors will inevitably test your boundaries – and this is OK! What is important is how you respond to these “tests.” Research shows meaningful connections between boundaries and teaching effectiveness, as they inform the relationships that impact the classroom environment, and inevitably, student success (Dunn-Haley & Zanzucchi, 2012). In addition to developing as teachers, graduate students are advancing as scholars, expanding their professional skillsets, and maintaining personal interests and relationships. Establishing boundaries between all of these arenas is integral to your well-being. Therefore, think of boundaries as means to establish and maintain a respectful rapport with students and the instructor, and to prioritize your time, attention, and actions.

Guiding Principles of Professional Boundaries

The following principles are adapted from Plaut & Baker (2011) and Clearly, Horsfall, Jackson, & Hunt (2012).

Professional boundaries...

1. **Are informed.** Inform yourself of the ethical standards, institutional policies, and disciplinary practices related to your TA-role. In addition, explore the wealth of discipline-specific research related to professional boundaries in the scholarship of teaching and learning.
2. **Consider potential boundary-crossing variables.** Take time to think about the professional, academic, personal, and situational risk factors for TA, instructor, and student boundaries. In a TA-role, these variables may include online and social media communication, personal disclosure, language, work hours, academic (mis)conduct, and non-academic (mis)conduct.
3. **Reach out to others.** Should a situation arise where you feel a student needs medical or emotional assistance, your professional boundaries are crossed, or you are witness to misconduct, discuss the event(s) with the course instructor, your academic supervisor, or your program graduate advisor as soon as possible; **“Whether with regard to scientific, clinical, or ethical issues, peer review and consultation should always be a cornerstone of our professional existence”** (Plaut & Baker, 2011, p. 831). Silence, denial, or avoidance often escalates tension, and increases the potential for miscommunication, misunderstanding, or conflict. In addition, maintain a record of the events under question,

and any correspondence that relates to it.

4. **Mindful of your well-being.** Use critically reflective practices (outlined in chapter 3) to be aware of your experiences as a TA, how you perceive others, and the consequences of your actions. Be honest with yourself about when you are feeling vulnerable, are in need of professional or academic guidance, or are facing an ethical dilemma.

Non-negotiable Boundaries

Certain boundaries have legal and institutional parameters that are not negotiable, and are universally applicable to students, staff, and faculty members. These include, but are not limited to, all forms of harassment and discrimination, violence, and academic and non-academic misconduct (Human Resources, University of Calgary, n.d.).

There are a number of campus resources available to inform you of institutional policies and procedures. For information, please consult:

- Human Resources;
- The Office of the Ombudsperson;
- The Office of Diversity, Equity, and Protected Disclosure (ODEPD);
- *The University of Calgary Calendar 2017-2018* (available online and in print);
- *Non-Academic Misconduct Policy* (2014);
- *Student-at-Risk Policy* (2015);
- *University of Calgary Code of Conduct* (2015);

Strategies for Establishing and Maintaining Boundaries

Espinoza (2012) argues that what makes or breaks rapport between students, instructors, and TAs is more to do with how you respond to them than what your perceptions of them are. Therefore, when establishing boundaries pertaining to students and instructors, it is important to be self-aware of your own personal and professional values.

Take a few moments to reflect on the following questions:

- ***What kind of rapport would you like to have with your students?*** Would you like your interactions to be more formal or casual?
- ***What kind of rapport do you wish to have with the instructor?*** Once more, consider if you would like to be more formal or casual. In addition, think back to your first meeting with the instructor. Did they express any expectations regarding how they prefer to interact with TAs (for example: using titles such as “Dr.”, “Mr.”, or “Ms.” versus calling each other by their first names)? How did you respond in turn, and what are you comfortable with going forward?
- ***What kind of information do you think is appropriate to share with students and the instructor?*** For example: personal contact information, social media accounts, and stories from your personal life (etc.).
- ***How can you embody these boundaries in the classroom (physically and virtually)?*** How do things such as your language, clothing, personal or online demeanor (etc.) support or contradict your values and expectations for yourself and others?

Boundaries with students. While the instructor is accountable to the university regarding all matters related to classroom material, assignment expectations, and grading, TAs are often the first contact for students with questions or concerns. The most important quality recommended by experienced TAs is the ability to be approachable with students while maintaining a degree of professional distance (Dunn-Haley & Zanzucchi, 2012). Whatever this looks like for you, communicate these boundaries, and be consistent in your actions.

The following is a list of guidelines to consider with regards to professional boundaries between students and TAs:

Maintain a professional relationship with students at all times; “Be friendly, but not a friend”

(Teaching Support Services, University of Guelph, 2014, p. 5). This also applies to close relationships (Teaching Support Services, 2014):

- *If a friend is taking the course:* inform the instructor and make the appropriate arrangements for the student’s evaluation and assessment. This will help avoid any conflict of interest, and minimize any potential negative impact on your friendship.
- *If a student is making advances:* Clearly communicate, by way of your words and actions, that the student’s behavior is inappropriate. If the behavior persists, seek the advice of the instructor to help you deal with the situation professionally.
- *If you are interested in a personal or romantic relationship with a student:* If you wish to pursue any kind of personal relationship with a student, you must wait until they have completed all course work and are no longer under your assessment or authority.
- *If a student is in distress:* If a student approaches you with personal information that may undermine your professional rapport, draw from the SU Wellness Centre’s *Responding to Students in Distress* in Appendix B.

Be prepared to define your expectations at the beginning of the term, to discuss them with the class, and to adhere to them (Espinoza, 2012). Students often expect instructors and TAs to be friendly, informal, and open. Such expectations may take the form of informal address, contact via social media, or discussion of you or your students’ personal lives. Being clear on what your boundaries are before the start of the term will minimize potential misunderstandings, and ensure consistency in these interactions.

Clearly outline when and how you will communicate online. This includes your preferred email address, the times when students can contact you, and your typical response turnaround time.

Be clear about the kinds of classroom tasks that are negotiable. Students may attempt to negotiate a deadline or assignment expectation with you, sometimes in lieu of talking to the instructor. Should such a situation arise, refer back to the course syllabus, assignment outlines, lab policies, and any information that students have received from the instructor. If you are unsure about how to answer a student, forward them to the instructor.

Boundaries with the instructor. The ideal TA-instructor relationship is based on collegiality, mutual-respect, professionalism, and commitment to student learning (Taraban-Gordon, 2013). Both TAs and instructors need to be familiar with policies regarding TA contracts and standard duties, and professional, academic, and non-academic conduct. At the beginning of your TA-ship, seek

out the most up-to-date information, much of which is located in the most recent *GSA Collective Agreement* (available on the GSA website) and the *University of Calgary 2016-2017 Calendar* (available in-print and online).

Maintain a professional relationship with the instructor. Professional boundaries are essential in any relationship with a power differential, as they provide structure and guidance regarding appropriate actions and interactions between individuals (Barnett, 2008). This means having a clear understanding of the instructor's expectations, knowing what your main tasks are in the course, and respecting boundaries related to personal and online communication and interactions.

Establish regular meeting times to discuss the course. This will provide both of you with opportunities to exchange important information about how the course is going, and to share your experiences as a TA. Such communication will help minimize opportunities for misunderstanding, and maintain focus on student success.

Boundaries online. Boundaries online present complicated challenges to consider. On one hand, social media can help increase student engagement, facilitate collaborative learning, and ease information dissemination. However, it can also negatively impact student and TA communication and rapport if left unmonitored (McEwan, 2012). McEwan (2012) outlines the following points to consider when deciding what kinds of online boundaries best suit you, your role, and the course:

Be cognizant of the nature of online space. Think: what kind of online space is used, and how are students invited into that space? Do students need an account? Is the information password-protected?

Manage disclosure. McEwan (2012) argues that disclosure is a difficult topic to negotiate because student-faculty relationships are shown to benefit from *some* self-disclosure about hobbies, interests, etc. However, how would you manage that online? Individual TAs must determine what and how much they post, and what is appropriate for students to see. Some strategies to consider are:

- to restrict what viewers can see on your account/profile;
- to discuss with the course instructor what kind of information is appropriate to share in your specific online environment, and If you wish to connect with a student via social media, only “friend” or “follow” after the class is over, or when the student has graduated.

Follow fairly. If you follow one group of students but not others, you are at risk of showing favoritism. This would negatively impact your rapport with students, and be detrimental to a positive learning environment. Instead, set guidelines for yourself regarding how you will connect with students prior to interacting with them online. These guidelines should reflect your comfort level, the nature of the online space, and the learning outcomes of the course.

Responding to a Student in Distress

The SU Wellness Centre has two resources—*Responding to Students in Distress* and *Referring a Student in Distress*—to guide you should a circumstance arise where you have reason to be concerned about a student’s personal, physical, or emotional well-being. In addition to the steps outlined, follow-up with the instructor after the incident or encounter occurs, and keep record of all correspondence and steps taken.

For copies of *Responding to Students in Distress* and *Referring a Student in Distress*, see Appendix B, and online at <http://www.ucalgary.ca/wellnesscentre/how-do-i-help-others>

SECTION II: ENTERING THE CLASSROOM

Introduction: How Do I Get started?

In *What the Best College Teachers Do*, Bain (2004) outlines the following unifying elements of effective teachers. In general, good teachers begin with a question, and attempt to help students understand its significance in ways that note its implications and connect to broader questions in the discipline. Then, the teacher prompts students to answer the original question by considering evidence, thinking critically, reasoning logically, and presenting major conclusions (Bain, 2004). The following guiding principles of effective teaching are adapted from Bain (2004), with added information specific to the TA role.

Effective teachers...

1. **Create a natural critical learning environment.** In a *natural* learning environment, students encounter the skills, habits, and information they are trying to learn in the questions and learning activities they are pursuing. This environment is *critical* in how it prompts students to think critically, reason from evidence, ask insightful questions, and assess their own learning. Together, a *natural critical learning environment* is made up of five elements:
 - a question, concept, or problem;
 - teacher guidance in helping students understand the question's significance within the broader concerns of the discipline;
 - student engagement in higher-order intellectual activity to compare, apply, analyze and/or synthesize, but never only to listen and remember;
 - student work to answer to the question or problem; and
 - further questioning – "What do we ask now?"

For creating a learner-centered classroom environment, see chapter 7.

2. **Get students' attention (and keep it).** Begin lectures with a provocative question, intriguing concept, or perplexing problem that raises issues, variables, or perspectives that students have not considered before.

For discussion on delivering the first class, see chapter 6.

3. **Start with students rather than the discipline.** Address students' prior knowledge about a topic early. Then, gradually raise their questioning and understanding of the topic to the desired level of critical thinking necessary to obtain the lesson's learning objectives.

For discussion on assessing student learning, see chapter 11.

4. **Seek commitments.** At the beginning of the term, ask students for their commitment to the course and the learning required if they intend on taking it. Behaviours such as eye contact, enthusiasm in your voice, and willingness to call on students demonstrate more commitment to learning than other formal or ostentatious ceremony (or militaristic demands for participation).
5. **Help students learn outside of class.** As a general rule, the best teachers do in class what they think will best help their students to learn outside of class. This approach is fundamentally different from simply deciding to do something because it “deals with” a subject. However, this approach might nonetheless lead to “orthodox” approaches (and benefits), such as providing an explanation that helps to clarify or simplify a complex idea. The difference is in your plan, and the choices you make when presenting material. Draw on the principles of academic accessibility and universal instructional design (UID) when planning and presenting materials (chapter 2).

For discussion on conducting effective office hours, see chapter 10.

6. **Engage students in disciplinary thinking.** Use class time to help students think about information and ideas the way scholars in the discipline do. This isn’t only about disciplinary knowledge, but teaching students the skills to understand, apply, analyze, synthesize, and evaluate evidence.
7. **Create diverse learning experiences.** “The very best teachers offered a balance of the systematic and the messy” (Bain, 2004, p. 116). Sometimes this involves repetition and familiarity, other times it involves innovation and surprise. When preparing to teach, reflect on which materials are best presented inductively (facts, data, general principles and theories) or deductively (applying principles to specific situations), and which forms of audio or visual input suit the material best.

For discussion on lecturing, see chapter 8.

Chapter 5: Preparing for Your Role

*We interpret the word **teaching** here to signify all professional activity that provides direct support for student learning. That includes not only traditional classroom and laboratory teaching, but also instruction of online courses, and small-group settings, one-to-one teacher-student interactions, student advising, and the scholarship of teaching and communication of its results.*

(Seldin, 2010, p. 5)

Guiding Principles for Beginning a TA-ship

Much of the work involved in teaching takes place well before the semester begins. Taking time *before* the first day to inquire, plan, and prepare empowers you to establish a professional rapport with the instructor, address student questions and concerns, introduce the subject matter of the course, and build a sense of community in the classroom. This work familiarizes you with the organization and content of the course, and is the foundation of the classroom environment (Davis, 2011).

When beginning a TA-ship, it's essential to...

1. **Seek knowledge of your role.** Much of this knowledge is found via the course instructor, and discipline-specific training in your department or program. Additionally, track down resources related to the course material, such as textbooks, past lecture notes, or undergraduate study guides.
2. **Plan strategically (and realistically!).** Once you know the specifics about your TA role in relation to the course material, think about your key milestones for the semester, and the timelines you have to complete them. Then, think about what goals you would like to set for yourself. Remember: you are not *just* a TA. Take other important arenas such as your graduate research and coursework, personal life, and professional responsibilities into consideration alongside your TA duties.
3. **Follow up.** Once all knowledge of your role is organized, touch base with the instructor to make sure your goals and times are realistic, within your assigned TA tasks, and supportive of the course learning outcomes. If necessary, approach your academic supervisor and graduate course instructors about any accommodations that need to be made in regards to deadlines or meetings.

Meeting the Course Instructor

Before the start of the term, schedule time to meet with the course instructor. This is your first opportunity to discuss the course, your TA role, and to fill in your "Assignment of Assistantship" contract. If this is your first time working together, this is also a chance to introduce yourselves,

discuss your past teaching experiences, and describe your familiarity with the course material. If the course and the materials are new to you, don't worry! Mentioning this will enable the instructor to adjust your TA role appropriately.

It is good practice to come prepared with a copy of the course syllabus, a printed copy of your "Assignment of Assistantship" contract, and any additional program paperwork relevant to your TA assignment. If there is any confusion when discussing your role, refer back to the *GSA Collective Agreement*, and your graduate advisor for clarification.

See Appendix C for a checklist on questions to ask the course instructor at the start of the term.

Setting SMART Goals

When goal setting, it's important to think strategically and specifically. Use the SMART goal-setting process below to reflect on what this looks like for you. Keep in mind: your TA role may evolve throughout the semester. Allow your goals to be flexible for any changes. The following guidelines for SMART goal setting are adapted from the Office of Personal & Career Development, Wake Forest University (2010), and Teaching Support Services, University of Guelph (2014).

Specific. First, your goals need to be specific. Specific goals help you determine exactly what you want to accomplish, and give you an idea about how to proceed with the other SMART criteria. If a goal is too vague, it may feel unachievable. For example, "I am going to be the best TA that I can be!" is a noble goal, but it does not clarify for you, the instructor, or the students what that entails. Instead, think specifically about what your "best TA" practices look like. Consider the following points:

- *What are the main responsibilities of my TA-ship?*
- *What kinds of tasks/assignments are part of the course?*
- *What do I value in teaching and learning?*

Measurable. Your goals also need to be measurable (and be measured!). Measurable goals reflect the learning objectives of the course, and quantify elements of your teaching progress and effectiveness; for example: "I will learn three new names each day," "I will budget 10 minutes of questions at the end of each session," or "I will grade 5 midterms every evening between Monday and Thursday." When considering measurable goals, reflect on the following points:

- *Who am I accountable to to show evidence of my progress and effectiveness? When and how often?*
- *How many students are in the classroom?*
- *What are the expected timelines?*

Achievable. Thinking about achievable goals can be very exciting, as you will consider skills that you wish to develop, or experiences that you would like try for the first time. Achievable goals are not a question of limitation, but of curiosity and exploration; for example: "I will prepare and deliver my first lecture," "I will prepare and execute a new learning activity that I read about," or "The instructor recently gave me feedback about my teaching, and I will incorporate three of his/her points into my next tutorial." To help get you inspired, consider the following:

- *What teaching and learning skills do I want to develop or strengthen?*
- *What resources and preparation time do I need?*
- *Will I be able to pursue this goal within the terms stipulated by my TA contract?*

Relevant. Relevant goals are about understanding the bigger picture, while appreciating the parts that make up the whole of student learning and your teaching development. These goals are often the product of reflecting on your experiences to date, and anticipating student needs; for example: “I will hold both online and in-person office hours this term to make sure I am as accessible to as many students as possible,” or “I will note three areas of student interest, confusion, or question in my teaching log each class.” Consider the following points:

- *What progress have I made in my teaching development to date?*
- *What are the learning objectives and tasks of the course, and what is my role in achieving them?*

Timely. Lastly, it’s important to set goals that you will be able to complete within the time frame of your TA-ship, and within the hours stipulated in your TA contract; for example: “I will meet with the instructor every two weeks to discuss the course,” or “I will have my tutorial activities prepared a week in advance.” Be as realistic and as flexible as possible when setting timely goals, as they are the most likely to adjust throughout the term. Consider the following points:

- *What key milestones are already set in the course? For example: assignment due dates, weekly tutorials, marking deadlines, etc.*
- *What milestones can I set for myself? How can I align my goals with these milestones?*
- *Who am I accountable to follow up with on these goals? the instructor? the students? myself?*

Examples. The following list of SMART goals draws on various timelines and events common in TA-ships. Use these examples to consider the kinds of goals that suit your preferences, your TA tasks, and your personal and academic schedules.

