TEACHING CULTURES: TEACHING ORIENTATIONS, REWARDS AND SOCIAL-POLITICAL INFLUENCES

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Abstract

For decades, scholars have studied the experiences of early childhood educators, schoolteachers, student teachers, professors, and so on. However, the experiences of teaching assistants (TAs) have largely been under-explored. By TAs, I mean graduate students who work part-time as educators, assisting undergraduate courses. In this research, I interview [N=17] current graduate students at a university in southern Ontario, Canada, about their recent experiences working as TAs on campus. The purpose of this interviewing is to gain insight into what teaching activities TAs do, how and why, and how their broad commitments to environmental/sustainability education impact their teaching. From analyzing interview data, drawing on principles of grounded theory, I find my interview data supports, extends, and refutes how Lortie (2002) and followers (i.e., Hargreaves and Shirley, 2009) depict teaching cultures. Discussions of teaching cultures are situated in broader conversations of neoliberalism and sustainability. Research results are arranged in a didactic model, to help TAs, along with a broader audience of educational stakeholders, make more informed teaching decisions.

Dedication

This dissertation is dedicated to my first teacher – My mother, Theresa Fockler

Acknowledgements

This is my second attempt at writing a dissertation. My first attempt unexpectedly fell apart in the summer of 2016. I was in my fourth year as a PhD student and given two options: create a new research project or leave the graduate program. I heard many discouraging voices, telling me to drop out. But I decided to try again. While I experienced many hard times, I would like to thank all those who remained encouraging and made a difference to my PhD journey. I could not have completed this dissertation without your support.

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I spent a great deal of time in solitude to write this dissertation. For years, I felt like I was living in Dr. Frankenstein's laboratory, ripping sentences apart and sewing them back together. I missed out on family events and parties with friends and spending time with those who meant the most to me. I sacrificed so much in attempt to finish my dissertation (faster) and meet expectations and deadlines. In many ways, music helped me stay focused and writing. Thanks for the music: Barbra Streisand, Dolly Parton, Chantal Kreviazuk, Johnny Cash, Elvis Presley, Frank Sinatra, John Mayer, Céline Dion, Lena Horne, and so many others.

Throughout writing this dissertation, I felt like I was running in circles and walking through fire. In the PhD program, I struggled with severe stress, anxiety, frustration, and low self-esteem. Having been almost kicked out of the program in my fourth year, I had an acute fear of failure and embarrassment. I was so stressed as a graduate student that I experienced night terrors (sleep terrors), something that I have read people experience under trauma or chronic stress. Recently, it was nature outside my window – the trees, spiders, butterflies, birds, rabbits, squirrels, chipmunks, to name a few, that helped improve my mental health. You never judged me. You accepted me as I am. Thank you nature.

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I was not expecting this break-up and my body went into shock. The pain was unbearable. Completing the revisions, to officially graduate, became not only difficult but nearly impossible. While my heart continues to break, I would like to thank all those who helped me carry on and encouraged me to finish writing this dissertation. Thank you for caring.

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Chapter 1: Why Study Teaching Assistants?

When you think about universities, what comes to mind? Do you think about crowded lecture halls? Professors? Late night study sessions at the library? Frosh week and college dorm parties? Sports teams and home games? For me, what pops into my head are graduate teaching assistants (GTAs) or teaching assistants (TAs). I was taught by TAs as an undergraduate student. If you attended university, at some point, it is likely that you were taught by TAs too.

TV shows like *Dawson's Creek* and *Gilmore Girls* and even movies like *Legally Blonde* often portray the university experience around professors, fraternities/sororities, student dorms, study groups, sports teams, and extracurriculars (e.g., writing for the school newspaper seems popular). But where are the teaching assistants? TAs are often missing from the picture or play a minimal role at best. This sends the message that TAs are insignificant to university life, and nothing could be further from the truth.

Who are TAs and what do they do? TAs are graduate students who assist undergraduate courses. They are generally responsible for: leading tutorials, grading student assignments and exams, and responding to students' questions. Gardner and Jones (2011) claim, "Undergraduate teaching at research universities often rests solidly on the backs of graduate teaching assistants (GTAs) who teach large proportions of the introductory curriculum" (p. 31).

Being a TA has its perks. Graduate students earn a stipend from doing TA work that they can put towards their tuition and other financial expenses (e.g., Queen's University, 2022; Western University, 2022). Being a TA also enables graduate students to gain work experience and develop skills that are transferrable across professions such as communication skills, time management skills, teamwork, and the ability to work with a diverse group of people (of varying racial backgrounds and learning abilities).

As a PhD student, I worked as a TA for six years at York University, located in Toronto, Ontario. A large part of being a TA involved me leading tutorials. During tutorials, I asked students to discuss course material in small groups and to present what they discussed as a role play, puppet show, song, comic strip, poem, math formula, political debate, and so on. It felt good to watch students doing things: exploring, discussing, solving problems, being creative and innovative. I always signed up to work in traditional in-person courses. This gave me a chance to take students on field trips to campus art galleries and other academic sites like Schulich School of Business and Osgoode Hall Law School. To me, these field trips were important. Working in a sociology of education course, I believed these excursions challenged students to think about education from different perspectives.

Being a TA is positively medieval. There are examples in the literature of rudimentary TAs, dating back to the 12th Century. At medieval universities in Europe, Newman (2007) talks about how masters would lecture about course content, followed by senior students holding additional lectures that "frequently mirrored the... lecture given by the master" with "possibly some open discussion" (p. 148). The senior student's lecture resembles an early version of the tutorial, where TAs work with students, discussing and reviewing lectured content.

TAs continue to be important to the functioning of modern universities. As Park and Ramos (2002) state:

Employing graduate students to help with undergraduate teaching is not in itself new... but what is new is the growing scale on which it is happening, and the increasing dependence... on this part-time staffing. (p. 48)

TAs usually take on several teaching related duties in undergraduate courses, such as grading student work (e.g., Meadows et al., 2015), responding to student concerns (e.g., Dunn-Haley and Zanzucchi, 2012), and leading tutorials or labs (e.g., Pentecost et al., 2012). Feld, Salamanca and Zölitz (2018) claim that a considerable amount of teaching at higher education institutions takes place within tutorials.