My SMART goal for the semester is to support undergraduate learning by developing my communication and teaching skills during office hours. To accomplish this goal, I will look at the course outline, set themed office hours at key points in the term, and communicate these events to students. For example, after the midterm on October 17, my next three office hours will be to provide students with in-person feedback. I will meet with the course instructor every two weeks to discuss how students and my teaching are progressing, and to consider any new ideas going forward.

My SMART goal for November is to manage my time in ways that help me stay focused and productive. This month: the class I TA for has a midterm on November 7, and a report due on November 21; I have a presentation in one of my graduate courses on November 10; and my SSHRC application is due on December 1. To accomplish this goal, I will write down all of my deadlines in a calendar, and draw in the marking turnaround times with the course instructor, list my research tasks for my presentation, and set up weekly meetings with my academic supervisor to review my SSHRC application. Each morning, I will take 10 minutes to examine my progress in completing these tasks, and use this information to

prioritize my day.

My SMART goal for this week is to mark 8 lab reports each night, so that all marking is finished for Thursday. This way, students can receive feedback with sufficient time to review for the upcoming exam. To accomplish this goal, I will begin marking at 6:00pm sharp, and read each exam through once before providing detailed feedback.

Planning Office Hours

It's important for TAs to consistently emphasize a genuine willingness to help students. Reis (n.d.) emphasizes that undergraduate students distinguish between "approachability" and "availability," and are more likely to approach someone whom they perceive as willing to assist them with their learning. Consider the following strategies when planning your office hours for the term:

Be informed. Ask the course instructor and department about their policies regarding how and where TAs typically hold office hours. If you do not have an office, ask your department about spaces that you can book.

Time your office hours strategically. Think about the following (Reis, n.d.):

- ***When are students likely to need assistance?*** Do your best to anticipate when students may want assistance with assignments, or gather feedback. For example: if assignments are due on Wednesdays, students are more likely to use office hours on Mondays, Tuesdays, Wednesdays, or Thursdays.
- ***When are students most likely to attend?*** Impractical office hours times impede student participation. Students often express preference for office hours immediately before or after the class that the office hours are held for.
- ***When does the instructor hold their office hours?*** Spreading your times evenly throughout the week can ensure that students have the most number of opportunities to seek assistance (Davis, 2001).
- ***Choose a time that you know you can commit to every week.*** Your office hours need to work with your schedule as well.

Consider the purpose of your office hours. Ideally, how would you like to use this time? Would you like to give face-to-face feedback to students about their work? to provide supplementary readings for assignments or lecture material?

Consider offering online office hours. In large lectures or in an online course, offering this option may support students better than offering face-to-face hours only.

Share information about your office hours often. This includes the time, location, and how to make appointments.

For information on conducting effective office hours, see Chapter 10.

Managing Your Time

Take a bird's eye view of your semester. Take a monthly calendar and make note of all deadlines in classes you are TA-ing for, your own coursework and research deadlines, other grad school priorities (scholarships, conferences, meetings), and events in your personal life (social gatherings, birthdays, etc.). This process maps out when you will be the busiest throughout the term. If there is a week when too many tasks are due at once, talk to the appropriate person about any arrangements that can be made to make the most effective use of this time possible. While it is not a hard and fast rule, if you approach your academic supervisor or other professors *at the beginning of the term* requesting to rearrange deadlines so that you may accommodate your TA duties, they will often be flexible. Keep in mind that it is both respectful and professional to discuss this with them as soon as possible, and not at the last minute.

Plan your average week. Using a weekly calendar, write out the times and locations for each of your priorities: coursework, office hours, transit time, research, leisure, etc. Be honest and realistic about how much time each of these points take up in your day. This information helps you see when you are the busiest throughout the week, and when you can be flexible.

Prioritize your day. Take time to outline what your top priorities are, to whom you are accountable to, and the deadlines. As you complete each task, take note of when it was completed. This will keep you focused, help you recognize your progress made towards completion, and give you a sense of satisfaction when the entire list is checked off.

If there is a group of TAs for the course, establish regular meeting times. This can be done virtually or in-person, and does not need to take much time. The purpose of these meetings is to share and reflect how each of your TA experiences are going, connect as a teaching community, communicate information relevant to your roles, and share your experiences.

Schedule regular rest, sleep, and leisure time. Graduate students often find it difficult to take time away from their teaching and research tasks. Common statements include: *"I am too busy," "I feel guilty,"* etc. While these statements may feel relevant in the moment, scheduling time to rest, sleep, and pursue other activities doesn't take away from your success. Rather, it sustains and enriches it by preventing burnout, tending to personal health, maintaining important relationships, and keeping perspective. What this time looks like is unique and customizable to you, your schedule, and your interests. Consider the following approaches:

- **Establish a routine.** Routines can help you keep organized and productive. A routine can also help you to prioritize your tasks in the time you have, and minimize the opportunities to overload yourself or feel pulled in too many directions.
- **Choose a group activity.** Possibilities can include fitness classes, book clubs, and coffee with friends. These activities make you accountable to the group, and therefore less likely to cancel at the last minute.
- **Make it meaningful.** Consider applying your leisure time to a cause or group that is important to you.

Chapter 6: The First Class

You can ease them into the course gradually, or you can grab their attention and do something dramatically different, but in either case you need to think consciously about how you set the stage to facilitate achieving the course objectives. Even before the class period begins, you can communicate nonverbally with such actions as arranging the seats in a circle, posting an agenda, putting your name on the board, and chatting with early arrivals about what class they have come from, or anything else that would indicate your interest in them. While students are coming in, suggest that they spend the time before class by getting acquainted with the students sitting near them.

(McKeachie & Svinicki, 2006, p. 22)

Guiding Principles for the First Day

1. **Be informed.** During your first meeting with the instructor, review their expectations for the first class, and identify what you can prepare. If you have your own lab or tutorial, you may have more autonomy regarding what you plan.
2. **Be organized.** Make sure that you have all of the necessary materials. These could include:
 1. a printed copy of the syllabus and course outline;
 2. pens, pencils, extra chalk or white-board markers, etc.;
 3. USB stick and/or laptop;
 4. printed copy of the class outline, introduction, icebreaker activity, etc.;
 5. course textbooks; and
 6. lab manuals.
3. **Be inquiring.** Take time before the start of the term to become familiar with the course material, and seek out resources that can inform your teaching and support student learning. For example: textbooks, lab manuals and safety training, department writing guides, campus resources, past TAs, or supplementary readings. Whenever possible, practice an experiment, lecture, or exercise ahead of time. This will help you identify areas of potential difficulty or misunderstanding for students, and increase your ability to successfully “troubleshoot” (Teaching Support Services, 2014, p. 8).
4. **Visit the classroom and/or lab beforehand.** Use this time to inspect that all relevant equipment is available (or booked) and working (Davis, 2011). If applicable, tour the space and equipment with the instructor and review all safety policies, how to work the equipment, any potential hazards, and other important information.

5. **Plan to use all of your time.** This will demonstrate that you take student learning and the class seriously (Centre for Teaching Support & Innovation, University of Toronto, n.d.). The materials that you bring on your first day should stir students' attention and curiosity, and convey your excitement about the material (Davis, 2011).
6. **Introduce yourself to students (and vice versa!)** Choose an icebreaker, learning activity, or discussion prompt that gets everyone talking within the first two weeks of class. This establishes an active, learner-centered classroom environment, and helps you and the students to learn about each other. See further discussion in this chapter.

Introducing the Course

Regardless of whether you or the instructor presents this information, you can anticipate using the first class to discuss the following:

Administration. This relates to course and department policies. The course instructor and the syllabus are the official sources for this information. Typical administrative information for the first day include (Davis, 2001):

- overview of course policies, syllabus and outline, and expectations;
- explanation of how the lecture, lab, and/or tutorial are organized and related;
- invitation for students to attend office hours;
- review course prerequisites, and/or safety training; and
- share how students can contact you and the instructor, and how you prefer to be addressed.

Expectations and standards. This information outlines the course and assignment learning objectives, and sets the academic standards for students to achieve them. This information also places the course within the context of the program or department curriculum (Centre for Teaching Support & Innovation, University of Toronto, n.d.). Once again, the course instructor and the syllabus are the official sources for this information. Typical information you can expect to deliver includes (Davis, 2001):

- the learning objectives of the course, and ideas about how to study and prepare for class;
- a description of how class time will be structured, and what kinds of learning activities will take place;
- an overview of the materials and textbooks; and
- if appropriate, a classroom assessment technique (CAT) to gauge students' prior knowledge. For information on CATs, see chapter 11.

Introducing Yourself

(Adapted from Center for Teaching, Vanderbilt University, 2008.)

The students are likely as curious about you as you are about them! Use your introduction as your opportunity to establish the rapport you wish to have with students, to inform students about your office hours, and to communicate your enthusiasm for the course material. Consider the following

information when introducing yourself:

Office hours.

- ***Communicate your availability.*** Let students know your availability, and list your office hours on the course syllabus, posted outside of your office door, and/or on the board on the first day of class (Davis, 2001). Include information such as the dates, time, location, and which email students may use to contact you regarding appointments (Centre for Teaching Excellence, University of Waterloo, n.d.).
- ***Explain your intended purpose for office hours.*** Sometimes students do not understand what office hours are for. This announcement is also an ideal time to encourage students that should they have any trouble with assignments, they can come to office hours and review their progress in the course and receive, as needed, referrals to relevant campus resources (Davis, 2001).

Academic background. What your research interests include, what excites you about the field, what your plans are for the future, and how long you have been at the University of Calgary.

Teaching background. Previous TA-ships or teaching experiences, and what you enjoy about being in the classroom.

Personal background. Where you come from, and your personal interests or hobbies.

Icebreakers

(Adapted from Centre for Teaching Support & Innovation, University of Toronto, 2006; n.d.)

Icebreakers are useful to learn students' names, help students connect with each other, and establish an environment of class participation. As a general rule, icebreakers should be kept light. Avoid activities that will make students feel compelled to reveal aspects about themselves that they are uncomfortable sharing in front of others. Examples of icebreaker activities include:

Interview your neighbor. Have students work in pairs and interview each other. They can have a prompting question related to the course material, their major/minor, reasons for taking the course, (etc.) After a few minutes, go around the class and have each interviewer present what they learned about their interviewee.

Pack a suitcase. Ask students to make a list of 5 things they would take to a desert island, or to a faraway place to live for a year. The "things" packed do not literally need to fit into the suitcase, but students cannot bring other humans with them. This provides students with a lighthearted topic of discussion before starting formal group work.

Name tents. Ask students to write their names on a folded index card and have it sit at their desks for the first week.

Managing Nervousness

Before beginning any new professional or academic role, it's natural to be concerned about nervousness – and that's ok! Here are some strategies to help ease these feelings (Teaching Support Services, University of Guelph, 2014):

Prepare your materials and practice presenting them ahead of time.

Make a pre-class routine. A pre-class routine is adaptable to your schedule and preferences. The purpose of this time is to organize your materials and get you into teaching mode. To consider what this looks like for you, ask:

- Do you like to re-read your materials before giving a lesson?
- Do you need to set up the equipment at a particular time, or in a certain sequence?
- Do you prefer to relax before addressing a group (for example: listening to your favourite music, enjoying a cup of coffee, or going for a brief walk)?

Breathe. When speaking in front of the class, remember to speak slowly and breathe deeply. When speaking to an individual, you can discretely drop your shoulders to help ease your body language. Alternatively, breathe in slowly for six seconds, and then breathe out slowly for six seconds (Kustra, 2008).

Chapter 7: Creating a Learner-Centered Classroom Environment

Situations that are conducive to learning must be created, to allow all students to engage in interesting and meaningful interactions. These interactions provide opportunities for personal growth, interpersonal sensitivity, skill in group interaction, problem-solving, understanding society and culture, and the ability to understand and cope with an ever-changing world.

(Akombo, 2013, p. 4)

A classroom environment refers to the intellectual, social, emotional, and physical environments in which students learn. These environments are determined by a constellation of interacting elements such as student-teacher relationships and interactions, course demographics, the instructor and TAs' teaching personae, student-student interaction, and the assumptions and values that inform the curriculum. Each of these elements creates and maintains a classroom environment both in the physical classroom, and outside it (Ambrose, et al., 2010). A positive and respectful classroom environment can prevent common classroom problems from occurring, and help students overcome anonymity or isolation in the classroom (Kustra & Potter, 2008).

A *learner-centered classroom environment* promotes the development of self-regulated, independent, autonomous, and directed learners. This environment is built on the relationships between teachers and students, and between students themselves (Weimer, 2013). In a learner-centered classroom, diverse learning and teaching contexts (including linguistic and academic abilities) are resources for student success, not barriers (Akombo, 2013). *Academic accessibility* and *universal instructional design (UID)* are effective strategies to promote a learner-centered classroom environment for all.

Guiding Principles of Learner-Centered Classroom Environments

From the beginning of the term, make an effort to get to know your students, and encourage students to get to know each other. This can be done through group learning activities, icebreakers (chapter 6), or class discussions (chapter 9). Weimer (2013) suggests five features of teacher-student relationships that promote learner-centered classroom environments:

1. **Educate students about the logical consequences of their learning decisions.** Any decision that a student makes about learning has consequences. However, it is often the case that the rewards or penalties of their decisions are felt too late. Therefore, it's important that what teacher's say is reinforced by what they do. For example: If you expect students to do readings every class, enter each class prepared with active learning activities that draw from the text(s).
2. **Be consistent.** Consistency ensures that all interactions and expectations with students are clear, fair, and reliable. For example, if the syllabus says "no late work accepted," emphasize this point in class, and prepare to stand by it in the future. Consistency also

informs students about how they can expect a teacher to relate to them. For example: when a teacher consistently models a professional and respectful demeanor, students observe how a mature and responsible learner behaves, and will likely to mirror these actions in the future.

3. **Hold high standards.** Believe that students can reach clear and challenging (but not unattainable) standards. Most importantly, be committed to stimulating the knowledge and skills required by students to achieve them. For example: evolve your expectations in ways that align with advances in student learning. Inform students of these developments, and follow up with a classroom activity that deepens their learning even further.
4. **Care about student learning.** When teachers care about student learning, there is a positive impact on student motivation. This caring must be genuine, and cannot be faked. Expressions of caring can be varied and customized to your teaching and professional persona. For example: take time to find answers to the questions students ask, compose conscientious email responses, or give a positive comment about a student's work.
5. **Embody a commitment to learning.** Show your love of the course material and practice *learner-centered teaching* (outlined below). When teachers demonstrate their commitment and investment to learning, it motivates students to reflect on their own learning values.

Practicing Learner-Centered Teaching

(Adapted from Chickering & Gamson, 1989; and Educational Development Unit, University of Calgary, 2014)

Learner-centered teaching...

1. **Supports active learning.** *Active learning* means that students take what they learn, make it a part of themselves, and relate it to past experiences. To promote active learning in the classroom, make sure that the learning material is stimulating, relevant, clearly communicated, and adaptable to student needs and classroom contexts.
2. **Demonstrates respect for diverse talents and ways of learning.** A diverse student body brings diverse talents, knowledge, skills, and learning styles to the classroom. Show interest in students' opinions and concerns, and seek to understand their learning experiences in ways that clarify their learning needs, and express your love of your discipline.
3. **Communicates clear and high expectations.** High and clear expectations encourage everyone—from those who come to class poorly prepared, to those who are self-motivated—to feel the importance of making an effort. At the beginning of the term, make expectations and learning outcomes clear, and provide information on the course organization, structure, and the direction it is going.
4. **Supports and encourages student independence.** To promote student development as

independent and self-regulated learners, provide students with opportunities to draw upon their interests, and set appropriate timelines for them to complete a task or learn a concept. When providing feedback, give prompt and constructive feedback, and encourage students to self-assess their own learning progress.

5. **Creates a teaching and learning community.** Use teaching methods and activities that encourage student-faculty contact, and respectful cooperation and collaboration among students. This enhances students' intellectual commitment to their studies, and motivates them to think about their own teaching, learning, and academic interests in the future.
6. **Uses appropriate assessment methods.** Clearly and purposefully align assessment methods, feedback, and intended learning outcomes. Provide clear criteria for evaluation, and organize and structure learning activities in ways that ensure deep and progressive learning.
7. **Commits to continuous improvement of your teaching effectiveness.** Gather feedback on your teaching effectiveness, consult scholarly literature on teaching and learning, and cultivate a reflective teaching practice. These processes help identify clear goals for your teaching and professional development, and enhance student learning overall.

Strategies for Learner-Centered Classroom Management

TAs may encounter unexpected, difficult, or disruptive student behavior in the classroom (physically or virtually). This encompasses a broad spectrum of situations, from students being unprepared for a task (potentially common), to disagreement or tension during discussion (less common), to conflict arising between teachers and students or students themselves (rare). What's important is that you know how to identify when these situations are happening, and have strategies in mind for how to respond. **As a TA, it is best to view these situations as opportunities to model the best teaching, learning, and professional practices of your discipline, and to learn from the course instructor.** Consider the guiding principles, scenarios, and suggested responses below. Ask the instructor how they prefer to positively and professionally navigate these (or similar) situations.

No one has done the reading. There are a number of strategies to consider if this happens. Some to consider include (McKeachie & Svinicki, 2006):

- assign students questions for review and discussion at the beginning of the next lesson;
- give different assignments to teams of students, and review the main points together before moving forward;
- give students time to scan the material before you continue lecturing; or
- voice the problematic nature of the situation, and state that there will be some form of assessment for the next class.

Only one student speaks up. Draw on a group activity where both observers and discussers have specific roles to play to complete the learning task. For example, buzz groups where one person from each group is the speaker, but the rest of the group helps to collect and synthesize information (McKeachie & Svinicki, 2006).

Conflict occurs. If a conflict occurs between you and a student or between groups of students, inform the course instructor and work to address the issue *as soon as possible*. This may require: apologizing for yourself or others (if warranted), explicitly discussing the root of the tension, or having private conversations with those involved (Ambrose, et al., 2010).

Turn disagreement into a learning opportunity. Debate, tension, and cognitive dissonance are opportunities to expand one's perspective, delve deeper into a topic, or better understand another's views. As such, one need not avoid tension and disagreement, but work towards facilitating these situations into important questions and discussions (Ambrose, et al., 2010).

If, despite your efforts, you are unable to engage the class, set aside time to reflect on your teaching methods and students' learning needs. Typical causes for inadequate participation can include: students may be accustomed to being passive in class, students may fear criticism from their teachers and peers, or students may assume that the task of the course is to find the answer the instructor wants rather than to explore and evaluate the possibilities of the material. There are no guaranteed effective ways to rectify such a situation. However, it is helpful to remind students how much they are learning (McKeachie & Svinicki, 2006). Consider the following strategies (McKeachie & Svinicki, 2006):

Find and use an activity or session to review what students have learned so far. This can be customized to the work done in the last month, week, or hour.

Recognize and use out-of-class learning opportunities such as email, or online discussion boards. Due to personal preference or the nature of the course material, some students may become more proficient participants with an increased sense of anonymity.

Periodically ask students how they feel discussion is going. For example, "Which aspects of the class are going well? What specific changes would improve class discussion?"

Choose and use a classroom assessment technique. See chapter 11.

Should a problem persist, approach the course instructor and discuss how student learning is progressing in the course to date before making changes to your teaching strategies.

SECTION III: TEACHING TOOLS AND STRATEGIES

Introduction: What Are the Key Elements of Lesson Planning?

A lesson plan has three main components: (a) learning objectives, (b) teaching and learning activities, and (c) strategies to assess student understanding. These components are applicable to large or small classes, various classroom settings (lectures, discussions, tutorials, labs, seminars, etc.) and across many disciplines. When you are developing your lesson plan, estimate how much time each activity will take. When presenting the lesson, consider providing students with an agenda of what they will be doing in class that day. This will help keep students engaged and focused throughout, and model how to organize their notes. At the end of class, budget time to answer students' questions and to summarize the key points (Milkova, n.d.).

The following is a general framework for lesson planning (adapted from Milkova, n.d.). Feel free to adjust this framework to suit the course learning objectives, students' needs, and your role in presenting the material.

Learning Objectives

1. Determine what you want students to learn and be able to do by the end of class. Consider the following questions:

- *What is the topic of the lesson?*
- *What do I (and/or the instructor) want students to learn?*
- *What do I want students to know or be able to do by the end of class?*
- *What do I want students to take away from this lesson?*

2. Rank these learning objectives in terms of importance. This helps you prioritize lesson content, and budget your class time. Consider the following questions:

- *What are the top 3-5 important concepts, ideas, skills, or terms that I want students to be able to grasp and apply?*
- *Why are they important?*
- *If I am short on time, are there any that can be omitted until another time?*

Teaching and Learning Activities

3. Develop the learning activities that you will use to get students to understand and apply what they have learned.

- Develop a creative introduction to the topic to stimulate student interest and encourage critical thinking. How will you introduce the topic? How can you check if students have had any previous exposure to the lesson topic, or what any assumptions or preconceived notions they have?
- Consider supplementing your introduction with a review of important concepts to remember from last class, a discussion question, or an activity that prompts the knowledge and skills of the day.

4. **Utilize the principles of UID and accessibility (see chapter 2) to prepare your learning activities.** As you plan your activities, factor in time for discussion, and asking and answering questions. Consider the following:
- *What will I do to explain the topic?*
 - *How will I illustrate the topic in a different way?*
 - *How can I actively engage students in the topic?*
 - *What are some relevant, real-life examples, analogies, or situations that I can use to help students understand the topic?*

Assessment of Student Understanding

5. **Prepare a strategy to check for student understanding.** How will you know that students are learning?
- Ask effective questions (see chapter 9) Review students' questions, answers, and comments throughout the lesson as a way to gauge their understanding.
 - Prepare a classroom assessment technique (CAT) (see chapter 11).
6. **Develop a conclusion and summary for the main points of the lesson, and a preview for the next one.** You can do this in a number of ways:
- State the main points yourself. For example: "Today we talked about..."
 - Have the class help you summarize the lesson, and write their points on the board.

Flexibility and Adaptability

New and experienced instructors alike know that it's easy to run out of time in class. Planning and managing your time in the classroom is a skill that develops with practice and reflection. You may need to adjust your lesson mid-class to meet students' needs. Your knowledge of the learning objectives and the course material are your best aids in making decisions on the spot. This is ultimately more productive and supportive of student learning than stubbornly sticking to your original plan (Milkova, n.d.).

Lesson Plan Templates

A lesson plan template helps you to organize your lessons beforehand, and to manage time as you teach. Lesson planning templates also document your teaching development, and can be an excellent resource when discussing the course with the instructor, and when preparing your teaching dossier (see Section V).

There is no single right way to plan a lesson; charts, lists, paragraphs, point form, and logs are all effective ways to plan ahead, and keep organized. They can be a means to grasp the "big picture" of the lesson, or to organize and structure small and important details. Feel free to create your own template, or to adjust the sample template in Appendix D to meet your preferences.

For a sample lesson template, see Appendix D.

Chapter 8: Lecturing

What are lectures good for?

- *Presenting up-to-date information (there is typically a gap between the latest scholarship and its appearance in a textbook);*
- *Summarizing material scattered over a variety of sources;*
- *Adapting material to the background and interests of a particular group of students at a particular time and place;*
- *Helping students read more effectively by providing an orientation and conceptual framework; and*
- *Focusing on key concepts, principles, or ideas.*

(McKeachie & Svinicki, 2006, p. 58)

Guiding Principles of Effective Lecturers

Revell & Wainwright (2009) demonstrate that staff and students agree on three elements that make a lecture “unmissable” (p. 214). Each point is outlined below as guiding principles for effective lecturing. The best lectures...

1. **Have some degree of student participation and interaction.** Here, the emphasis is on active learning. Any active learning activities gives students the chance to apply their learning and then explain it to the group—for example: discussions, debates, brain storming, problem-solving, or role playing.
2. **Have a clear structure.** A clear structure best supports students in seeing the material’s “big picture,” and connecting the smaller, more intricate knowledge connections in between. Lectures should synthesize information, highlight main ideas, and emphasize key points.
3. **Are presented with passion and enthusiasm.** A passionate lecturer brings any subject to life! Don’t be shy about conveying your enthusiasm for the course material. It can positively impact student engagement and motivation with the subject.

Preparing Lectures

When planning any lecture, the form (structure, organization, and design) of the lecture needs to fit the content, and vice versa. As you plan, keep in mind that there is a difference between “novice” and “expert” organizations of knowledge (Ambrose, et al., 2010, p. 54). Students’ knowledge won’t be as sophisticated or developed as yours, and yours won’t be as developed as the instructor’s. Your lecture should be organized to provide a structure for student engagement, and facilitate disciplinary knowledge and skills acquisition in order for students to draw on deliverables for future tasks (Ambrose, et al., 2010).

Organizing Lecture Material

Here are some strategies to consider when planning and organizing your lecture material:

Begin by organizing your knowledge of the content. Write down planning notes for the following points (Cannon & Knapper, 2012):

- ***What is the purpose of the lecture?*** to present students with information on a certain subject? to demonstrate a model or procedure? to construct an academic argument? to encourage critical thinking? The answers to these questions inform the rest of your preparation, and your eventual presentation of the material.
- ***What is the subject matter of the lecture?*** How much material should you plan to cover? How much is too much? What kinds of questions might students ask?
- ***Where does this lecture fit within the context of the course?*** Lectures are not isolated entities (Cannon & Knapper, 2012, p. 23). They typically belong in a series of lessons on a particular topic. Discuss with the instructor where and how your lectures fit within the context of the course.
- ***How will I structure the lecture material?***

Prepare a strong beginning and ending (Cannon & Knapper, 2012):

- ***Beginnings:*** Use the start of the lecture to make links to previously discussed materials, known interests or concerns of students, or current events. Then, explain the structure (or main topic) to provide students with the means to organize their notes, and a point of reference for how the information will be presented. Next, display items of visual interest that engage students' attention and stimulate thinking, such as: pictures, video clips, models, or demonstrations.
- ***Endings:*** Use the end of the lecture to reflect on the links made in the outline structure, and to conclude the topic for the day. From there, you can use these materials to frame the next lecture.

As a general rule, design your lecture in 10-15 minute blocks. Adult attention spans average at approximately 10-15 minutes; for example: shift from lecturing to viewing audio-visual material, or plan an activity or problem-solving question at the end of each major concept or idea (Centre for Teaching Excellence, University of Waterloo, n.d.).

Prepare lecture notes, but not an entire script. A script is too time consuming to prepare, reading from the page will hinder making eye contact with students, and your voice will be projected downwards towards the page. Reading from a page will also prevent you from having opportunities to vary your voice or be spontaneous (Centre for Teaching Excellence, n.d.).

Structuring Lectures

Ambrose, et al. (2010) urge lecturers to consider providing students with the organizational structure of its contents, and keeping it visible throughout the class. Students may not interpret the organization, basic relationships, or category structures of the material, especially if they are new to the subject. Leaving the lecture outline visible can help students organize their knowledge of the material, and

retrieve this information when studying their notes.

Cannon & Knapper (2012, 24-25) outline a number of possible lecture structures (listed below). All “Summary and Conclusion” sections can be supplemented by a learning activity, class discussion, or assessment activity.

Basic lecture.

- Introduction and overview
- Main points
- Review of main points and conclusion

Comparative.

- Introduction
- First major point: details about topic A
- Second major point: details about topic B
- Third major point: criteria for comparing A and B
- Fourth major point: compare and contrast A and B
- Summary and conclusion

Problem focused.

- Introduction: state the problem and provide an overview of the possible solutions
- First major point: solution #1
- Second major point: solution #2
- Third major point: solution #3
- Fourth major point: compare the solutions presented
- Summary and conclusion

Academic argument.

- Introduction: overview of lecturer’s position and supporting arguments
- First major point: counter-arguments
- Second major point: critique of counter-arguments and evidence
- Third major point: arguments and evidence in favor of lecturer’s position
- Conclusion: restatement of lecturer’s position

Delivering Lectures

Success in delivering lectures rests on your facilitation skills, subject knowledge, and ability to adapt to events as they occur. All three elements require *speaking*, *engaging*, and *explaining*.

Speaking.

Relax before you speak. Take a deep breath. Next, tighten and hold your major muscles for five seconds. Exhale and release for 5 seconds as you move on to the next muscle group. Continue until you have gone from your jaw to your toes (Davis, 2001).

Speak more slowly than normal, but allow for some variance. When considering how to vary your voice, think about the pitch, volume, and duration of your words and sentences (Davis, 2001). Students of all linguistic backgrounds will appreciate this, and it will help minimize their difficulties when taking notes (Cannon and Knapper, 2012).

As you speak, use verbal “signposts”. Verbal signposts identify and clarify important points; for example: “This idea is most important because...;” “the next point we need to consider is...;” or “So far, we have considered two solutions to this problem. The first solution focused on...” (Cannon and Knapper, 2012, p. 39). Additionally, try to minimize your use of vocalized pauses, which can cause confusion or disengagement. These include: “um,” “well,” “OK,” “so,” or “hmm” (Davis, 2001, p. 116).

Pause. A pause is one of the most useful tools when public speaking. A 5 to 30 second pause can capture students’ attention, add emphasis to a concept or idea, or allow students time to think (McKeachie & Svinicki, 2006). Planning pauses into your lecture gives you and the students a short rest. In this time, you can take a sip of water, present a question or problem that you would like students to think about, or emphasize the importance of the next concept (Davis, 2001).

Engaging.

Keep eye contact with students. Reading from the screen can be as monotonous as reading from a printed page, and shows students that your attention isn’t on them. Making eye contact can help build connections with students, and discourage sources of distraction. It may also be helpful for some students to be able to see your face and mouth as you speak (Centre for Teaching Excellence, University of Waterloo, n.d.).

Check for student understanding. From the front of the room, you can observe students’ level of interest (or confusion), and see who has questions. Alternatively, you can:

- Use phrases like: “Is that clear to everyone?” or “Let me put that another way...” Take these questions as opportunities to draw on visual materials such as PowerPoint, a handout, audio/visual aids, or concept maps (Teaching Commons, York University, 2014).
- Repeat key words or phrases, or write them on the board for students to see (Teaching Support Services, University of Guelph, 2014).

Explaining. Explicitly highlight deep features and connections to concepts. Ways to do this can include (Ambrose, et al., 2010):

- **Making connections.** When you introduce a new concept, idea (etc.), connect it to what students have already learned in previous courses or lectures. Alternatively, ask students to make the connections themselves.
- **Providing examples.** List problems, theories, and concepts (etc.) that share deep features (axioms, assumptions, motivations, values, etc.) but differ superficially. Alternatively, share examples that are superficially similar, but the deep features differ.

Chapter 9: Facilitating Discussion

As an approach to teaching, facilitation focuses on leadership as guidance rather than direct instruction. Facilitation leads by suggestion and redirection, helping students to assume control over and responsibility for their own learning. A good facilitator is often unnoticed by students because the focus of the classroom experience is students and their learning.

(Kustra & Potter, 2008, p. 51)

Discussion is the verbal exchange of ideas, arguments, theories, hypotheses, perspectives, information, and conclusions. *Facilitating discussion* requires thorough preparation before class, and attentive responsiveness during class. Discussion activities are not as predictable as lectures. Students' questions and comments may take learning in a different direction than intended, or reveal new insights on their progress with the material to date (Kustra & Potter, 2008). The best tools you have are your knowledge of the course material and your facilitation skills. Using both together can help you to turn any discussion into an opportunity to generate and synthesize new ideas with students (Kenny, n.d.).

Guiding Principles of Facilitating Discussion

Kustra & Potter (2008) outline five areas of facilitator responsibility. These responsibilities are adapted below as guiding principles for facilitating effective discussion.

Effective discussion facilitators...

- 1. Plan in advance.** Plan the discussion topic, activity structure, and means to assess student understanding. Formulate your expectations around the classroom norms established by the course instructor on the first day. From there, set high standards for student success, communicate those goals to students (and that these goals are within their reach), and provide the facilitation skills needed for their success.
- 2. Structure the discussion environment.** Effective facilitators structure the discussion in ways that foster goal-directed learning, minimize irrelevance, and encourages students' self-regulation and self-assessment as learners. There are three variables of a good discussion structure: a strong opening and closings, the physical space, and time management.
- 3. Direct discussion towards the planned learning outcomes.** Appropriately manage the time per discussion activity, and the speaking time of each student. If the discussion falls off task or one student or group is dominating the speaking time, direct everyone back to the task or topic at hand.