With TAs representing "a major portion of the undergraduate teaching force for colleges and universities" (Jackson, 2020, Abstract), there is a growing interest in preparing TAs to take on teaching duties. Over the last decade, there has been a considerable interest in professional development (PD) for TAs. Since TAs are graduate students and have not necessarily taught before, PD for TAs is typically designed to help teaching assistants

develop knowledge and skills of teaching in (usually) quick ways. For example, Parker et al. (2015) provide an account of a one-day seminar for TAs at University of North Carolina Wilmington, centered on training TAs in applied learning. Others like Becker et al. (2017) detail a 10-week training program for TAs at a post-secondary institution in western US, focused on "quickly" increasing the capability for TAs "to effectively and consistently implement instructional techniques" (p. 3).

While this PD is well-intentioned – PD in general has been sharply criticized. Hargreaves (1994b) states that the majority of "teacher education and development initiatives rest on efforts... to get teachers to improve their knowledge and skills of teaching and thereby also raise the status of the profession" (p. 9). However, Hargreaves asserts that this PD usually has meagre and indefinite success. This is because teachers generally refuse to use, postpone using or selectively use "new knowledge and skills" that they have been "exposed to or trained in" during PD sessions (p. 9). But why? Hargreaves points to a fault in the design of the PD itself. He argues that PD for teachers does not generally consider cultures of teaching, making new knowledge and skills less applicable or relevant to teachers' work situations. In reference to Hultman and Hörberg, Hargreaves (1994b) states:

Not surprisingly, the reason why knowledge about how to improve teaching is often not well utilized by teachers is not just that it is bad knowledge (though sometimes it is), or even badly communicated and disseminated knowledge. Rather, it does not acknowledge or address the personal identities and moral purposes of teachers, nor the cultures and contexts in which they work. (p. 10)

Cultures of teaching, also referred to as teaching cultures, are work cultures of teachers and other educators. Here, the emphasis on *cultures* is "anthropological" (see Hargreaves, 2010, p. 143). Teaching cultures represent what educators do as a group or as a culture. These cultures, Feiman-Nemser and Floden (1984) explain, stand for "the work-related beliefs and knowledge teachers share – beliefs about appropriate ways of acting on the job, rewarding aspects of teaching, and knowledge that enables teachers to do their work" (p. 16).

My present study is a study of teaching cultures, with priority given to the teaching cultures of TAs. My study is inspired by my experience working as a TA at York University. I enjoyed working as a TA and I am interested in knowing more about TA work practices.

Here, I raise two research questions:

- 1. What teaching activities do graduate students do as teaching assistants (at a university in southern Ontario), how and why? What "psychic rewards" underpin this teaching?
- 2. When, where, how and to what extent are TAs affected by their broader political and ethical commitments when teaching? How might "psychic rewards" be gained by sustaining these commitments?

In one sense, these research questions are about shared "beliefs about appropriate ways of acting on the job... knowledge that enables teachers to do their work" (see Feiman-Nemser and Floden, 1984, p. 16). My first research question sets out to explore "performative" orientations adopted by TAs. Educators who adopt a performative view of teaching are focused on accomplishing teaching tasks, producing results or outcomes. All jobs, and teaching is no exception, require the completion of work. My second research question, however, helps to extend this common view of teaching by considering how a TA's broader political and ethical commitments, particularly their sustainability commitments, influence their teaching practices.

My research questions also concentrate on "rewarding aspects of teaching" (see Feiman-Nemser and Floden, 1984, p. 16). According to Lortie (1975/2002), there are three main teaching rewards: extrinsic, ancillary, and psychic. Extrinsic rewards are external incentives or "earnings" (p. 101), such as "money, prestige, or power" (p. 102), "appointments to special committees, receiving a fellowship" (p. 130). Ancillary rewards are linked to work conditions like "economic security... holidays and vacations" and other things like a safe and clean work environment (p. 103). Psychic rewards, on the other hand, are emotional rewards. They define the teaching experience. Psychic rewards are the (positive) emotional aspects of teaching, the inner satisfaction, enjoyment, happiness, pride, confidence, and enthusiasm that a teacher gains from teaching. A teacher gains psychic rewards from doing work that they value (e.g., raising student achievement or implementing a lesson or fulfilling a teaching goal).

I consider my present research to be significant for several reasons. To start, my study aims to provide "greater visibility and voice" to teaching assistants (see Clarke, 2005, p. 14). TAs

are unique in the sense that they are severely marginalized in higher education. They are the lowest form of teaching staff at universities. TAs assist undergraduate courses. They stand in the shadows of course instructors, who primarily lead and design undergraduate courses (see Unit 1 Collective Agreement, 2014).

While being a TA is a temporary position for a graduate student, studying the TA remains important. Research points to graduate students struggling, finding it difficult to both juggle graduate work and TA work (e.g., Grady et al., 2014; Muzaka, 2009). Studying teaching cultures of TAs may help the graduate student find better ways to navigate their dual roles as academics and educators, to reduce "role conflict and role overload" (see Grady et al., 2014, p. 5).

I arrange my research results in a didactic model, and this is significant (see Figure 1.5, in Chapter Eight). This model advances various approaches to theory, serving to verify, extend, and refute how Lortie (2002) and followers (i.e., Hargreaves and Shirley, 2009) characterize teaching cultures. I argue that this model also provides implications for practice, suggesting it can be used to reform and develop professional development for TAs/other educators as well as reform policy and contracts for TAs. Additionally, the model presents opportunities for research. I argue that the model can be used in collaborative action research studies.

In a broader sense, my research honors TAs, teachers, and other educators. According to the United Nations Educational, Scientific and Cultural Organization, there are "94 million teachers" around the world, teaching pre-school to post-secondary as of the year 2019 (UNESCO, 2020, p. 1). While teachers and other educators play an important role, helping students develop knowledge and skills to better themselves and society, they are not widely respected (see Varkey Foundation, 2018). The general perception is that teachers are "lazy" (Smith, 2021, para. 7) and "babysitters" (Stieber, 2022, para. 10). Shaw (1903/2004) famously states: "He [sic] who can, does. He [sic] who cannot, teaches" (p. 253). My research challenges this assault on educators, suggesting work they do is important, impactful, and takes much skill, knowledge, and commitment.