4. **Attend to the experiences of all learners.** Unexpected situations or behaviours may arise during discussion. This can include uneven student participation, low energy levels, or heightened emotional states. It's important to be able to recognize different situations as they are happening, to learn how to "read" the situation for the appropriate leadership response required, and to assess student understanding afterwards.
5. **Model the skills, knowledge, and behavior that the facilitator wants students to practice and adopt.** "Every move a facilitator makes will be noted by students – not always consciously, but noted nonetheless" (Kustra & Potter, 2008, p. 56); how you ask questions, give feedback, and respond to comments communicates standards of practice in the classroom and broader discipline. Be mindful of your actions, language, and gestures, as students are likely to mirror them in the future.

Planning the Discussion

Consider the following points when planning your discussion:

What topics are the most important for students to consider? The key here is to organize your discussion plan in a purposeful and logical sequence, while still remaining adaptable (Davis, 2001). Ask yourself:

- *How will I open and close the discussion?*
- *What directions can the discussion take?*
- *Which topics may sidetrack students' attention?*

What learning activities best align with the learning objectives of the discussion? There are *multiple* possible activities, including case studies, panels, role-play, debates, or brainstorming. Be innovative and creative when choosing the activity that best suits the class and the learning outcomes. In this process, ask yourself (Kustra & Potter, 2008):

- *What are the students like and how many are in the room?*
- *What expectations did the instructor outline on the first day?*
- *Are you able to manipulate the space?* (For example: rearranging desks and chairs.)

Are students aware of the expectations for the discussion? Before engaging class in discussion, remind students of participation expectations and course learning objectives outlined on the first day (Kustra & Potter, 2008). If appropriate, post them visibly before the discussion activity.

Are the relevant materials equally accessible to all? Good discussion necessitates informed participants. To ensure that students have equal access to discussion materials, make the materials available as early as possible—ideally in the required textbooks, on D2L (or a similar learning management system), or through the library database (Brookfield & Preskill, 2005).

Can I anticipate sensitive or controversial contributions? What this looks like will vary among disciplines. Before you plan the activity, ask the instructor to recall sensitive topics for students in previous courses. From there, frame the discussion purposefully and explicitly, observe of

the classroom climate, and be mindful of student experiences. Consider the following strategies as means to frame the activity (Ambrose, et al., 2010):

- Acknowledge that the topics may have personal significance for students. Then, explicitly identify the sources that the discussion activity draws from, outline the learning goals, and model the disciplinary behaviours and language desired from the students.
- Explain why the course is dealing with this issue, why it's necessary for the discussion to consider all sides, and how such discussion relates to the discipline.
- Restate the ground rules for discussion outlined on the first day.

Structuring the Discussion

The following strategies are applicable to structuring any kind of discussion activity (Kustra & Potter, 2008):

Prepare a strong opening. A strong opening has the capacity to generate the excitement and curiosity to carry students into discussion with focus and enthusiasm. Strong opening strategies can include (Davis, 2001):

- A good question from either yourself or students
- A brief revision of the topic, and any specialized terms. However, this should not be a mini-lecture; writing the points on the board is sufficient.
- A 1-minute paper. Ask students to take one minute to write down information relevant to the discussion to come. This activates their knowledge of the material quickly. If you choose, you can use this as an assessment strategy for student preparedness. For more information on classroom assessment, see chapter 11.

Create the discussion environment. With discussion activities, it's important to push students beyond comfortable or uncritical assumptions to seriously engage with a new concept, theory, argument, or point of view. Otherwise, discussion may be superficial, and learning minimal. However, this cannot be done without purposefully creating the circumstances conducive to the kinds of learning and thinking intended. The ideal discussion classroom environment prompts students to: see challenges as learning opportunities; internalize the importance of justifying their claims; and consider new points of view. For more information on creating a learner-centered classroom environment, see chapter 7.

(Re)arrange the space. Try different configurations of tables, chairs, computers, projectors, discussion boards, and desks depending on the kind of discussion activity and the class size. A circle, horseshoe, or debate setup allows most students to see and hear each other best.

Use relevant sounds and visuals. Pictures, visual data, and music can help establish the discussion atmosphere, and keep student attention on task.

Prepare a strong closing. A strong closing recalls the objectives, problems, or questions stated at the beginning of the class, and reflects on whether they have been achieved. Closings are more difficult than openings because the facilitator needs to conserve the momentum of class discussion, and motion it towards the form and content of the closing activity. A strong closing can make the difference

between students leaving the discussion feeling intellectually stimulated, or feeling frustrated that their efforts were unfruitful. Strong closing strategies can include (Davis, 2011):

- Asking students to state how their thinking changed as result of the discussion. This can also be done as an individual writing task.
- Stating your own observations or evaluations of the discussion. For example: What were some examples of helpful or insightful contributions? When did the group stray from the subject? Which questions arose from the discussion or remain unanswered?
- Use any remaining questions or issues to frame the next discussion or lecture.

Directing the Discussion

Directing discussion is about learning when and how to intervene with: questions, redirection, or feedback. This is a unique challenge for new and experienced facilitators alike, and varies between classrooms, individuals, and discussion activities. Experience is the best teacher.

Always observe and be sensitive to the general behavioural norms of the students within the classroom environment. From there, you can look at a comment or action in context, and then discern whether intervention is required (Kustra & Potter, 2008). Then, check your observations with the instructor to ensure they are accurate, and work together to decide whether, and how, change is needed. General strategies for directing discussion include:

Be an active observer. During discussion, make note of who is contributing, the kinds of contributions, and how long the contributions are. This helps teachers prepare appropriate strategies for supporting or challenging student learning. If you find that a few students are dominating the discussion, direct it away from them and encourage others to participate (Kustra & Potter, 2008).

Anticipate that discussion may go off track. If a discussion goes off track from its intended direction, stop and clarify what is happening. Don't shut down a distraction (or disagreement) the moment it occurs (Davis, 2001). Instead, spend time looking at the issues that have arisen from all positions and their use of evidence and facts. Once the points of confusion or distraction have been adequately acknowledged, communicate that the discussion has gone off topic and move on (Kenny, n.d.).

Keep calm if a disagreement, controversy, or argument breaks out. Debate arises in any good discussion. While disagreement or controversy can provide opportunity for critical thinking and scholarly debate, students may feel repressed or unsettled if the disagreement is left unresolved (McKeachie & Svinicki, 2006). Should a controversial comment become a personal criticism of another student, even if said jokingly, speak up promptly (Davis, 2001). For further information on classroom management strategies, see chapter 7.

Avoid common pitfalls. Brookfield & Preskill (2005) outline the following things to avoid when facilitating discussion:

- **Lecturing.** Ideally, your lectures, preparatory reading materials, and previous assignments leading up to the discussion sufficiently introduce the material. Lecturing immediately before the discussion session runs the risk of conveying the message that you want (or

expect) students to say only certain things, or address certain topics.

- **Being vague.** Opening discussions with vague questions such as “What do you think?” or “Who wants to start us off?” only works once discussion participants know and trust each other (and the teachers) enough to dive into discussion easily and quickly. Instead, prepare a good opening and closing to the discussion activity, and consider outlining the activity agenda orally or visibly.
- **Playing favourites.** There are students in every class that demonstrate greater willingness to contribute to discussion. Often, this is to be encouraged. However, resist the temptation to call on the same students repeatedly or routinely. This establishes a “pecking order” for opening contributions, which may discourage participation from other students, as they can predict who are keen to speak up first (Brookfield & Preskill, 2005, p. 64).
- **Fearing silence.** Don’t panic at silence! At the beginning of discussion, there may be periods of silence as students intellectually settle into the discussion task. Be patient, and choose not to say anything at first. This will prevent you from providing your own answers, which demonstrates to students that you will do the thinking for them.
- **Misinterpreting silence.** Just because the classroom is silent doesn’t mean that nothing is happening with the participants. From the start of the term, characterize periods of reflective deliberation as normal (not awkward) parts of the learning process.

Engaging Student Participation

Encourage active listening from students. Have students paraphrase each speaker’s comments before providing their own. Students who have just learned something are often better able to translate it to their classmates. By discussing the ideas and positions of their peers, students can make more objective judgments in relation to classroom expectations and standards, and assessment of their work (Nicol & Macfarlane-Dick, 2006).

Practice active listening.

- **Listen carefully to what is (or is not) said.** This will help you be alert for how students understand the material. Use phrases like: “Is that clear to everyone?” “Let me put that another way...” or “Let’s find where the author discusses this in the material...” (Teaching Commons, York University, 2014).
- **When appropriate, take time to positively acknowledge insightful student questions and comments.** This praise builds the speaker’s confidence, gives you an opportunity to highlight or summarize key points, and shows students the progress that the class discussion has made (Kenny, n.d.)

Provide affirmation. If a student contributes good ideas, comments, or points of discussion, make note of it. Encourage students to do this for each other. However, do not provide affirmation when it is unwarranted. This can lead to mistrust from students, and can have a negative impact the classroom environment. For information on giving feedback, see chapter 13.

Attending to the Discussion

A facilitator needs to attend to the experiences of the students as discussion participants. Use the following strategies (Kustra & Potter, 2008):

Be mindful of different learner-experiences. Keep track of those who are contributing and those who are listening. Just because a student is quiet in class does not mean they are not engaging with the material. Each student experiences discussion differently. Note how students are responding to discussion, and periodically ask them to describe their observations and reflections. This has the added benefit of teaching the students the importance (and possibilities) of considering a topic from as many lenses and discourses as possible.

Check for students' understanding. Periodically take time to ask questions to assess students' understanding of the ideas, arguments, theories, hypotheses, perspectives, information, and conclusions from the discussion material or their peers. Possible means to do this include:

- Paraphrase, or ask students to paraphrase, the topic or contribution. For example: "If I understand you correctly...", or "Do you mean..."
- Ask for clarification, or for reference to the readings or discussion material.
- Record notes on the board or overhead to help students see the connections between the ideas under discussion. This helps students organize their knowledge, and provides you with a record of the content covered.
- **For information on classroom assessment, see chapter 11.**

Note energy levels. Fatigue impairs learning. If students become tired, it is time to move on to something else or to take a break.

Include everyone. Everyone who wants to contribute to discussion should have the opportunity. Do not favour certain students' contributions over others, or marginalize any individual or group.

Asking Effective Questions

Asking questions is integral to student learning and effective teaching. On one hand, teachers' questions can be used to capture students' attention, spark their curiosity, and reinforce important points. On the other, students' questions are effective means to determine how well they are learning the material (Davis, 2001). As general guidelines:

Balance the kind of questions that you ask. This varies the cognitive skills students draw from (Davis, 2001). Effective questions include (Kustra & Potter, 2008, p. 80):

- **High-level questions**, which require application, synthesis, or evaluation. For example: "If Laertes was left out of the play, would it still be Hamlet? Why?" or "Characterize the evidence required to establish the heritability of a behavioural trait."
- **Divergent questions.** Suggest many possible correct responses. For example: "What are some of the themes in 'A Farewell to Arms'?" or "Propose an experiment to test the hypothesis that malaria can be transferred between people."

- **Structured questions.** Direct the learner to specific approaches, areas of the subject matter, or framework. For example: “What could a general practitioner prescribe for these unusual symptoms?” Or: “In what ways could you use ‘mark and recapture’ to estimate flock size in a population of birds?”
- **Straightforward questions.** Address one issue at a time. For example: “What are some ways to select for successful transformation in bacteria?”

Ask one question at a time. This allows students sufficient time to integrate and synthesize understanding (Kenny, n.d.).

Avoid asking leading questions. *Leading questions* prompt the respondent to answer in a certain way. Leading questions limit students’ capacities for critical or abstract thinking because they pressure students to say what they think the teacher wants to hear (Davis, 2001). For example: “The first source is full of original thought and presents excellent use of evidence, whereas the second source uses excessive jargon and outdated materials. Which is right?” This question is problematic because it leads the respondent to agree with the questioner that the first source is superior, requires no critical or abstract thinking, and minimizes any skills or knowledge students could gain from reading the materials. A non-leading way to ask this question could be: **“Tell me about the two sources. How did the authors’ selections and uses of evidence compare?”** This question requires students to look at the form and content of both sources, to think critically about the sources’ arguments, and to generate their own logical answers.

Giving Effective Answers

Davis (2001) suggests the following strategies for answering students’ questions effectively:

Be aware that your behaviour sets the tones for students’ questions. If students witness you negatively respond to students’ questions, they will be discouraged from asking questions in the future. Instead, give the questioner your undivided attention, make sure that everyone can hear the questioner, treat questions as contributions to the learning process (rather than interruptions to your teaching), and **ask the student whether their question has been answered.**

Call on questioners in the order in which they sought recognition. For example: if a number of students raise their hand, say “Sarah first, John second” so that students know they have a chance to speak. This will prevent students from becoming disengaged, and demonstrate your commitment to (and interest in) their learning.

Invite students to talk to you after class or during office hours if they raise a question too complex for the lesson. While their question is undoubtedly important to them, be cognizant that a lengthy or overly complicated response on your part may detour student learning for the rest of the class. First, thank the student for the question, and provide appropriate feedback for their use of course materials. Next, invite the student to meet with you after class or during office hours.

Delay answers to questions that will be covered in future material. If the question will be addressed later in the class, mention this to the student and point it out at the appropriate time. When you reach the subject, show the student that you remembered their question by saying (for example): “Here is the answer to the question you asked earlier, Peter.”

If you don’t know the answer, it’s ok to say so! This situation may feel daunting at first. However, it is an excellent opportunity for both you and your students to learn. The following is a list of potential responses to draw from if you are unsure about how to answer a student:

- Make sure that you have understood what they are asking. Ask them to clarify their question, or to break it down into its key elements.
- Look up the answer together in the textbook, readings, or online.
- Say that you do not know the answer, but that you will look into it between now and the next class. Always follow up with the student that asked you the question. This shows your commitment to and interest in their learning.

Chapter 10: Conducting Effective Office Hours

Office hours are an important adjunct to college-level courses, allowing you and your students the chance to go over material that could not be addressed during class, to review exams or papers in more detail, to discuss questions at greater length, or to explore future courses or careers.

(Davis, 2001, p. 369)

Office hours provide a chance for you and the students to go over material that was not covered in class, to give feedback in person, and to discuss questions related to the material. Office hours also provide opportunities for you and students to get to know each other better, and to gauge how well the class is going. For example, if a number of students ask the same questions or voice the same concerns during office hours, you know it's a point that you should revisit in class (Davis, 2001).

Guiding Principles for Effective Office Hours

Effective office hours are (Davis, 2001)...

1. **Strategically planned.** Refer to “Planning Office Hours” in chapter 5 for information.
2. **Appropriately staged.** Announce any special topics for your office hours ahead of time, so that students can plan accordingly. You can also ask students to present their questions in writing in advance, and to bring all related reading and materials with the appropriate sections marked.
3. **Consistent.** Once you have decided a time and location, do your best to stick to them. If you cannot make your office hours on a particular day, send out an email to the class explaining which days and time will be affected, and how they may contact you to make appointments when you return.
4. **Friendly and inviting.** Be creative in making the space approachable and inviting, for example: leave the door open or ajar to signal that you are in the room, or set out a bowl of candy. When students arrive, let them tell you the purpose of their visit by prompting them with “What can I do for you?” Indulging in some small talk can also make the mood relaxed and friendly.

Strategies for Conducting Office Hours

Get students to attend. Often, students don't make use of office hours throughout the term. Consider the following strategies to ensure that your office hours are both inviting and effective at all points in the course:

- Require all students to come to your office hours during the first 3 weeks of the term, or post answers to homework on your office door. This will show them where your office is, therefore increasing their likelihood to return (Center for Teaching and Learning, n.d.);
- Have students pick up or drop off assignments/exams during office hours;
- Use office hours to focus on learning strategies and developing ideas, rather than solving problems or giving answers (Davis, 2001); or
- Have additional information or resources available only during office hours, for example: sample exam questions, lab reports, or supplementary readings (Teaching Support Services, 2014).

Give students your undivided attention. When meeting a student, listen carefully, put away papers, work, or laptops, and try to not let phone calls or visitors interrupt your sessions (Davis, 2001).

Manage your time. For example (Center for Teaching and Learning, n.d.):

- ***If a number of students appear at your office at the same time***, ask what kinds of questions they have, and meet with those with similar issues at the same time.
- ***If you spend a long time with one student and there are others waiting***, consider bringing the conversation to an end with a question for them to take away, or with a small “assignment” that you follow up on at a later date.

Online Office Hours

Online office hours are increasingly more common (and popular) with students, instructors, and TAs. While they lack the relationship-building and communication benefits of face-to-face interactions, online office hours can be more flexible. For example: they are schedulable for any time of day, including in the evening; emails and discussion boards are easily archived, and therefore can be referred to later; they are customizable to most online spaces, including email, blogs, discussion boards, and D2L (or another learning management system); and they are accessible from anywhere with a Wi-Fi connection, thus removing the need for a private space. These elements are customizable to when students are likely working on their assignments, therefore allowing you to provide support in real-time (Eaton, 2012).