Overview of Chapters

Chapter One introduces my present research study on teaching cultures. This chapter includes the rationale for my research, my overarching research questions, and the significance of my study.

Chapter Two outlines my research context. I situate my study within broader contemporary themes of neoliberalism and sustainability in higher education. These themes are a common thread throughout my dissertation.

In Chapters Three and Four, I present existing literature that supports, challenges, and extends how Lortie (2002) and followers (i.e., Hargreaves and Shirley, 2009) describe teaching cultures.

Chapter Five lays out how I conduct my research. Here I provide details about methodology and methods. Purposive sampling, interviews, and principles of grounded theory all play a central role in my research.

My research results are outlined in Chapters Six and Seven. I arrange my research findings in a didactic model. This model supports, extends, and refutes how Lortie and followers portray teaching cultures.

Chapter Eight is my concluding chapter. Here I discuss my research and outline practical implications, limitations, and possible future directions.

Chapter 2: Social, Economic, and Political Context

My research centers around TAs and the work they do at universities. While intellectual pursuits were the primary concern of universities in the 12th Century (see Newman, 2007), intellectual activities are only one aspect of universities in the 21st Century. Today, universities in North America and elsewhere (e.g., Brazil, South Africa, Australia) are undergoing a major shift, a changing "social-political-economical milieu" (see Tobin and Tippins, 1993, p. 9). This is a result of neoliberalisms and a growing interest in sustainability. Efficiency and productivity are now prioritized at universities. There is a drive to secure funding. Attracting student enrollment and remaining competitive in the higher education marketplace is key. Signing sustainability declarations is a common practice. Reducing water, electricity, and waste on campuses helps to lower campus operational costs. While the emphasis in this chapter is on change at post-secondary institutions, these discussions are also relevant to other education sectors and beyond.

Neoliberalism

Let me begin by defining neoliberalism. Neoliberalism is not a singular entity. Rather it is complex and pluralistic, and different theorists discuss different meanings. Lipman (2011) suggests that "neoliberalism is an ensemble of economic and social policies, forms of governance, and discourses and ideologies that promote individual self-interest, unrestricted flows of capital, deep reductions in the cost of labor, and sharp retrenchment of the public sphere" (p. 6). Neoliberalism is everywhere. Gildersleeve (2017) states:

There is no longer a public sphere. There is no longer a private sphere. There is only and everywhere a neoliberal sphere. Neoliberalism is not only the dominant model of economic and political relations across social institutions and practices, it is the ubiquitous modus operandus of the Anthropocene in which postsecondary education finds, constitutes, and embattles itself today. (p. 286)

Others echo this thinking. Holmes and Lindsay (2018) explain that neoliberalism as "the dominant political and economic philosophy across the globe, and new managerialist, corporatized practices, as its 'organizational arms,' are ubiquitous within the higher education sector worldwide" (p. 1). Neoliberalism has been taking root in higher education since the 1980s.

Higher education institutions receive funding from the government to keep courses and programs running and otherwise, schools operational. However, beginning in the 1980s, this funding has been harder to come by, with governments making extensive funding cuts (see Brulé, 2004). Both public and private higher education institutions have been impacted. Lapovsky (2013) writes about the situation in the United States. "Reductions in state support have also affected private colleges in many states," Lapovsky says, "but to a lesser extent than for public colleges" (p. 2). Scholars like Brulé (2004) claim that funding cuts have forced higher education institutions to become increasingly entrepreneurial, to find new ways to maintain their financial position. Horne (2020) provides more insight into this issue, referring to universities in Australia. "Where in 1989 universities derived more than 80% of their operating costs from the public purse," Horne states "now it is estimated to be less than 40%" ("An unofficial government policy," para. 9).

To explore how neoliberal reforms have shaped higher education, I consider three central facets of the reform process noted by Ball (2016): market, management, and performance.

What is the *market*? "**The market** consists of arrangements of competition and choice, and various forms of privatisation" Ball (2016) states (p. 1049; original embed). Literature locates higher education institutions in a marketplace. Mintz (2020) explains:

American colleges and universities exist within a highly competitive marketplace. Individual institutions compete for students, faculty, research dollars, external funding, donations, visibility and prestige, and, in some cases, survival. (para. 1)

To remain a competitive adversary, higher education institutions need to be well *managed* in the neoliberal era. Ball (2016) refers specifically to strategic management. Shimizu (2012) states that strategic management concerns "thinking about and developing a strategy for an organization" or "future plan" (p. 1) based around "attracting more customers" (p. 2). The question becomes, how can higher education institutions continue to be "competitive and financially sustainable" in the higher education marketplace (see Lapovsky, 2013, p. 5)?

One way is to offer online learning options. Lapovsky (2013) states that online learning provides "new potential sources of revenue by reaching new students" (p. 9). Higher

education institutions have typically offered online courses since the early 2000s (e.g., Karsenti, 2001; Smith, Ferguson and Caris, 2003). However, the need for online courses has accelerated. "The global coronavirus disease (COVID-19) outbreak" Tsang et al. (2021) state, "forced a shift from face-to-face education to online learning in higher education settings around the world" (p. 1). Going online has been difficult for several higher education institutions, DeVaney et al. (2020) says, because some institutions are more technologically advanced than others. DeVaney et al. state that this shows how higher education institutions need to make plans for online learning over the long-term rather than as "rapid adaptation" (para. 4) and "build digital capabilities" that will give them "the resilience to seamlessly pivot through any crisis" (para. 13).

Other ways to attract students is by rethinking degree outcomes. There are examples of universities adjusting their education programs, finding ways to support the school-to-job transition. Chiose (2017) states that student enrollment is dwindling in humanities programs at Canadian universities. Students are opting to study high demand fields like science or engineering or business instead of the humanities. Some universities are responding by cancelling "individual courses, or entire specialized humanities programs" (para. 4). Other universities are continuing to offer humanities programs but updating these programs, "combining philosophy or history with commerce" or offering "co-op work terms" to humanities students or finding other ways "to keep their courses relevant" (para. 6). Others like Ketteridge, Fry and Marshall (2015) state that all faculty at University of Wolverhampton, England, are encouraged to advance "degree outcomes that deliver digital literacy, graduate employment and a recognition of the impact of diversity" (p. 55).

Are higher education institutions attracting the international student market? Are plans being made for offshore campuses? In their research report, *Global Geographies of Offshore Campuses*, Kleibert et al. (2020) define offshore campuses "as physical presences of higher education institutions abroad" (p. 6). They state that higher education institutions worldwide like École Centrale de Nantes, Georgetown University, and Skema Business School have established offshore campuses in places like China, Mauritius, and Qatar. Offshore campuses have "significant financial and reputational risks for the home university should... [they] fail" according to Healey (2016, p. 61), and these campuses have been

known to fail (e.g., Maslen, 2015). To help curtail failure, Wilkins (2016) presents a framework designed to help managers at higher education institutions gauge the risks and possibilities of developing campuses aboard.

What about recruiting international students? In the report, *The Higher Education Business Model Innovation and Financial Sustainability*, Lapovsky (2013) talks about how numerous US post-secondary institutions have altered their business plans to assure financial security. This includes "recruitment of international students in order to broaden their student pool" (p. 7). In reference to Friesen (2021), Horne (2020) and Asalya and Kumar (2021), higher education institutions in Canada and Australia make billions of dollars annually from international students – who pay high tuition fees.

Ball (2012) refers to *performativity* as the most typical manifestation of neoliberalism. Centered around individual achievement, performativity encourages individuals to become "more effective... to improve", to "take responsibility for working hard, faster and better" (p. 31). One way performativity is visible in higher education is how faculty are expected to do increasingly more work in shorter timeframes. This is what Gill (2010) refers to as "fast academia" and there is even professional development, offered at universities in Britain and elsewhere, to help faculty cope with their rapidly increasing work responsibilities (p. 238). While there is a call for slow scholarship (e.g., Hartman and Darab, 2012), Vostal (2015) finds that academics he interviews at a university in Britain mostly reject "the idea of slowness as an overarching and organising principle" and some even claim to be optimistic about speeding up their work practices (p. 306).

Performativity is also about performing multiple roles simultaneously. In the neoliberal era, Ball (2003) declares that the teacher does more than teach: "teachers are re-worked as producers/providers, educational entrepreneurs and managers" (p. 218). Xu (2019) researchers university teachers in China, finding that they struggle to keep up with both teaching and research duties. However, Xu argues, the data also gives the impression that when teachers do more work they might "feel a sense of accomplishment" (p. 914). Castro and Tomàs (2011) interview and conduct focus groups with manager-academics at

universities in Catalonia, Spain. Results show that academics who take on manager roles experience "a greater sense of institutional belonging" (p. 305).

It is not enough to perform. Rather performance must be evaluated. Ball (2012) argues that performativity functions "within a framework of judgement within which what 'improvement' and effectiveness are, is determined for us, and 'indicated' of us by measures of quality and productivity" (p. 31). Feldman and Sandoval (2018) write about how the metrics of performance are putting academics under increasing pressure to be excellent performing many roles. Kapur (2016) speaks about how US higher education institutions measure a teacher's effectiveness in relation to quantifiable attributes like student enrollment and graduation rates. Cheek (2017) indicates that a researcher's effectiveness is evaluated in relation to their research funding. From a quick search of the Web, I also find several ranking tools that gauge the annual performance of a university, such as *Times Higher Education* World University Rankings, Center for World University Rankings, and Round University Rankings.

The influence of the market, management, and performance on higher education is very important. Ball (2016) speaks about how this influence is not necessarily bad, or a deficit, but rather permits educators to perform their work in changed ways. This is underscored by Ball, who states:

In other words, these policies of reform produce new kinds of policy subjects, and, to a great extent, they do not make us do things, they do not oppress or constrain us; they enable us to do things differently, they create new roles and opportunities, the possibility of excellence, of improvement, of choice, of autonomy, of innovation. (p. 1050)

As discussed throughout this chapter, higher education institutions have been undergoing a change process. Government funding has depleted, and this has required colleges and universities to cut expenses and find new income prospects (see Lapovsky, 2013). In the next section, I talk about sustainability and how post-secondary campuses have implemented "green" initiatives to cut expenses and support environmental causes.

Environmentalism/Sustainability

According to UNESCO (2005, 2006), the environmental/sustainability movement dates back decades, to the 1970s, when concerns were raised about high levels of economic growth and development in industrialized countries. This development was unrestricted and deemed unsustainable. People wanted to consume more and more, and in response companies produced more. Too many natural resources were being used. Ecosystems were being destroyed. There was growing awareness that social problems like poverty, malnutrition, illness, and so on, were inseparable from environmental degradation. This propelled the United Nations' interest in *sustainable development* or *sustainability*, for short, a concept introduced by the World Commission on Environment and Development (WCED).

The WCED (1987) defines sustainability as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (p. 43). This widely cited definition represents sustainability as a long-term goal. It is about ensuring society progresses and moves forwards (including economic growth) but without compromising the natural environment. There is a responsibility to future generations. Development must improve people's lives, benefit them, serve to create, and advance "social equity" (p. 43).

All institutions have an important role to play in aiding sustainability efforts. UNESCO (2006) states, "Higher education has a particular role to play" when it comes to "research and learning for sustainable development, and as initiators and poles of activity in their communities and nationally" (p. 23; original embed). Shyy (2021) comments, "it is the responsibility of universities to empower our students with a deeper awareness of how they can help shape... more positive social and environmental outcomes" (para. 8). Below, referring to literature, I consider how sustainability has shaped higher education, especially in regard to: planning, physical operations, community engagement, co-curricular activities, partnerships, academics, and institutes and networks.

Sustainability *planning* is becoming important to post-secondary schools. For example, Thompson Rivers University's sustainability plan includes aiming for sustainable

purchasing, water conservation, carbon neutrality, and so on (Thompson Rivers University, 2019). White (2014) investigates "27 campus sustainability plans" adopted by Virginia Tech, University of Kansas, Pomona College, and other post-secondary schools in the United States, to integrate sustainability into things like physical operations, curriculum, research, and managerial aspects (p. 228). But sustainability plans can be abstract and ambiguous (see White, 2014). Is there any concrete evidence of sustainability in higher education?