Talk to the course instructor about offering online office hours throughout the term. When considering their design and execution, refer to the principles of universal instructional design (UID) in chapter 2 and online boundaries in chapter 4.

SECTION IV: ASSESSMENT, FEEDBACK, AND GRADING

Introduction: How Do I Evaluate Student Work?

Assessment, feedback, and grading practices are among the most inquired topics for all levels of teachers and learners. At the beginning of your TA role, ask the course instructor about the recommended grading practices for the course and its assigned tasks. Such information includes (but is not limited to) past grading strategies, grading rubrics, feedback practices, assignment expectations, desired learning outcomes, submission guidelines, late policies, and grading turn-around time. This information is available from the syllabus, the instructor, and the department website (Berenson, 2014). Knowledge of all information relevant to assessment, feedback, and grading minimizes the potential for miscommunication, and ensures consistent, effective, and timely practices.

The following questions are essential to understanding how to approach any assessment, feedback, or grading task:

- *What is involved in the assignment?*
- *What criteria and expectations have been outlined to the students?*
- *How will the assignment be graded?*
- *What tools or resources do I have to refer back to in the grading process?*
- *What strategies can I use to be consistent in my grading?*

Chapter 11: Assessing Student Learning

Assessment provides a framework for sharing educational objectives with students, and for charting their progress. However, it can generate feedback information that can be used by students to enhance learning and achievement. This feedback information can also help teachers re-align their teaching in response to learners' needs. When assessment serves these purposes it is called "formative assessment". It is argued that formative assessment should be an integral part of teaching and learning in higher education and that "feedback" and "feed-forward" should be systematically embedded in curriculum practices.

(Nicol & Macfarlane-Dick, 2006, p. 1)

Assessment refers to a wide range of strategies for measuring educational effectiveness (Angelo, 1993). *Classroom assessment techniques* (CATs) are non-graded, anonymous, in-class activities that are designed to give you and students opportunities to diagnose how teaching and learning are going (Cannon and Knapper, 2012). TAs can use this information refocus their teaching, prevent surprises in student performance, and empower students to take ownership of their learning (Angelo, 1993).

Guiding Principles of Classroom Assessment

The following principles for classroom assessment are adapted from Gibbs (1999).

Classroom assessment functions to...

1. **Capture students' time and attention.** When assessment is done at an appropriate time and means, it can be used to guide students to focus on a *specific* subset of course material.
2. **Generate both quantity and quality learning activity.** When assessment is strategically applied, it can prompt students to independently seek outside learning activities to help learn the skills and knowledge of the course. To explain, if an assessment task that looks at a certain learning activity suddenly disappears, then student learning activities that support those assessment tasks also disappear. For example: if a course reduces the amount of essays assigned, then students change their learning activities away from reading and writing that promote essay writing. Students will instead turn their efforts towards whatever the new assessment method is, be it multiple choice, short answer exams, etc.

3. **Provide timely, impactful, and diverse feedback.** For assessment to be impactful, the timing, quality, quantity, and frequency of feedback need to be carefully considered and staged.
4. **Help students internalize disciplinary notions of quality.** Students pay attention to feedback with social dimensions. When students can assess others' work, be it their peers' or the major voices within the discipline, they can correspondingly learn how to judge (and improve on) their own performance.

Diagnostic Assessment

Diagnostic assessment informs the teacher about two things: the knowledge that students bring into the course, or any weak (or missing) knowledge throughout the semester. A diagnostic assessment technique could be an un-marked quiz, a 1-Minute Paper, or an assignment at the beginning of the course. Patterns and key themes in the assessment results give you information on how student learning is progressing to date (Ambrose, et al., 2010). For example: if the course requires a working knowledge of the International Phonetic Alphabet, give a short quiz asking students to define key terms and transcribe words at the beginning of the semester. The resulting information will inform you about whether you need to schedule time to review transcription basics.

Once you have identified insufficient knowledge, remediate it by highlighting conditions of applicability, providing "rules of thumb", identifying (and explaining) discipline-specific conventions, reviewing relevant concepts and ideas, or engaging in an active learning activity that gets students *using* their learning, rather than being passive recipients of it (for example: a discussion, role-play, or debate) (Ambrose, et al., 2010).

The Classroom Assessment Cycle

Angelo & Cross (1993) suggest the following classroom assessment cycle when planning, engaging, and evaluating a classroom assessment activity. The cycle has three phases, and three steps (nine steps in total).

Phase I: Planning a CAT.

1. **Choose the class date to carry out the CAT.** It should have a comfortable place within the context of the course or lesson. This ensures the assessment activities is effective and does not cause unnecessary anxiety for students (or yourself!).
2. **Decide on what you want to assess about student learning.** For example: critical thinking abilities? A chapter in the textbook? Comprehension of a complex theory?
3. **Choose a CAT that will provide the feedback that you need.** It also needs to work with your teaching style, and be implementable within the class well that day.

Phase II: Implementing and using a CAT.

4. **Teach the lesson that will "target" the learning goal or subject that you wish to assess.** As any unexpected form of assessment may cause stress for some students, explain the

use of the activity and its non-graded (or anonymous) nature before conducting it (Center for Teaching, Vanderbilt University, n.d.).

5. **Assess the results once you have collected all responses and feedback.** Review the results with the course instructor before making changes to your teaching.
6. **Analyze the feedback and turn it into information that you can use to support student learning, and improve your teaching effectiveness.** What this looks like will depend on what you want to assess. For example: If you are assessing how students analyze primary sources, it may be helpful to look at the processes they engage in, or key information they draw on.

Phase III: Responding to the results of a CAT.

7. **Interpret the results and formulate an appropriate and relevant response to students' learning needs.** For example: If students in a German class are having difficulties with prepositions, plan an active learning activity or review session that cover grammar basics, such as identifying cases.
8. **Communicate the results with students, and implement the response.** If you and the instructor decide to change your teaching strategies in response to the data presented via the assessment activity, communicate the activity results to students, explain the teaching changes made, and why.
9. **Reflect on the effectiveness of the CATs' impact on student learning, and your teaching.**

Classroom Assessment Techniques (CATs)

Some CATs include (Center for Teaching, Vanderbilt University, n.d.):

Background knowledge probe. This is typically a questionnaire given at the start of a course or before the introduction of a new topic. Such activities are designed to reveal students' background knowledge about course material.

1-minute paper. At the end of class, provide students with notecards and ask them one (or both) of the following questions: "What was the most important thing you learned today?" and "What question remains unanswered for you?"

The Muddiest point. This technique assesses where students are having difficulties. The "muddiest point" refers to any elements of the material that are the most unclear or confusing. Ask students to write down a quick response to the question: "What was the muddiest point in the lecture, [homework, discussion, film, etc.]?" This can be done either as a discussion activity, in office hours, or anonymously via notecards that students fill out in class.

Defining features matrix. Either in front of the class or with a handout, write a matrix of three columns with several rows. At the top of the outside columns, list two concepts that have enough similarities that they might be confusing. Use the middle column to list significant similarities or differences. Afterwards, step back and analyze the findings as a group in relation to the desired learning outcomes.

Brainstorming or concept map. Start with a question that correlates with the learning you are trying to assess. The results of this activity will not be systematic. Be prepared to differentiate between accurate and appropriately applied knowledge from knowledge that is inaccurate or inappropriately applied. Examples of questions to ask include (Ambrose, et al, 2010):

- ***To uncover beliefs, associations, and discursive assumptions:*** “what do you think of when you hear the word *religion*?”
- ***To disclose factual or conceptual knowledge:*** “What were some of the key historical events of the Black Death?” or “What comes to mind when you think about space exploration?”
- ***To look at procedural knowledge:*** “If you were going to do a research project on *subject x*, where would you begin?”
- ***To look at contextual knowledge:*** “What are some methods you can use to research this topic?”

Chapter 12: Giving Feedback

Whether or not feedback is effective depends on what students need to hear, not what you need to say.

(Brookhart, 2011, p. 34).

Feedback is a technique used by teachers to communicate to students about their performance. It is important for teachers to determine the type of feedback beneficial to the greatest number of students, and to understand the type of feedback that can lead to improvements in student performance (McGrath, Taylor, & Pynchyl, 2011).

Guiding Principles of Effective Feedback

(Adapted from Nichol & Macfarlane-Dick, 2010).

Effective feedback...

- 1. Facilitates student development of self-assessment and reflection in learning.** When students are truly engaged in learning, they monitor gaps between the knowledge and skills of the set task (assignment, exam, etc.), their personal goals, and the outcomes produced. Involving students in assessing their work provides opportunities for them to reflect on goals, strategies, and outcomes highly effective in enhancing academic success, and fostering a lifelong love of learning.
- 2. Encourages teacher and peer dialogue around learning.** For students to be able to use feedback productively and appropriately, they need to be able to understand the feedback itself, and the intentions it was given with. Feedback as dialogue around learning means that students receive the feedback information, and then have the opportunity to engage the teacher in effective discussion about that feedback.
- 3. Helps clarify what good performance is.** A learning goal can only be achieved when both students *and* teachers understand that goal, assume ownership in their roles in achieving it, and have a means to assess progress. If students do not share (at least part) of the teacher's conceptions of the assessment goals and learning outcomes, the feedback information they receive is unlikely to translate into a message that can help them evaluate gaps in required and actual knowledge and skills.
- 4. Provides opportunities to close the gap.** There are two essential questions regarding feedback effectiveness: first, is the feedback of the best quality, and second, does it lead to positive changes in student behavior or learning choices? If feedback information is not turned into action soon after it is received, this is a missed learning opportunity. Closing the knowledge gap is about supporting students while engaged in the act of producing work, and providing opportunities of repeating the task to demonstrate what they have learned.

5. **Delivers high quality information to students about their learning.** Quality feedback is information that helps students trouble-shoot their own performance and take action to close the knowledge and skill gaps between their intentions for their work, and the effect it has on producing learning outcomes. The feedback given needs to be relevant to the task at hand, and to student needs.
6. **Encourages positive motivational beliefs and self-esteem.** It's important to understand the relationship between student motivational beliefs and self-esteem. Students construct their motivations based on their appraisals of the teaching, learning, and assessment contexts, which in turn influence the goals that they set, and their commitment to them. Teacher feedback can have a positive (or negative) impact on these motivations.
7. **Provides information to teachers that can be used to help shape teaching.** "Good feedback practice is not only about providing good information to the students about learning but it is also about providing good information to teachers" (Nicol & Macfarlane-Dick, n.d., p. 1). Teachers need good data about how student learning is progressing in order to produce feedback relevant to the learning task, to students' needs, and to deciding on actions to help close any learning gaps present.

Strategies for Giving Feedback

Be timely. For any student work, feedback needs to come while students still remember the significance of the assignment, and the desired learning of their efforts in completing it (Brookhart, 2011).

Use appropriate assessment methods and standards. Before beginning a grading task, know the kind of feedback and assessment standards that you will be grading students by. The instructor, grading rubric, and your department are the expert resources for information, policies, tips, and strategies.

Be clear and consistent when outlining expectations. Provide students early access to the assignment outline and grading rubrics, or set aside class time to provide an example of exemplary work (Nicol & Macfarlane-Dick, 2006).

Consider providing self-assessment tasks or questions to students. Self-assessment tasks are adaptable to any teaching, learning, and disciplinary context. There are multiple possible activities such as reflective writing, questions and discussion during office hours, or peer-assessment among students. Nicol & Macfarlane-Dick (2006) state that such tasks are important to learning because self-monitoring processes are a by-product of purposeful and meaningful engagement in a learning task. These processes prompt students to identify gaps in their skills or knowledge in relation to expectations, and how to judge their work in relation to these standards. For example (Nicol & Macfarlane-Dick, 2006):

- ask students to identify the strengths and weaknesses of their work in relation to the assignment or test expectations, course syllabus, or outline;
- ask students to reflect on their learning goal for a particular task. Then, ask students to reflect on the progress made to achieve that goal, and how to move forward to the next stage of understanding; or
- ask students to comment on an example of work in relation to the assignment expectations and criteria outlined.

Consider how to adjust your feedback to the learners' needs. For example (Brookhart, 2011):

If a learner is struggling with a particular task or concept:

- Focus your feedback on the learning process. Sometimes students struggle because they don't see the correlation between the choices they make about learning, and the results they get. In such cases, the key to feedback is providing descriptive comments about both strengths and areas for improvement.
- Always use clear language and vocabulary.
- Check back with the student to make sure your feedback has been understood, and the requisite learning achieved (or identified).

If a student is an overachiever:

- Reference areas of particular strength in their work, and what made it so strong. Then, suggest next steps to be taken for even further learning.

Chapter 13: Assigning Grades

Let's start with grades. They are still important and still generated by teachers. Doing the work required in a course gets students grades, but it's also an opportunity for them to learn. The challenge is to acknowledge the importance of grades but retain a focus on what's being learned through these experiences. To meet this challenge, I've devised a set of principles that define a more balanced relationship between grades and learning...:

- 1. Harness the power of grades to motivate students...;*
- 2. Make evaluation experiences less stressful...;*
- 3. Use evaluation only to assess learning...; and*
- 4. Focus more on formative feedback.*

(Weimer, 2013, 176-79).

Guiding Principles for Grading in a TA Role

There are three guiding principles for grading that are applicable to *all* TAs regardless of program:

- 1. Understand your role in grading.** At the beginning of the term, explicitly discuss grading responsibilities and practices with the course instructor.
- 2. Understand grading practices.** Take all possible steps to become fluent and knowledgeable in grading expectations and practices for the course. The specifics of the grading process will be unique to the instructor and course that you are TA-ing for. The instructor, department, and University of Calgary have the responsibility for the design, implementation, and interpretation of assessment and official grading practices (Eberly Center for Teaching Excellence & Educational Innovation, Carnegie Mellon University, n.d.)
- 3. Understand university policy.** Consult the *Collective agreement between the board of governors of the University of Calgary and the Graduate Students' Association: May 1, 2014 – April 30, 2016* and the *University of Calgary Calendar* for official policies pertaining to grading in a “Graduate Assistant (Teaching)” role. Both texts are available online and in print.

Grading Rubrics

Grading rubrics map out the components of an assignment that will be taken into account when grading and describes them according to the assignment requirements at different levels. As the TA, a rubric saves you time when grading, and ensures consistency among multiple graders. For students, a rubric outlines the expectations for the assignment, and the standards of academic performance correlated to a specific mark.

Sometimes TAs create their own assignments, grading policies, or rubrics for the assignments they are tasked to grade. If this is the case, produce written copies and review them with the instructor **before**

presenting them to students. **Then**, take all necessary steps to make sure that the students are clear about these policies and expectations, and are able to access them before the assignment is handed in (Berenson, 2014).

General Grading Strategies

The syllabus, grading rubrics, and the instructor are essential resources to ensure that communication is clear and consistent between students, the instructor, and TAs.

Outline assignment expectations early and clearly. When presenting assignment expectations, take time in class to allow students to ask questions, and to clarify any muddy points of understanding (Berenson, 2014). This process has three main benefits (Davis, 2001):

- Minimizes opportunities for misunderstanding or miscommunication regarding course assignment and exam policies, late work, and assignment instructions;
- Minimizes potential for student complaints, and your grades are easier to justify if complaints arise; and
- Maximizes your proficiency with many necessary components of the grading process.

Consider a grading strategy that keeps you efficient, consistent, and organized.

Possible strategies include (Berenson, 2014):

- Read through a few papers/answers to get an overview of how students are doing. Then, select “exemplary”, “good” and “needs improvement” examples to guide your grading.
- Before you evaluate an assignment in detail, read it through quickly to get a sense of how it is organized. Then do a detailed reading and provide a grade and written feedback.
- Mark student work without knowing whose you are grading. Most importantly, communicate this practice to your students and have them put their name and student number on the title/front page of the assignment only. Alternatively, they can just put their ID number on the document.

Don’t keep students in the dark about their grades. At the beginning of the term, refer to the course instructor about their expectations for grade turnaround time. Additionally, don’t undermine the instructor’s grading policies; for example, don’t tell students if you think they deserved a higher mark, but you had to conform to the instructor’s grading policies and grade them lower (McKeachie & Svinicki, 2006).

When grading with a team of TAs. Make a grading plan with the other TAs and the instructor to ensure consistency, accountability, and accuracy. Strategies for organizing the group include (Berenson, 2014):

- Grade a few examples of student work individually, and then compare your comments and feedback. Make adjustments and solve any discrepancies as necessary.
- Grade with the other TAs at the same place and same time to compare grading and reach a consensus when any discrepancies arise.
- Have each TA pick a question and grade all student responses to that question.
- Grade assignments for students not in your section to ensure fairness or to avoid student concerns about favoritism.

When returning assignments and exams. When returning assignments or exams, consider the best timing to return graded work to students. Returning graded assignments at the end of class keeps students from being distracted, and potentially interrupting the class. Also, if there are several sections to a course, encourage all TAs to hand back work on the same day to help demonstrate to students that there are consistent grading standards (Berenson, 2014).