Higher education institutions are "greening" their *physical operations*. Aleixo, Azeiteiro and Leal (2018) write about polytechnics and universities in Portugal having implemented or planning to implement innovations on campuses to reduce waste (e.g., waste and recycling management), water usage (e.g., upgrading water faucets and toilets), and energy (e.g., solar panels). Greenfield (2017) states that hundreds of post-secondary schools in the United States use some solar energy to offset their electricity bills. Others like ChargePoint (2021) spotlight sustainable transportation initiatives, claiming universities like Santa Clara University and Massachusetts Institute of Technology are putting electric vehicle charging stations on their campuses to minimize exhaust emissions. Fonseca et al. (2018) speak about modernizing an academic building at University of Coimbra, Portugal, with the objective of achieving almost "zero energy performance" (p. 790). Yerema and Watkins (2021) write about York University being identified as a Green Employer in Canada for having solar panels, recycling and waste programs, green roofs, bicycle parking, rainwater storage, LEED certified buildings, and so on.

But it is not enough to "green" campus operations. Literature suggests that campus leaders promote sustainability through *community engagement* activities. RecycleMania: Campus Race to Zero Waste (2017) is an annual event to support and promote campus recycling, where staff and students at higher education institutions across North America take part in activities to reduce campus waste (e.g., food waste, trash). Boulton et al. (2017) research the success of a yearly challenge at Allegheny College, that encourages staff, students, and faculty to cut back on how much electricity they use on campus. Berchin et al. (2017) write about a sustainability awareness program at the Federal Institute of Education, Science and Technology of Santa Catarina, Brazil, that encourages staff and students to alter their waste

behaviors, electricity use, and paper consumption. McCoy et al. (2018) conduct a series of recycling-based activities at Western State Colorado University to find cost-effective ways to grow recycling involvement on campus.

There are also *co-curricular activities*, which are often student-led. Duram and Williams (2015) detail how, at Southern Illinois University, students initiate, operate, and expand a campus garden. Dallaire et al. (2018) reflect on an annual student-organized conference for sustainability research at McGill University, Montréal. Antle (2019) states that students at Johnson County Community College in Kansas started a fund to finance sustainability-related projects on campus like tree planting, installing solar panels, and sustainability research.

Students are also involved with campaigning. For example, People & Planet (2022) is a student network in the United Kingdom that organizes the campaign *Fossil Free*, advocating for universities and colleges to divest their funding and business investments away from the fossil fuel industry. From student campaigning so far, a total of 93 universities in the UK have pledged to divest £15 billion pounds (about \$24 billion in Canadian dollars). Similar fossil fuel divestment campaigns are popping up across North America at Ryerson University (Ravilojan, 2020), University of Guelph (Lam, 2018), St. Thomas University (Moore, 2020), University of California (Fossil Free University of California, 2019), and Harvard University (e.g., Mufson, 2019) to name a few.

Higher education institutions are forming *partnerships* to promote and further sustainability. Ghosh (2011) gives an account of post-secondary schools partnering with the United States government to bolster green energy sources like wind and solar on campuses. Bilodeau, Podger and Abd-El-Aziz (2014) report that University of British Columbia partner with the City of Kelowna to improve public transit on UBC's Okanagan campus. Coffman (2009) states that University of Hawaii at Manoa (UHM) partner with the Hawaiian Electric Company to make UHM more energy efficient.

Sustainability is also happening across different *courses and programs*. In Australia, Davison et al. (2014) provide details on a distributed leadership project where faculty,

across disciplines and universities, work collaboratively to enrich "interdisciplinary climate change teaching" (p. 98). Cebrián (2017) refers to a collaborative action research project that brings together faculty, from different fields of study, at University of Southampton, UK, to support including sustainability in curriculum. Coops et al. (2015) outline "the development, and preliminary implementation, of an entry-level, interdisciplinary sustainability course" at University of British Columbia (p. 729).

Sustainability *institutes and networks* help to make sustainability happen on higher education campuses. Atherton and Giurco (2011) states that, at University of Technology Sydney, a campus research institute (Institute for Sustainable Futures) develops strategies for lowering emissions, decreasing paper use, and strengthening sustainable transportation on campus. Kurland (2011) states that there is a sustainability network at California State University Northridge that supports sustainability in campus physical operations, curriculum, outreach, and faculty and staff development. Similarly, Levy and Marans (2012) write about university officials at University of Michigan commissioning an interdisciplinary team, composed of faculty and students on campus, to develop research-based suggestions for cultivating a sustainability culture on campus.

But is it enough for colleges and universities to do sustainability? Assessment tools are used by higher education institutions to monitor, communicate, investigate, and compare their sustainability performance. The *Sustainability Assessment Questionnaire* helps post-secondary schools assess the extent sustainability topics/practices impact faculty research, academic studies, institutional policies, and campus physical operations, to name a few (University Leaders for a Sustainable Future, 2009). The *Sustainability Tracking, Assessment and Rating System* enables higher education institutions to publicly report their sustainability initiatives and compare their sustainability accomplishments against other colleges and universities (AASHE, 2017). One ranking tool that stands out to me is *Times Higher Education Impact Rankings*, which "are the only global performance tables that assess universities against the United Nations' Sustainable Development Goals" (York University, 2021, para. 3).

What motivates higher education institutions to be more sustainable? Sustainability

declarations may motivate these institutions. Grindsted (2011) states that "universities and intergovernmental institutions have developed more than 31 SHE [sustainability in higher education] declarations, and more than 1400 universities have signed a SHE declaration globally" (p. 29). Lozano et al. (2013) declares that the general aim of SHE declarations is to have higher education institutions commit to promoting environmental awareness and environmentally friendly practices.

Government pressures are also key to sustainability implementation. For example, Kurland (2011) explains that energy efficiency mandates issued by the state of California and California State University have influenced CSUN to reduce its energy consumption. Bilodeau et al. (2014) state that the *Greenhouse Gas Reduction Targets Act* which calls for public organizations in British Columbia "to be carbon neutral in operations from 2010" is a prime motivator for University of British Columbia "to reduce campus energy consumption and greenhouse gas emissions" (p. 158). Also, according to University of California Santa Cruz Sustainability Office (2014), a student-led Drought Response Team was launched at University of California Santa Cruz in response to water restrictions mandated by the City of Santa Cruz.