Approaching Student Complaints about Their Grades

Orsmond & Merry (2010) accurately note that student perceptions on teachers' feedback may not always be correspondingly perceived and accepted by students. As much as possible, discuss students' complaints about their grade directly, professionally, and with communication to the instructor (Davis, 2001). In such circumstances, the purpose of feedback is to encourage students to become self-assessors of their own learning via three questions: "what am I doing?", "where am I going?", and "what do I do next?" Additional strategies include (Davis, 2001):

Provide reflection and digestion time. Before returning graded work, tell the students when you will be available to discuss grades. Leave at least one full day between handing back and discussing grades to provide time for reflecting on feedback. This includes when grades are posted on D2L or other electronic platforms.

Stage specific office hours to discuss grades. Set aside specific office hours for discussing assignment feedback and grades. Ask students to come prepared with specific questions about their assignment, especially in relation to the rubric or assignment outline.

Ask for their comments and questions in writing. Ask students to submit their concerns formally in writing, and specifically in reference to the assignment sheet or rubric.

As appropriate, refer students to the course instructor. Be sure to inform him/her beforehand so that they are aware of the discussions you and the student have had to date. As much as possible, provide a record of *all* correspondence and feedback given so everyone has the same information to work with. This ensures the most fair assessment possible.

Promoting academic integrity

TA(s) play an important role in promoting and maintaining academic integrity in the classroom and in student work. You are actively contributing to upholding academic standards of excellence as you are evaluating student work and noting that academic integrity is upheld. Therefore, it's important to understand the University of Calgary's institutional definitions of academic misconduct, and the procedures required if you catch a student committing some form of academic misconduct. This information can be found in the *University of Calgary Calendar*, available in print and online at <http://www.ucalgary.ca/pubs/calendar/>.

If you encounter (a) student(s) committing academic misconduct, report the incident to the instructor. Do not return the assignment to the student, or approach them without discussing the

correct response to the instructor first. Regarding examination, know what the instructor expects your response to be before going into the examination room. You may be asked to direct the student to the instructor, take the examination away, or move the student to another part of the room.

SECTION V – DOCUMENTING TEACHING

Introduction: What is a Teaching Dossier?

A teaching portfolio is a factual description of a professor's teaching strengths and accomplishments. It includes documents and materials that collectively suggest the scope and quality of a professor's teaching performance. The portfolio is to teaching what lists of publications, grants, and honors are to research and scholarship.

(Seldin, Miller, Seldin, 2010, p. 4)

A *teaching dossier* (also referred to as a *teaching portfolio*) is an integrated summary of your teaching philosophy and teaching practices. Your teaching practices are made up of your approaches to and strategies for teaching, your accomplishments, and the evidence of teaching effectiveness and student learning you've acquired in the classroom. Each item included in your dossier appropriately demonstrates the scope and quality of your teaching practices, and supports the claims made in your teaching philosophy statement.

The hallmark of a compelling teaching dossier is a strong *teaching philosophy statement*, which describes *what* your fundamental beliefs are about teaching and learning, *why* you hold these values, and *how* you translate them into your teaching practice (Kenny & Berenson, 2014). Though on occasion you may be asked to provide a *teaching philosophy statement* independent of your dossier (Kearns & Subino Sullivan, 2011, p.137)—perhaps as part of a job application, for example—in most cases, you should view your *teaching philosophy statement* and your *teaching dossier* as mutually exclusive. The former is shaped by, and directly references, the materials contained within the latter, and each should be deliberately crafted and integrated into the other.

Teaching dossiers serve three main purposes:

- they provide an opportunity to engage in critical reflection on your professional development, growth in teaching abilities, academic skills and knowledge, and teaching identity (Kenny & Berenson, 2014);
- they are means for the teacher to assemble evidence of their teaching approaches, accomplishments, and effectiveness (Knapper and Wright, 2001); and
- they are a valuable resource in academic promotion or hiring processes, annual performance reviews, or teaching awards applications (Seldin, Miller, & Seldin, 2010).

As graduate students, your exposure to teaching experiences vary widely, and are entirely program-dependent. While some departments offer guaranteed teaching opportunities throughout one's graduate degree, others offer few, or none. This section has been crafted to address graduate students with *all levels* of teaching exposure and experience, and offers a number of tools and exercises to help you start crafting a compelling teaching dossier, regardless of your current level of teaching experience.

Chapter 13: Writing a Teaching Philosophy Statement

The statement of teaching philosophy (also called the teaching statement or teaching philosophy statement) promotes reflective practice by encouraging instructors to describe their teaching methods, to justify why they use those methods, to analyze the effectiveness of those methods, and to consider how they might appropriately modify those methods in future courses.

(Kearns & Subino Sullivan, 2011, p. 136).

What is a Teaching Philosophy Statement?

The teaching philosophy statement, often the first section of the teaching dossier, is a reflective, highly personal, first-person narrative that illustrates to your reader the *what*, *why*, and *how* of your approach to teaching (Kenny & Berenson, 2014). Though related to your pedagogical practices, the teaching philosophy is its own distinct entity—one that informs your approach to teaching, and the pedagogical decisions you make, in the many teaching contexts you might be exposed to. Be sure to maintain a distinction between your teaching philosophy and your pedagogical approach. The latter will likely change depending on the level of the course being taught, or the context of the teaching experience (ex. acting as a writing tutor vs. delivering a guest lecture vs. running a tutorial or lab); your teaching philosophy should remain consistent in these and any other teaching contexts you encounter (Beatty, 2009, p. 126).

There is no one ideal format for the teaching philosophy statement. The general rule of thumb is to aim for a document that is one to two pages in length; avoids technical jargon; is written in the first-person; and provides your reader with an authentic portrayal of who you are as an educator (Van Note Chism, 1998). Though approaches to the composition of the teaching philosophy differ widely, the following components are typically seen in a strong statement (Van Note Chism, 1998; Schonwetter, Sokal, Friesen, and Taylor, 2002; Kenny, Jeffs, and Berenson, 2015):

1. one's beliefs about their teaching, their students' learning, and about post-secondary education (in context);
2. one's teaching strategies (as a demonstration of the above beliefs), with emphasis on the particularly strong components of, and accomplishments as a result of, the implementation of this teaching strategy;
3. the impact one has had—on not only students and colleagues, but on the educator him or herself as well; and
4. one's plans and goals for growth in the future.

Framework for Building a Teaching Philosophy

Kenny, Jeffs, & Berenson (2015, p. 2) outline the following framework for develop a teaching philosophy statement (Table 2):

Table 2

Key components of a teaching philosophy statement with guiding questions for reflection

| Philosophy Statement Components | Guiding Questions |
|--|---|
| Beliefs about teaching and learning and post-secondary education | What are my beliefs about teaching and learning in post-secondary education? Why do I hold these beliefs? Who or what has most informed my teaching approaches? How have my beliefs been influenced by my teaching experiences and/or scholarly literature related to teaching and learning? What difference do I hope to make as a teacher? What does it mean to be a good teacher in a post-secondary context? What does good teaching look like in a post-secondary context? What does good teaching look like in my discipline? What does it mean to be a good learner in a post-secondary context? |
| Teaching strategies and strengths | What teaching and learning strategies do I use? How do these strategies align with my beliefs? When have I felt most engaged and affirmed as an instructor? What are my key strengths and skills as an instructor? What am I most proud of? What sets me apart? What are some of my accomplishments as a post-secondary educator? |
| Impact | What difference have I made, and how do I know? What has been the impact of my approaches to teaching and learning (on me, on students, on colleagues)? What have others learned from my teaching and learning approaches? What methods do I use to evaluate my impact? |
| Future Goals | How will I continue to develop, grow, and improve as an educator? What interests me most about teaching in post-secondary education? What are my future goals and aspirations as an instructor in post-secondary education? |

Questions adapted from: Kearns, K.D. & Sullivan, C.S. (2011); Stavros, J.M. & Hinrichs, G. (2011); Schonwetter et al. (2002); Seldin, P., Miller, J.E. & Seldin, C.A. (2010).

How to Craft a Teaching Philosophy Statement When You Have Little to No Teaching Experience: Guiding Principles

The process of crafting a teaching philosophy statement can be intimidating—even to those with a plethora of teaching experiences and evidence of teaching effectiveness at their fingertips. For those graduate students still early in their teaching careers, the process of cultivating a teaching philosophy statement, with little or no teaching experience to draw on, might seem an impossible task. If you feel this way, you're not alone, and you're not out of luck. The key to refining your philosophy in the infancy of your teaching career is multifaceted:

1. What life experiences outside of the academy have offered you opportunities to take on a teaching role? Note that your teaching philosophy need not be exclusively reliant on classroom teaching to be effective. Teaching and learning happen in many contexts and environments.
2. What has your experience as a learner been like? It is helpful to reflect on your experience as a learner to help discover the kind of teacher you want to be (Burnett, 2017, p. 8).
3. What other opportunities for teaching and learning are available to you when the teaching assistantship is not a foreseeable option?
4. Are you regularly revisiting your teaching philosophy statement? Only through continued revision and reflection as your capacity for teaching grows will you find yourself with a persuasive and compelling philosophy.

Below we've expanded on these four important facets of early-stage teaching philosophy development, and offer some guiding questions to help you get started.

Life Experience

Many of your experiences outside of the academy have likely already contributed to your teaching knowledge and capabilities. Before you think about your experiences as a student, and start searching for on-campus opportunities to learn more about teaching, recall work, volunteer, or other leadership experiences you've had in the past. What did your role look like?

- Did you lead a volunteer group? train a new employee? present a new idea to a superior? assess the performance of a co-worker?
- What did you learn from the experience? about yourself? about how learning happened (or didn't happen)?
- What could you have done to improve the situation—both for you as the teacher, and for your learner(s)?
- How have these experiences helped to inform the kind of teacher you want to be?

Learner-Centred Reflection

Beyond previous extracurricular experiences, your previous education can have a tremendous impact on the cultivation of your teaching philosophy. The following reflective prompts, adapted from Burnett, will encourage you to start thinking about your experiences as a learner, and help you clarify the kind of teacher you want to become.

- Recall your favourite learning experiences as an undergraduate student. What did the environment look like? What stood out to you?
- Under what conditions were you best able to succeed as a student?

- Think of your most memorable professors. What stands out about their teaching? Why did you find this a positive environment within which to learn?
- What differences can you note between your undergraduate and graduate experiences thus far? What has been the impact on your learning? Is your ability to learn in a graduate environment more or less effective than during your undergraduate experience? Why?
- Who or what motivated you to pursue graduate studies? Was it an undergraduate professor? A mentor? What influence did they have on your desire to continue as a learner?

Finding Teaching Opportunities in Unlikely Places

Though it might seem that conventional teaching experience is critical to one's success crafting a teaching philosophy, there are many other experiences available to graduate students that can aid in the development of an articulate and persuasive philosophy and statement (adapted from Burnett).

- Ask to sit in on the lectures of professors whose teaching you admire or find effective.
- Get in touch with upper-level TAs from your department, and ask if you might be able to observe their teaching in a tutorial, lab, or seminar.
- Find opportunities for mentorship on or off campus. The University of Calgary offers numerous opportunities to serve in a mentorship capacity.
- Tutoring is a great way to practice your teaching skills in a low-stakes, low-stress environment.
- Seek out opportunities for leadership experience (ex. at work or while volunteering).

Continuous Self-Reflection

Crafting a teaching philosophy statement is a continuous process, regardless of when you start to create it. As a graduate student, you have a great opportunity to get started early with this type of reflection and refinement—a process that will benefit not only your job and award prospects, but your students and your teaching practices as well. With each new opportunity to take on a teaching role, make sure you take the time to reflect on it; keep a journal, craft an online system for documenting your thoughts, or make notes on your lesson plans for future use.

- What about the teaching experience was useful?
- If the lesson was successful, why did you find it so?
- What would you change? What would you maintain?
- How can you improve similar experiences in your future practice?
- Were your students receptive to the lesson? Why or why not?
- Did learning take place? What evidence do you have to support this?

Reflecting on your teaching and learning experiences as they happen, and documenting your thoughts on a consistent basis, will ensure that you not only maintain a relevant, up-to-date document ready to be used in any number of situations, but are also allowing your frequently-revisited philosophy to inform your teaching practice with each new opportunity (Beatty, 2009, p. 116). In other words, don't wait for a job or award application to motivate you to put your teaching philosophy statement and dossier together. The earlier you start, the more prepared you will be when an opportunity presents itself. Start early, keep a detailed record of your teaching, reflect often, and experience the benefits of this practice in real time. For more information on self-reflection, refer to Chapter 3.

Some Important Reminders

1. Be humble (Kenny, Jeffs, & Berenson, 2015). Though the teaching philosophy and dossier are designed to showcase your strengths, they're also meant to demonstrate a commitment to continued growth. Make sure you've struck the right balance between your successes and possible areas for improvement.
2. Don't forget about your students (Schussler, Rowland, Distel, Bauman, Keppler & Kawarasaki, 2011, n.p.). As you compose your statement, you might find yourself tempted to refer primarily to your actions as a teacher—what *you* think, how *you* feel, why *you* approach teaching the way that *you* do. This is, of course, important, but be mindful of the students on the receiving end of your practice. How does your approach to teaching aid in their learning? What are your top priorities for students? How has student learning affected the way you teach?
3. Consult your department to find out whether a specific teaching statement or philosophy has been crafted for departmental use. If one does exist, try to incorporate it into your own teaching philosophy, or at least demonstrate an awareness of it in the body of your dossier.
4. Incorporate specific examples from your teaching experience into your statement (Kearns & Subino Sullivan, 2011, p. 139; Beatty, 2009, p. 128). How does your philosophy translate into action (Van Note Chism, 1997-98)? Help your reader understand what your philosophy looks like by offering them a vivid picture of who you are and what you do in the classroom. (More information about evidence of teaching is offered in the proceeding chapter.)
5. Try to connect your philosophy to the scholarship of teaching and learning (Kenny, Jeffs, & Berenson, 2015). Is there a particular element of SoTL research that has affected your teaching practice or influenced your philosophy in some way? Demonstrating engagement with contemporary SoTL research shows commitment to the discipline and to teaching improvement.
6. Schonwetter, Sokal, Friesen, and Taylor observe that increasingly, hiring committees are asking for a teaching philosophy statement without the accompanying dossier (2002, p. 90). If you find yourself in this situation, make sure to adjust your statement accordingly. Incorporate evidence directly into your statement, and prepare appropriate supplementary materials for the interview process.

Further Resources

- **Kenny, N., Jeffs, C., & Berenson, C. (2015). *Preparing a teaching philosophy statement: Handout*. Taylor Institute for Teaching and Learning, University of Calgary.**

This document, prepared through the Taylor Institute for Teaching and Learning, goes into depth about the teaching philosophy statement, its purpose, and the core elements that make it successful. You'll find a very useful set of guiding questions that will help you craft the four main principles of a good philosophy (as articulated in this chapter)—beliefs, strategies, impact, and future goals—as well some basic principles to keep you on track.

- **Kearns, K.D. & Subino Sullivan, C. (2011). Resources and practices to help graduate students and postdoctoral fellows write statements of teaching philosophy. *Adv Physiol Educ*, 35, 136-145.**

Catered specifically towards graduate students, postdoctoral fellows, and junior faculty members, this article suggests resources for writing your teaching philosophy statement,

offers numerous guiding questions to get you thinking about your unique teaching practices, and provides several methods through which to make your teaching philosophy statement that much stronger.

- **Teaching Philosophies and Dossiers Workshop.**

The Taylor Institute for Teaching and Learning offers two teaching philosophy and dossier workshops—one catering specifically to the University of Calgary Teaching Awards application process, and the other as a component of the *Emerging Teachers Development badge*, a part of the *Graduate Certificate in University Teaching and Learning*. These workshops are particularly useful if you're looking for advice or feedback from a seasoned professional, or simply aren't sure where to start with your own dossier or philosophy.

- **Sample teaching philosophy statements.**

The Taylor Institute for Teaching and Learning offers several sample teaching philosophy statements from past recipients of the University of Calgary Teaching Awards. Consult these to get a better understanding of how diverse teaching philosophy statements can be. Visit ucalgary.ca/taylorinstitute/resources/teaching-philosophies-and-dossiers to see the samples.

Chapter 14: Assembling a Teaching Dossier

Teaching is a highly creative activity whose success can only be shown by a variety of data from a variety of different sources.

(Canadian Association of University Teachers, 2007, p. 9).

As mentioned in the previous chapter, the teaching philosophy statement is heavily reliant upon materials included in the teaching dossier. The dossier cannot exist without a teaching philosophy statement stating its purpose and dictating its make-up; and the teaching philosophy statement presents as a collection of unsubstantiated claims without the evidence of teaching that a dossier provides. Knowing how to make these items work together is critical for the success of both.