Sustainability is tied to financial savings. Implementing sustainability in campus physical operations is associated with lower operating costs. Coffman (2009) explains that the partnership between University of Hawaii at Manoa and the Hawaiian Electric Company was designed to help reduce "UHM's approximately \$20 million annual electricity bill and associated carbon footprint" (p. 242). Lo (2015) finds administrators at post-secondary schools in China "are under pressure to reduce the operational costs of the school, and water and energy conservation are viable means" (p. 40).

Also, higher education institutions need to have an environmentally friendly image to attract students. Attaran and Celik (2015) state that universities worldwide recognize the need to consider environmental views, where "the majority of prospective college students and their parents claim that the environmental record is a determining factor in their selection of a university" (p. 327).

Conclusions: Something to Sing About?

Dylan (1963) sings, "the times they are a-changin" (track 1) and this is true of higher education. With less government funding available, authors like Levidow (2002) imply that higher education institutions can no longer afford to be solely concerned with intellectual pursuits. They must also have financial goals. These institutions must find new sources of funding and ways of cutting expenses. One way higher education institutions are reducing costs is by implementing sustainability initiatives like solar panels, rainwater storage, and recycling programs (e.g., Aleixo et al., 2018; Fonseca et al., 2018; Yerema and Watkins, 2021). In this sense, what ends up being good for the financial wellbeing of higher education institutions also ends up being good for the planet.

But how do these discussions relate to my study of teaching? How do sustainability cultures (in terms of social equity, social prosperity, environmental conservation) shape cultures of teaching? How do neoliberalisms (like reducing expenses and working efficiently) influence teaching practices? I spend the remainder of my dissertation pondering these questions.

Chapter 3: Teaching Cultures are Technical (Framework)

Teachers and other educators have teaching routines and teaching practices. But why these teaching routines? Why these practices? Hargreaves (1994a) states that teachers do what they do because of cultures of teaching. He explains, "cultures of teaching comprise beliefs, values, habits and assumed ways of doing things among communities of teachers who have had to deal with similar demands and constraints over many years" (p. 165; original embed). These "cultures provide a context in which particular strategies of teaching are developed, sustained and preferred over time" (p. 165). Cultures of teaching have a long tradition in scholarly thought, dating back to the early 1930s. Three classic studies of teaching cultures include: Waller's (1932) *The Sociology of Teaching*, Jackson's (1990) *Life in Classrooms*, and Lortie's (2002) *Schoolteacher: A Sociological Study*. Studying teaching cultures remains popular, with studies like Kenny (2018), Fitzgerald et al. (2019), and Pacaol (2020).

Waller (1932) observes the school system in the United States (i.e., elementary schools, high schools, colleges). He says that "school is a social organism" (p. 6). Schools have a governing structure, a culture, a community of teachers and students. Teachers teach and students are expected to learn. "The political organization of the school… makes the teacher dominant" (p. 8). Teachers control students with various rules and discipline measures. Teachers having authority over students is considered a "general tradition" and "a condition of student achievement" (p. 9).

Jackson (1990) observes what takes place at University of Chicago Laboratory Schools. Jackson is primarily concerned with "life in elementary classrooms" (p. 4). He makes the case that these classrooms are quite standardized. Spend some time in an elementary classroom, Jackson says, and you will likely notice how these environments are "physically arranged with considerable regularity" (p. 7). These classrooms have chalkboards, desks, chairs, seating charts. What students and teachers do in these rooms is "fairly stable" (p. 9). There are daily classroom schedules and classroom rules and more or less standard student activities. Also, "the social composition" of the elementary classroom is "fairly constant" (p. 7), typically composed of the same teachers and students throughout the school year.

Lortie (2002) interviews and surveys public elementary and high school teachers in the Boston Metropolitan Area and in Dade County, Florida. Lortie presents, what Hargreaves (2010) describes as, a "simple but compelling argument: that teaching is characterized by three orientations which impede educational improvement – presentism, conservatism, and individualism" (pp. 146–147). Lortie argues that teaching is a conservative act. In Lortie's words, Presentism is about how teachers are immersed in the present, doing teaching tasks, not looking for "general principles to inform their work" (Lortie, 2002, p. 212). Conservatism pertains to how teachers desire their teaching to remain the same over time, where "the drift is toward continuity rather than change" (p. 210). Individualism relates to how teachers "resist conditions that would force change" since they have "a stake in autonomy" (p. 210). Lortie describes psychic rewards underpinning (these) teaching orientations.

Presentism, Conservatism, and Individualism are "performative" teaching orientations, meaning that educators adopt these orientations to reach teaching targets, goals, produce results or outcomes, achieve teaching ends. Performativity is affiliated with functionalism (Patrick, 2013), reductionism (O'Neil, 2018), and "technical rationality" (Cribb and Gewirtz, 2013, p. 344). As previously discussed in Chapter Two, performativity is the most typical manifestation of neoliberalism (see Ball, 2012).

I frame my study of teaching cultures around Lortie (2002) and followers (i.e., Hargreaves and Shirley, 2009). In this chapter, I evaluate the strength of how Lortie and followers characterize teaching cultures, referring to literature that supports, contradicts, and challenges Presentism (Endemic, Adaptive, Addictive), Conservatism, and Individualism and associated psychic rewards. While my research takes place within the field of higher education, focusing on the teaching cultures of TAs, literature here, and in subsequent chapters, discusses teaching cultures in higher education and across other education sectors. This emphasizes the importance of studying teaching cultures and their relevance to a range of educators (e.g., teaching assistants, teachers, student teachers, early childhood educators, professors).

Presentism

For Lortie (2002), Presentism refers to how teaching work is very much a present activity, based around educators completing many, separate short-term tasks on an ongoing basis in classrooms and other school spaces. Such tasks include preparing for lessons, delivering lessons, answering students' questions, grading student work, tutoring, and so on. Teaching tasks broken up in this way relates to how teaching is structured around short-term tasks. In other words, Hargreaves and Shirley (2009) state, for Lortie short-term tasks are "an ingrained or *endemic* feature of teaching" (p. 2508).

Literature highlights how teaching requires educators to complete many different short tasks. At University of Colorado in Boulder, Pentecost et al. (2012) state that TAs within a general chemistry course are required to attend meetings, facilitate laboratory/recitation classes, tutor, grade student assignments, and invigilate exams. Fairbrother (2012) claims that working as a TA, at a UK university, gives her a chance to do tasks like prepare and deliver lectures, lead tutorials, and grade student work. Teaching duties for TAs at York University are similar and may include things like grading student assignments, communicating with students, having meetings with professors/course instructors, supervising exams (see Unit 1 Collective Agreement, 2014).