An eight- to 12-page document, excluding accompanying appendices, the teaching dossier, like the teaching philosophy statement itself, is a living document that requires consistent revision to remain true to your teaching philosophy and development. The dossier is typically housed in a three-ring binder or in an electronic format, where you can easily substitute old materials for new or revised ones without losing the essence of the overall document. Like the teaching philosophy statement, consistent revision of the dossier is necessary. Ensuring that all materials referenced in the body of the document are present in the appendix, and vice versa, is critical for a clean and professional document.

What is the Purpose of Your Teaching Dossier?

This is informed by who your main audience is, the kind of evidence they would expect to find, and the selection of evidence that is most convincing. For example (Seldin, Miller, & Seldin, 2010): Who is the main audience for your teaching dossier? Yourself? Chairperson? Awards committee? Hiring committee? Once you have determined that, you can organize and prepare your dossier appropriately and strategically.

Guiding Questions for Preparing a Teaching Dossier

When reflecting on the contents of your teaching dossier, its intended audience, and sources of evidence, consider the following elements (Kenny & Berenson, 2014, Table 1, p. 2):

1. **Claims and beliefs.** What are the key beliefs that I hold, or will hold, related to teaching and learning? What are the key claims that I make, or will make, in my teaching in class, in my department, and in my practices?
2. **Strategies and approaches.** What teaching and learning methodologies, strategies and approaches do I or will I use that support my claims and beliefs?
3. **Evidence.** What sources of documentation and materials provide, or will provide,

evidence of my teaching and learning methodologies, strategies, and approaches? What data and documentation provide evidence of the impact and effectiveness of my approaches? How does this evidence align to the key claims I make about my teaching?

A well-crafted dossier demonstrates alignment between these three key areas, and makes connections between categories (a claim and its supporting evidence, for example) clear to its reader.

The Teaching Dossier: What does it Contain?

The Canadian Association of University Teachers (2002, pp. 14-16) recommends the following four key areas of evidence:

1. **Teaching Responsibilities.** This written statement will include a description of the courses you have taught or are currently teaching (or, teaching-related responsibilities in other realms, such as tutoring, mentoring, through work experience, in your community, etc., as discussed in the previous chapter); how these courses fit into your department's larger program (if applicable); how students (or mentees, employees, etc.) are evaluated; and your teaching expectations for each of these teaching scenarios.
2. **Teaching Philosophy Statement.** Refer to Chapter 13 for more information on crafting a teaching philosophy statement.
3. **Evidence of Teaching Effectiveness.** Using strategically selected materials that showcase your strengths as a teacher, and identifying opportunities for growth and development, a statement on evidence of teaching effectiveness highlights accomplishments from within the teaching responsibilities (above) and demonstrates your commitment to pursuing your teaching goals. These may include examples of successfully implemented lesson plans or courses, participation in SoTL research, the completion of teaching workshops and certifications, involvement in teaching- and/or learning-focused societies or associations, quotations from formal or unsolicited student feedback, etc. (For more ideas on where evidence of teaching effectiveness comes from, see the "What Should I Include?" section below.) You'll want to order these hierarchically in your statement, based on use-value.
4. **Supporting Evidence.** Here will you include copies of all items you've referenced in your teaching philosophy statement, summary of teaching responsibilities, and evidence of teaching effectiveness, and compile them into an appendix for your reviewers. Again, the order is important here! And, if you feel a particular piece of evidence is too large to include, ensure you let your reviewers know that additional items are available upon request.

Other summaries or statements you'd like to add to the body of your dossier may include: teaching methodologies and materials; curriculum revisions and/or pedagogical innovations; representative syllabi (articulates your course design strategies); documentation of teaching improvement activities;

engagement in the scholarship of teaching and learning (SoTL); educational service and leadership; teaching goals and improvement; student feedback and course evaluations; peer observation and review of teaching; teaching awards and recognition; and, evidence of student learning and success (Kenny & Berenson, 2014). In each case, you would write a brief statement (a segment of the eight- to 12-page overall dossier) that describes your approach to the topic, and references or directly incorporates excerpts from materials you've included in your dossier (Kenny & Berenson, 2014).

Once you've written your statements and gathered your supporting evidence, you'll need to arrange your dossier into a coherent, organized document. The order you choose is entirely subjective—while some individuals begin with a statement of their teaching responsibilities, others prefer to begin with their teaching philosophy statement. Choose the order that makes the most sense to you, and presents the dossier in the most coherent manner possible. Include a table of contents; ensure your dossier is free of grammatical and organizational errors; and, make sure you've offered an honest depiction of yourself throughout. As with any academic document, include a references list of all scholarly materials referenced.

What should I include?

The teaching dossier is as subjective a document as is your teaching philosophy statement. You control its make-up, and the message you intend to create through its contents. The aim is to strike a balance between evidence from yourself, evidence from your students, and evidence from others (colleagues, faculty members, etc.). There are many resources at your disposal that can be referenced in your dossier, and included in its appendix. The following items are just some of the many options available to you as you compile your materials (adapted from Canadian Association of University Teachers, 2002):

Teaching Responsibilities:

- list of courses taught (includes pertinent information such as course titles and number)
- any course materials composed by you for student use
- evidence of prompt interaction(s) between teacher and student(s) (ex. e-mail, office hours, D2L, etc.)
- evidence of student development (ex. handling difficult situations and how they were resolved, combatting low student-participation, etc.)
- evidence of adaptation to various student learning styles

Products of Teaching Effectiveness

- exam grades, as evidence of learning
- students' lab materials
- students' assignments
- a record of students who have selected you for multiple courses or seminar/tutorial/lab sections
- evidence of mentorship to colleagues in the area of teaching development/improvement

Teaching Development

- a record of self-reflection and changes made as a result of it
- instructional innovation and documented effectiveness
- keeping up with current SoTL trends or new teaching materials, and any attempts to implement research into your teaching; effectiveness of implementation
- conducting research on teaching effectiveness (your own teaching, or others)
- involvement in organizations aimed at teaching development
- professional development (seminars, workshops, courses, etc.)

Professional Contributions

- scholarly publications, such as textbooks or journals (contributions to or editing of)

Evidence from Students

- course evaluations (formal or informal)
- student comments (formal or unsolicited)
- interviews with students

Evidence from Colleague/Mentor

- reference letters or statements from colleagues and/or mentors who have observed your teaching
- comments from colleagues/mentors for which your course was a prerequisite
- contributions to course development and/or improvement

Evidence from Others

- teaching accolades, such as nomination and/or selection for teaching awards (Students' Union or University of Calgary Teaching Awards, for example)
- statements from administrators about teaching effectiveness
- comments from parents of students in your class
- invitations to teach from other institutions/organizations
- invited presentations or publications in SoTL publications

The Importance of Alignment

Ensuring that your teaching dossier demonstrates alignment between the claims you make, the strategies you implement, and the evidence you provide, will ensure the strongest possible dossier. It's also just as important to demonstrate alignment within categories as it is to demonstrate alignment across them. For example, is there alignment between what you say, what your students say, and what your colleagues say? The following table is useful for ensuring that your dossier demonstrates clear and thorough alignment between claims and across the evidence provided.

| Key Beliefs | Strategies | Evidence |
|---|--|--|
| What are the key beliefs that you hold related to teaching and learning? What are the key claims that you make about your teaching? | What teaching and learning methodologies, strategies and approaches do you (or will you) use that support these beliefs? | What sources of documentation and materials provide (or will provide) evidence of your teaching and learning methodologies, strategies and approaches? What data and documentation provide evidence of the impact and effectiveness of your approaches? How does this evidence align to the key claims you make about your teaching? |

Adapted from Kenny, N., & Berenson, C. (2014).

The Importance of Feedback

Seldin, Miller, and Seldin (2010) stress the importance of getting feedback on your teaching dossier—from peers, mentors, and administrators. As a graduate student, there are a number of avenues for feedback available to you—including upper-level graduate students, post-doctoral candidates, teaching mentors, your supervisor, your graduate program administrator(s), and your department head.

Be sure to approach each potential reviewer professionally and politely, and recognize that they may be too busy to give you their attention when you need it. Provide ample notice if you're up against a deadline; approach multiple resources for feedback; and don't be afraid to seek potential reviewers outside your own discipline. Oftentimes, hiring committees or award selection committees are comprised of reviewers from a multitude of disciplines. Make sure someone unfamiliar with your area of expertise can read and understand your teaching dossier with ease.

For those occasions where you find yourself without an available reviewer, here are some reflective questions designed to help you review and refine your dossier on your own (adapted from Seldin, Miller & Seldin, 2010, pp. 32-33):

- have you clearly identified all of your teaching responsibilities (current and from the recent past)?
- is your teaching philosophy statement a true representation of your methodologies and approach to teaching?
- is there consistency between your teaching philosophy statement and the rest of your dossier?
- are the claims made in the body of your dossier supported by evidence in your appendix?
- is all data up to date?
- have you included performance evaluations from multiple sources (ex. students, professors you've invited to observe your teaching, etc.)
- have you incorporated concrete evidence of student learning?

- in what ways have you demonstrated your commitment to ongoing improvement of your teaching performance? Are your short- and long-term teaching goals clearly articulated?
- have you demonstrated a clear knowledge of any departmental or institutional factors that influence or augment your teaching effectiveness?
- is your document easily readable? Would it benefit from charts, graphs, or tables to help articulate data and ease readability?
- are the *what*, *how*, and *why* of your teaching clear for your reader?
- have you added a complete and accurate table of contents to your dossier?
- have you ordered your appendices for ease of reading?

Important Reminders

1. Remember that a teaching dossier is not merely a showcase of your best work (Knapper & Wright, 2001, p. 19). There are many ways to demonstrate effective growth and development in your teaching practice, and sometimes it means showing growth from a particularly difficult segment of teaching (such as low USRI scores or poor student feedback) that has since been augmented or corrected. This shows evidence of your ability to adapt and develop as an instructor, while keeping your students' learning the top priority.
2. Be aware of the length of your dossier. You don't want to overwhelm your reader with information.
3. You control the content and presentation of your dossier (Knapper & Wright, 2001, p. 22). It is a highly personal document, written in the first-person perspective. Make it your own.
4. Be cognizant of out-of-date data. Keeping your dossier relevant to the last three years of teaching experience is generally recommended (Knapper & Wright, 2001, p. 24). Data from several years past will become less and less relevant to reviewers as time goes on.
5. Early reflection, emphasized heavily in the previous chapter, comes in particularly handy when it comes time to compile your dossier. Keeping organized records of teaching effectiveness makes it easy to draw upon past materials as you compile your dossier. Keeping up with consistent reflection even after you have compiled your dossier's first edition will make the process of updating the document for an award nomination or job application much smoother.

Further Resources

- **Kenny, N., & Berenson, C. (2014). Creating a teaching dossier: Handout. Taylor Institute for Teaching and Learning, University of Calgary.**

This document outlines the purpose of and reasons for preparing a teaching dossier. It includes numerous reflective questions that help guide you through the process of creating a dossier with a specific reader or committee in mind. Particularly helpful for individuals new to the dossier-compiling process, this document encourages you to think about how the claims you make in your philosophy are represented through a discussion of your strategies and then supported by evidence in your appendix. A key part of the process of dossier-composition, this is a very helpful tool for keeping your dossier concise and effective.

- **Teaching Philosophies and Dossiers Workshop.**

The Taylor Institute for Teaching and Learning offers two teaching philosophy and dossier workshops—one catering specifically to the University of Calgary Teaching Awards application process, and the other as a component of the *Emerging Teachers Development badge*, a part of the *Graduate Certificate in University Teaching and Learning*. These workshops are particularly useful if you're looking for advice or feedback from a seasoned professional, or simply aren't sure where to start with your own dossier or philosophy.

- **Seldin, P., Miller, J. E., & Seldin, C.A. (2010). *The teaching portfolio: A practical guide to improved performance and promotion/tenure decisions* (4th ed). San Francisco: John Wiley & Sons.**

A thorough guide to the teaching dossier, this book also features full teaching dossiers from virtually every discipline one could think of (pp. 119-371). Though the collection does not feature the dossier of a graduate student specifically, the numerous of examples are certainly useful—regardless of what stage you're currently at in your career.

Chapter 15: Professional Teaching Development & SoTL Engagement

The scholarship of teaching and learning (SoTL) is a synthesis of teaching, learning, and research in post-secondary education that brings a scholarly lens—the curiosity, the inquiry, the rigour, the disciplinary perspectives, and the attention to larger conversations—to what happens when learning happens (or doesn't).

(Chick, 2015).

Professional Teaching Development at the Graduate Level

A critical component of a successful teaching dossier is a demonstrated commitment to ongoing professional development. The ability to not only articulate what you've learned through your teaching experiences, but also demonstrate your commitment to ongoing learning and problem-solving, helps your dossier reader to understand the direction you want your teaching to go, and how you plan to get there. Seldin, Miller, and Seldin consider professional development, and the application of this acquired knowledge onto your teaching practice, to comprise a critical component of the teaching dossier (75).

While competing priorities such as coursework, research, and departmental and/or institutional service occupy much of your time, trying to carve out space in your schedule for teaching development seminars and workshops can feel overwhelming, if not impossible. However, taking advantage of these opportunities early on in your teaching career will certainly set you up for success, so they're worth investing time in! Furthermore, attendance at these workshops and seminars may even help you uncover or refine the foundation of your teaching philosophy statement if you're struggling to get started with it; many development opportunities provided for graduate students offer space to practice your teaching (and receive various forms of feedback in an interdepartmental setting) and engage in critical self-reflection.

Where to Begin

Our repeated emphasis on the importance of continuous self-reflection on your teaching, regardless of your level of experience, is not without reason. On top of helping you clarify the philosophy your teaching ascribes to, and the directions you want to take your teaching in the future, it's also a great way identify gaps in your current knowledge base that might be filled by attendance at a seminar in your department, or a workshop at the Taylor Institute, or perhaps even a conference on teaching and learning.

That said, it can certainly feel overwhelming to figure out where to search for professional development opportunities, or to know where to begin. Below, we've listed a few helpful resources that are particularly valuable to graduate student teachers.

Departmental Resources: Your department is a great place to seek out professional development opportunities, and likely the first place you will encounter them. In departments where teaching assistantships are a standard component of their graduate programs, you may find that TA orientations, marking seminars, and brown bag lunch workshops are offered to help you prepare and engage. If you are unsure of whether or not your department offers teaching-related workshops, contact your graduate program director to find out more.

The Taylor Institute for Teaching and Learning: A key resource for on-campus teaching development opportunities is the Taylor Institute for Teaching and Learning. Offering everything from introductory workshops for first-year TAs to a course on designing your own online course, the Taylor Institute offers workshops and courses that appeal to teachers at all levels and from all faculties.

- **Take a Workshop:** there are many workshops offered at the Taylor Institute that cater to specific teaching needs, and are often created on an ad-hoc basis through the teaching development workshop pedagogy series—where faculty members researching or developing a particular teaching strategy present their findings in workshop form. Of interest to graduate students is the Instructional Skills Workshop (ISW)—an intensive course that brings together graduate students, postdoctoral fellows, instructors, and faculty, to strengthen their instructional skills through lesson planning and delivery, and various forms of group feedback. Check the Taylor Institute’s workshop calendar (<http://www.ucalgary.ca/taylorinstitute/events-workshops/calendar>) for more information and to register.
- **Earn a Badge:** the Taylor Institute offers five badge programs to graduate students that cater to specific teaching topics (listed below). Each badge has its own requirements, such as attendance at multiple workshops, completion of self-directed online courses, and the submission of reflection assignments.
 - *Emerging Teachers Development*
 - *SoTL Foundations for Graduate Students*
 - *Learning Spaces and Digital Pedagogy*
 - *Theories and Issues in Postsecondary Teaching and Learning*
 - *Developing Your Teaching Dossier*For more information on badge requirements, visit <http://www.ucalgary.ca/taylorinstitute/graduate-student-teaching-development>.
- **Complete the Graduate Student Certificate in University Teaching & Learning:** Once all five of the above badge programs have been successfully completed, graduate students are eligible to receive the Graduate Student Certificate in University Teaching & Learning. For more information on the certificate and its requirements, visit <http://www.ucalgary.ca/taylorinstitute/graduate-student-teaching-development/graduate-student-certificate-university-teaching-and-learning>.
- **Online Resources:** There are many resources available on the Taylor Institute’s website that aid in teaching development. Topics include receiving formative feedback, teaching

controversial issues, and increasing student engagement. Visit <http://www.ucalgary.ca/taylorinstitute/graduate-student-teaching-development-resources> for more information.

Teaching and Learning Conferences: Demonstrating your commitment to teaching improvement may be as simple as attendance at a teaching and learning conference (we've listed two below). You might consider presenting too!