But why do educators complete many discrete tasks? The accumulation of psychic rewards is a main reason. "Teachers are more likely to experience reward if they can punctuate their work," Lortie (2002) advises "concentrating on short-range outcomes as a source of gratification" (p. 212). Fisher (2019) agrees. He suggests that short-termism is central to human functioning. "Despite our mental faculty to look and plan ahead," Fisher argues "we have a weakness in our thinking called 'present bias', which favours short-term payoffs over long-term rewards" (para. 12).

Neoliberal cultures are built around short-term thinking. Teaching work is organized around short-term employment contracts, these contracts being another example of a neoliberal measure. Teachers are typically contracted to work on a short-term basis by school boards, higher education institutions or any other educational organization to complete a set of teaching activities in exchange for pay. But these contracts are becoming more and more

open-ended. Mangan (2009) remarks that a teacher's responsibilities have become continuously more imposed as well as go beyond "the explicit terms of the employment contract" (p. 3). He says there is a shift towards contractual flexibility, which means "the employer has flexibility within the contract of employment so that if the need arises, it can compel employees to perform work not specifically contracted" (p. 11). This has resulted in teaching intensification, which is associated with what Hargreaves and Shirley call *Adaptive Presentism*.

Hargreaves and Shirley (2009) claim Adaptive Presentism refers to how neoliberal reforms have intensified teaching. Teaching work is being piled on because of neoliberal reforms. There are increasing teaching demands and changes. Educators now must adopt "a range of reluctant, short-term, and often cynical adaptations to imposed reforms" (p. 2509). Hargreaves and Shirley further elaborate, stating that intensified work conditions have created a negative situation for teachers, giving teachers:

[R]educed time for relaxation and renewal, lack of time to retool skills and keep up with the field, increased dependency on externally prescribed materials, and cutting of corners and quality. (p. 2509)

Burnett, Schick and McNinch (2013) also describe intensification in teaching, stating:

In the context of teaching, work intensification refers to the ways in which teachers are subjected to increasing external pressures, such as demands from policy-makers or broader societal expectations. The result is an increase in the number of tasks or duties for which a teacher is responsible, without the accompaniment of additional resources or time. As the work of teachers is increasingly reduced to executing the decisions made by others, intensification thus carries an implicit threat of deprofessionalization. (p. 4)

Seifert and Yingfei (2014) provide an example of teaching intensification. They state that education reforms have created intensified work conditions at middle schools in Guangzhou, China, with teachers having to devote more time to "teaching... preparation and marking" resulting in many of these educators "feeling annoyed and stressed" (p. 65). Similarly, Burnett et al. (2013) find that work intensification in K-12 public schools in Saskatchewan, Canada, has resulted in "heavier workloads and increased accountability" for

teachers (p. 4) adding to "pressures on their personal lives and on their health and well-being" (p. 3).

Not all educators respond cynically to work intensity. Literature points to some educators accruing psychic rewards from thinking that intensification is a positive thing, has benefits for students. "The experience of intensification reflects on teachers' professional self," Ballet and Kelchtermans (2009) state "and as such always implicates their relationship with pupils" (p. 1156). They continue by saying that since teachers want what is best for students, intensified teaching conditions are "emotionally charged and calls for change (can) become compelling" (p. 1156). This is supported by Cucchiara, Rooney and Robertson-Kraft (2015), who find K-12 teachers at urban public and private schools in northeastern US speak of "feeling proud" of their involvement in an educational reform designed to improve student achievement, despite this reform saddling them with work that is "extremely rigorous, emphasizing long hours and multiple demands" (p. 266).

Other than Endemic and Adaptive, Hargreaves and Shirley (2009) also represent Presentism as *Addictive*. They claim that Presentism continues to exist in teaching because teachers are obsessed with using short-term methods to complete teaching tasks, methods that are "simple to employ, widespread, and available" (p. 2524). Lin (2017) interviews teachers at a public elementary school in Taicun City, Taiwan, about taking part in classroom observation. This entails teachers visiting classrooms and observing their colleagues teach. Lin finds that teachers hope "to learn... useful, easy and quickly applicable" teaching methods from classroom observations and are "disappointed" when this does not happen (p. 291). Also, Lin (2018) surveys teachers in Taiwan, finding teachers "are eager to acquire strategies they can use immediately" (p. 272). Hardré and Burris (2012) find, in the context of a TA training program at a post-secondary school in southwestern United States, TAs have a "preference for pragmatic strategies" (p. 115).

But why the attraction to short-term strategies? Educators are busy and short-term strategies help educators complete their work quickly and easily and otherwise, efficiently. In times of neoliberalism, Apple (2000) states:

Efficiency and an "ethic" of cost-benefit analysis are the dominant norms. All people are to act in ways that maximize their own personal benefits. (p. 59)

Educators that are more efficient are more productive, and being productive can make an educator feel good, helping them to acquire psychic rewards. Mankins (2017) asserts, "Most employees want to be productive" (para. 12; original embed). In the neoliberal age, Ball (2000) comments that an individual's performance functions as a measurement of "productivity or output" (p. 1) and "persons are valued for their productivity" (p. 6).

Conservatism

Lortie (2002) states that teachers have conservative tendencies. He claims that when completing teaching activities, "teachers... are heavily influenced by past experience" (p. 208). This means that how a teacher once taught, or recall being taught, for example, greatly influences how they teach.

Lortie coined the term *Apprenticeship of Observation* to shed light on how "being a student is like serving an apprenticeship in teaching" (Lortie, 2002, p. 61). Throughout K–12 schooling, students spend countless hours in classrooms observing teachers teach. Through all this observing, students come to learn that teaching can be imitated, that it is a natural process. As Lortie asks: "what child cannot, after all, do a reasonably accurate portrayal of a classroom teacher's actions?" (p. 62). This being the case, Lortie advises that the apprenticeship model possesses a "special occupational effect" for students who aspire to teach (p. 61). The aspiring teacher learns to teach as their former educators have taught, but seldom (if ever) learn the underlying pedagogical reasons for these teaching behaviors. Lortie's apprenticeship model is fundamentally conservative, based on "the cultural transmission of teaching practices" (see Mewborn and Tyminski, 2006, p. 30).