- The **University of Calgary Conference on Postsecondary Learning and Teaching** is offered each Spring by the Taylor Institute, and features a variety of presentations, interactive sessions, and keynote speeches that speak to teaching and learning practice and scholarship. There are many ways to get involved with the conference—from attendance, to volunteering, to presenting. Visit <http://www.ucalgary.ca/taylorinstitute/> for more information.
- The **Society for Teaching and Learning in Higher Education (STLHE)** holds its annual conference each summer, and aims to enhance teaching and learning in higher education. For more information, visit <https://www.stlhe.ca/about-stlhe/vision-goals/>.

Individual Consultation: As you begin to identify areas where you want to learn more or develop new skills that will aid in your teaching progress, remember that there may not be a workshop in regular circulation that addresses your specific question or concern. If you're currently a TA, remember that your first point of contact should always be the instructor of record for the course you're teaching. If you're confronted with a specific issue, and aren't sure how to address it appropriately, ask your instructor of record for recommendations and resources. Additionally, the Educational Development Unit at the Taylor Institute offers one-to-one confidential consultations with instructors, where one can discuss a teaching problem and explore strategies for remediation. Visit <http://www.ucalgary.ca/taylorinstitute/teaching-development/consultation> for more information.

SoTL Engagement

One increasingly important aspect of professional teaching development resides with the scholarship of teaching and learning, or SoTL. SoTL, as Nancy Chick (2015) describes it, is a particular kind of research that investigates the ways in which students learn, both within and across disciplines. Oftentimes, the vocabulary used to identify an opportunity to engage in SoTL is perceived negatively; as Randy Bass (1999) has argued, to have a “problem” in one’s teaching is not the same as having a “problem” in one’s research. Where the latter invites conversation, the former seems to illicit a negative response—that one is not teaching well, or that students are not responding well to lecture materials, for example.

However, learning to identify “problems” in one’s teaching is exactly where SoTL projects begin to take their shape. The key is to look at a teaching “problem” from the perspective of the student—how is their learning affected, for better or for worse, by the problem you’ve identified? And, how

can you mitigate this in order to better student learning in your classroom?

Peter Felton (2013) identifies five key components of SoTL research:

1. inquiry into student learning;
2. grounded in context;
3. methodologically sound;
4. conducted in partnership with students; and
5. appropriately public. (121)

Adhering to these five principles as you define, propose, set-up, and investigate your teaching “problem” will ensure that you are contributing to a very valuable body of knowledge for teachers all over the world.

SoTL & Ethics: A critical component of SoTL research is its adherence to standard ethical practices. Because SoTL is, by nature, an investigation into the behaviours and performance of human subjects, it is critical that these human subjects are not harmed or deceived for the sake of advancing knowledge (Chick, 2015). In the majority of cases, SoTL research projects centre their focus on students’ learning, and this can become tricky when the instructor of record is playing the role of both teacher and investigator. Ethics boards were created to mitigate any concerns about the instructor-student dynamic by putting the concerns of the students first. If, for example, a student is concerned that their grade might be affected by their participation (or not) in the proposed research study, steps need to be taken to eliminate this concern.

Two primary components of an ethical SoTL investigation are:

- informed consent from the research subjects—where the investigators explain the research, its potential benefits, and any potential risks to participants
- confidentiality—where steps are taken to maximize confidentiality, and ensure that no sensitive information, such as a student’s grades, are publicized at any point

Anytime you create a SoTL project, you must receive ethics approval before you begin. For more information on how to begin the ethics application process, visit <http://www.ucalgary.ca/taylorinstitute/starting-your-grants-project> and <http://www.ucalgary.ca/taylorinstitute/guides/ethics-scholarship-teaching-and-learning>.

Graduate Student SoTL Engagement Opportunities: The thought of designing your own SoTL project might sound intimidating at this stage of your teaching career. This is normal! Don’t feel as though you need to be engaging in groundbreaking SoTL research from the moment you take on the role of educator. There are multiple ways to get involved with SoTL research at the University of Calgary that don’t necessarily involve designing your own research project (though we’ve provided some information about that too). Below are a few ideas to get you started:

- the **SoTL Foundations Program for Graduate Students***: this program is designed to get students engaged with current SoTL research. Meet with colleagues of all levels, and from all faculties, to read, critically reflect on, and discuss the scholarship of teaching and learning. For more information on the program, and to register for workshops, visit <http://www.ucalgary.ca/taylorinstitute/sotl-foundations-program-graduate-students>.

- a **research assistantship**: SoTL Grant recipients will often hire research assistants to help execute their investigation. Openings for these positions can be advertised in a number of ways, including postings in the GSA's *News & Views*, and through the investigator's home department. If you're interested in getting involved with a SoTL project, make sure to let your supervisor know, and to keep your eyes open for postings around campus.
- the Taylor Institute's **Research Associates Program**: those research assistants who are hired by the Taylor Institute are invited to join this program, which offers professional development opportunities, valuable work experience, involvement in a community of like-minded RAs, and opportunities to contribute to the Taylor Institute's numerous programs and activities. For more information, visit <http://www.ucalgary.ca/taylorinstitute/research-associates-program>.
- the **Teaching and Learning Grants Program**: funded by the Provost's Office, these grants are disseminated with the aim of enhancing student learning at the University of Calgary. While you cannot be the sole principle investigator of a SoTL project as a graduate student, you are eligible to apply for a grant if accompanied by a full-time faculty member. For more information on the grants program and how to apply, visit <http://www.ucalgary.ca/taylorinstitute/awards-grants/teaching-grants>.

To find out more about these and other opportunities for SoTL engagement offered at the Taylor Institute for Teaching and Learning, visit <http://www.ucalgary.ca/taylorinstitute/sotl>.

*This program serves as one component of the requirements for the Graduate Student Certificate in University Teaching and Learning. For more information, refer to p. 85.

SoTL Conferences: Similar to conferences with a focus on teaching and learning, there are also opportunities to attend SoTL-related conferences. If you find yourself developing a SoTL project, participating as a research assistant, or merely wanting to learn more about the processes involved with SoTL, attendance at a SoTL conference, like one of the two listed below, will be helpful.

- The **Symposium on Scholarship of Teaching and Learning**, organized by the Institute for Scholarship of Teaching and Learning at Mount Royal University, holds an annual conference in Banff, AB, and aims to share and publicize research related to teaching and learning development while building a strong scholarly community. For more information, visit <http://isotlsymposium.mtroyal.ca>.
- The **International Society for the Scholarship of Teaching and Learning (ISSOTL)** holds a yearly conference in the Fall semester, with the purpose of encouraging collaborate work across faculties and continents in the discipline of scholarly teaching and learning. For more information, visit <http://issotl.com/issotl15/node/28>.

Further Resources

- **the University of Calgary SoTL Guide:** sotl.ucalgaryblogs.ca
- **the University of Calgary SoTL Librarian and Library Guide:** <http://libguides.ucalgary.ca/SoTL>
- **Scholarship of Teaching and Learning Annotated Literature Database:**
<https://researchsotl.wordpress.com>
- ***Teaching and Learning Inquiry*, a publication of ISSOTL:** <http://www.issotl.com/issotl15/node/20>
- **Center for Engaged Learning, Elon University:** centerforengagedlearning.org
- **Carnegie Foundation for the Advancement of Teaching:** <https://www.carnegiefoundation.org>

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APPENDIX A: Selected TA Training and Resources at the University of Calgary

From the Taylor Institute for Teaching and Learning

Teaching Assistant (TA) Orientation Day. Participants explore the roles and responsibilities of a TA-ship, consider effective teaching and communication strategies, and reflect on the qualities and practices essential to TA success. Information on campus resources available to TAs is also distributed (Educational Development Unit, n.d.).

Instructional Skills Workshop (ISW). ISW is a four-day workshop designed to give faculty members, postdoctoral fellows, and graduate students an opportunity to explore teaching and learning concepts, practice facilitation strategies, and receive feedback in a supportive environment (Educational Development Unit, n.d.).

Workshops. Throughout the year, the EDU offers various workshops for faculty members and graduate students to develop the skills and qualities of effective teachers. Workshop and event categories include: Awards and Grants, Curriculum and Course design, Learning Technologies, Teaching Activities and Philosophy, and the Graduate Student Certificate in University Teaching and Learning.

Taylor Institute Teaching Community. The Teaching Community is an online repository for postsecondary educators of all levels to connect, collaborate, communicate, and converse. Users can find, share, tag, and post resources and research on a growing number of online forums dedicated to discussing postsecondary teaching and learning. The Taylor Institute Teaching Community can be accessed at <http://www.ucalgary.ca/taylorinstitute/teaching-community/>

Award for Graduate Assistants (Teaching). The University of Calgary Teaching Awards include an award for graduate assistants (teaching). Up to three awards are presented each year to recognize teaching excellence of graduate students employed as TAs in undergraduate courses (Educational Development Unit, n.d.).

On Campus

Faculty and department training, resources, and accreditation. Departments and faculties have a number of resources, training opportunities, and policies for TA training and teaching in their discipline. Contact your graduate advisor for more information.

Student Success Centre (SSC). The SSC offers a number of workshops, advising, and events to support graduate and undergraduate success at the University of Calgary. Graduate advising at the SSC includes peer coaching, writing support, academic development, and Grad Success Week. The SSC is located at the Taylor Family Digital Library (Student Success Centre, University of Calgary, n.d.).





My GradSkills. My GradSkills provides professional and academic development opportunities, resources, and workshops to help graduate students develop transferable skills for success before and after graduation. Transferrable skill areas include: 3MT preparation, career building, communication, information technology, research, social awareness, teaching, and wellness. All My GradSkills workshops, events, and resources have received academic oversight, and are endorsed by the Faculty of Graduate Studies (FGS) (Faculty of Graduate Studies, n.d.).

APPENDIX B: Responding to Students in Distress and Referring a Student in Distress

RESPONDING TO STUDENTS IN DISTRESS

SU Wellness Centre

This resource is designed to help you respond to a student in distress. Recognizing signs of distress and responding with care and concern are critical factors in supporting a healthy campus community.

|  |  |  |  |
|--|--|---|--|
| ASK | SUPPORT | REFER | FOLLOW-UP |
| <ul style="list-style-type: none"> Trust your instincts, and pay attention to worrisome behaviours. Approach the student to ask about their wellbeing during a one-on-one conversation. Be specific about your concern when speaking with the student. <p><i>"I wanted to talk with you because I noticed you have been absent a lot lately and I'm concerned about you."</i></p> <p><i>"For the past two weeks, you have appeared to be sad and distracted. I'm concerned about your wellbeing. How is this semester going for you?"</i></p> | <ul style="list-style-type: none"> Listen openly and non-judgmentally. Ask questions to help gather information and understand the students' situation. Acknowledge the students' thoughts and feelings in a compassionate way. Offer hope. <p><i>"Can you tell me more about what is happening?"</i></p> <p><i>"It sounds like you are feeling overwhelmed. You are not alone. There are people and resources that can help."</i></p> <p><i>"Maybe one thing we can do is get you some support to help you with what you're going through right now."</i></p> | <ul style="list-style-type: none"> Encourage the student to connect with available resources as soon as possible. Early help seeking may support improved outcomes. Provide information about available services or resources. Resource information is included on the other side of this page. Offer to help the student connect with available resources. If appropriate, you may offer to contact a resource or walk with the student to a resource. <p><i>"I know that there are services on campus to help you deal with these concerns. With your permission, I can help you connect with these resources."</i></p> <p><i>"If you'd like, we can call and inquire about booking an appointment for you."</i></p> | <ul style="list-style-type: none"> Offer to follow-up with the student, but do not insist on knowing what has happened. Respect the student's decision to accept or refuse assistance, except in situations where you are concerned about a risk of harm. In these situations, contact Campus Security. If the situation involves imminent risk of harm, call 911. If you need personal support, reach out to colleagues or relevant campus or community resources. <p><i>"I respect your decision. I hope you will keep these options in mind. My door is always open."</i></p> <p><i>"Would it be ok if I follow up with you after class next week?"</i></p> |

The design of this resource is based partially on resources developed by Mount Royal University, Queen's University and the University of South Carolina. Adapted with permission from Mount Royal University.

ucalgary.ca/wellnesscentre



REFERRING A STUDENT IN DISTRESS

SU Wellness Centre

This resource aims to help you refer a student who may need additional support. When in doubt, contact any of the resources listed below for consultation or assistance.

Call 911 if the situation requires emergency response (police, fire, ambulance).

CONCERN

HOW TO HELP

**Risk of harm
to self or others**

**Aggressive or violent
behaviour**

After hours concern

**Contact Campus Security
403-220-5333**

Campus Security is available 24 hours a day to respond to situations that require an immediate response.

Call 911 if the situation requires emergency response (police, fire, ambulance).

CONCERN

HOW TO HELP

**Disturbing or worrisome
behaviour or
communication**

**Concern about potential
harm to self to others**

**Contact the Student-At-Risk Team
403-220-4923 or SAR@ucalgary.ca**

The SAR Team is a multidisciplinary campus resource that is available to consult with students, faculty and staff about these concerns during regular University business hours. The team responds to concerns by conducting an initial assessment of violence risk and engaging with involved individuals as early as possible to minimize the risk of harm. Response may include: outreach to involved individuals, offer of support or resources, direct intervention, or further assessment.

CONCERN

HOW TO HELP

**Emotional distress,
personal crisis, illness,
mental health concern, or
concern about potential
harm to self**

**Contact the SU Wellness Centre
403-210-9355**

Counsellors, physicians, nurses and chaplains are available to meet with students and to consult with faculty and staff about issues of concern. The centre is open from 9:00am - 4:30pm, Monday to Friday. For after hours support, the Distress Centre Help Line is available at 403-266-4357.

ucalgary.ca/wellnesscentre

APPENDIX C: Questions to Ask the Course Instructor

The following list of questions will help structure your first meeting with the course instructor (adapted with permission from the Centre for Teaching Excellence, University of Waterloo, n.d.).

| Table 3 | | |
|--|--|--------------|
| <i>Checklist: Questions to ask the course instructor</i> | | |
| <u>✓</u> | <u>Question</u> | <u>Notes</u> |
| The course | | |
| | <p>Tell me about the course...</p> <ul style="list-style-type: none"> • What are the learning objectives? • What are the main activities, exams, and assignments? • What is my role in their design, implementation, and assessment? <p>What are the course policies on late assignments, plagiarism, or appeals? Are there other specific policies that I should be aware of?</p> <p>What I should prepare for first day?</p> | |
| My role | | |
| | <p>What does my TA role look like? Will I be lecturing? Leading discussions? Grading? Running a tutorial? Conducting labs?</p> <p>Am I to attend all lectures, tutorials, and/or labs? Are there specific tasks that I should be prepared to do during class time? For example, taking notes, setting up or keeping track of supplies/materials, giving demonstrations, etc.?</p> <p>How often will I be performing the above tasks? Approximately how many hours a week will this be in total?</p> <p>What are the best TA qualities and teaching strategies that you have worked with in the past? What has not worked well?</p> | |
| Feedback | | |
| | <p>How will I get feedback for my performance?</p> <p>Who will I get it from, and when?</p> | |

| Expectations |
|--|
| <p>Am I to give individual assistance to students? How do you define what that looks like? How will I know if I am helping too much or too little?</p> <p>How will I know when to send a student to you for additional clarification or guidance?</p> <p>What should I do and whom should I contact if I am unable to attend a class/lab/tutorial? How much notice is required?</p> <p>What audio/visual/lab equipment should I know how to use? Am I responsible for retrieving and returning it, or should I book it from someone?</p> |
| Grading |
| <p>What are the criteria for assigning grades?</p> <ul style="list-style-type: none"> Is there a process or rubric that I should follow? What is the turnaround time? <p>Who reviews disputed grades?</p> <p>Who will keep record of the grades, and how is this done?</p> <p>What kind of feedback is standard for this course?</p> <p>If there are multiple TAs, how do we ensure consistent grading practices?</p> |
| Teaching |
| <p>What course material am I be responsible for? Should I draw from particular resources?</p> <p>How should I expect to run my lab, discussion, or lecture sessions?</p> <ul style="list-style-type: none"> Should I stay close to the textbooks, or to the lecture material? How much autonomy do I have to present new ideas, use different teaching methods, or present alternate perspectives? <p>How often should I hold office hours? Where? When?</p> <p>When and how often will we meet to discuss the course?</p> |

APPENDIX D: Lesson Plan Template

(Adapted with permission from the Centre for Teaching Excellence, University of Waterloo, n.d.).

| | | | |
|---|------------------|---------------------|------------------|
| Table 4 | | | |
| <i>Sample lesson plan template</i> | | | |
| Date | | Lesson title | |
| Learning objectives | | | |
| Time | Knowledge | Questions | Resources |
| | | | |
| | | | |
| | | | |
| | | | |
| Assessment strategy | | | |
| Post-lesson reflection | | | |
| <i>What went well:</i> | | | |
| <i>What to improve upon:</i> | | | |
| <i>Thinking ahead to the next lesson:</i> | | | |