From searching the literature, I find that the Apprenticeship of Observation remains central to the teaching experience. This is very interesting. But I notice that this literature has slight differences. To help make sense of these differences, I turn to Boyd et al. (2013) who identifies four responses educators have to this apprenticeship model: functional, evaluative, affective, and disrupted.

Boyd et al. (2013) state that a *functional* response is one where an educator considers traditional teaching methods as reasonable or logical. Van Canh (2018) describes his early experiences as a college instructor in Vietnam, stating: "During my first years of teaching, I had no idea of the nuts and bolts of teaching English, and I taught my students the way I had been taught by my teachers" (p. 5). Likewise, O'Neil (2018) recounts when she first started teaching at universities in the United States, commenting: "I fell back on mimicking some of my own instructors I had as a student" (p. 366). She goes onto say, "I stood up tall up in front of the classroom and with my authoritative voice, I lectured about the environment" (p. 366).

For Boyd et al., *evaluative responses* refer to how an educator uses their prior schooling experiences to make judgements about what teaching methods to include or exclude in their practice (Boyd et al., 2013). Take Smagorinsky and Barnes (2014) for instance. They interview elementary and secondary student teachers at universities in southern United States to explore the influence the Apprenticeship of Observation has on these novice educators. Smagorinsky and Barnes find that student teachers are judgmental about how they were taught as students, seeking to mostly imitate the "progressive, constructivist, communal, rigorous, and open-ended" teaching methods used by their past teachers while aiming to avoid using "teachers' rigid, authoritarian, harsh, and undemanding instructional approaches" (p. 37).

According to Boyd et al., *affective responses* concern feelings, where admiring or loathing a past teacher influences how one feels about a subject discipline or course material, for example (Boyd et al., 2013). In the context of a primary teacher education program in Ireland, Furlong (2013) interviews student teachers about their aspirations – who they aim to be as educators. She finds that one student teacher wants to be friendly and welcoming, much like "her favourite teacher" (p. 74). Khanna (2017) writes about attending a boarding school in North India, where teachers placed emphasis on "fear and discipline" (p. 95). She says that this was a negative schooling experience. It left her feeling miserable and full of grief. But when she began teaching, she adopted this same style of teaching. She states that this "created a lingering sense of familiarity with and resistance to the profession" (p. 95).

Boyd et al. (2013) argue that functional, evaluative, and affective responses are affiliated with Lortie's apprenticeship model. But *disrupted responses* serve to interfere with this model. A disrupted response, Boyd et al. says, involves an educator critically reflecting on past schooling experiences and considering alternative ways of teaching. For example, at Valparaiso University, Westrick and Morris (2016) analyze how student teachers respond to a presentation on teaching and assessment. They find that this educational experience helps student teachers think about, challenge, and begin "to replace naïve notions of teaching, learning, and assessment" (p. 156). Narváez, Ramírez and Vasco (2013) analyze autobiographical narratives of student teachers at University of Tolima, Colombia. They discover that students portray their former educational experiences as traditional or conventional and consider their teacher education programs to offer alternative ways forward, other ways of teaching.

While disrupted responses are a real possibility, the apprenticeship model continues to influence educators. Why? Again, psychic rewards are a main reason. Lortie (2002) argues teachers have "a preference for doing things as they have been done in the past" where "the drift is toward continuity rather than change" (p. 210). Scholars indicate that this is because change can be frightening. After all, Bailey and Raelin (2015) describe *change* as representing unpredictability, loss, fear, worry and *consistency* as the exact opposite, standing for certainty, security, familiarity.

This is supported by the literature. Hamlaoui (2021) surveys and interviews teachers at Tunisian post-secondary schools about incorporating ICT (information and communications technology) in their practice. She finds that teachers who have taught for longer appear "more resistant to any kind of change" in teaching, seeing "no need to change or question their current professional methodology" (p. 178). This strongly emphasizes conservatism in teaching. In Iowa, Snyder (2017) interviews veteran teachers at K-12 schools about their response to education reform (in general). He finds that these teachers are both resistant to and more accepting of change in education. While these teachers associate education reform with "a loss of autonomy" ("Reasons for Resistance", para. 6), they also connect it with "continuing renewal" ("Later Career Teachers," para. 1).

Individualism

Lortie (2002) argues that teaching is an individualist profession, where teachers work individually, accomplishing teaching activities on their own in classrooms. This is supported by Ingersoll (2012). "Although elementary and secondary teaching involves intensive interaction with youngsters," Ingersoll asserts "the work of teachers is done largely in isolation from colleagues" (para. 1). The same holds true for professors in higher education (e.g., Ziker, 2014).

Neoliberal cultures prioritize the individual, emphasizing individual rights and choices (e.g., Johansson and Berthelsen, 2012), individual worth (e.g., Etherington, 2019), "individual performance and output" (Bal, Grassiani and Kirk, 2014, p. 46), and individual accountability (e.g., Soini, Pyhältö and Pietarinen, 2010). Hursh and Wall (2011) allege, "Neoliberalism conceptualizes the individual... as an autonomous entrepreneur responsible for his or her own self, progress, position, and success or failure" (p. 561).

However, individualism in teaching is not necessarily a bad thing. Rather teachers may like working on their own. It can offer them a sense of freedom or autonomy over their work. As a professor, Dettmar (2021) comments that there is a "great privilege... of being left alone to do our work according to our own lights and rhythms" ("Isolation and Autonomy," para.

1). As Lortie (2002) states, being alone in classrooms gives a teacher "the chance to align his [sic] goals with his [sic] own capacities and interests" (p. 210).

Reinders and Balcikanli (2011) present teacher autonomy as "the teacher's ability to make decisions about teaching and their own professional development" (p. 16). Worth and Van den Brande (2020) analyze national survey data in England, discovering "teacher autonomy is strongly correlated with job satisfaction, perceptions of workload manageability and intention to stay in the profession" (p. 3). Eren (2020) finds that public university teachers in Turkey perceive autonomous teachers to be adaptable, enthusiastic, creative, reflective, problem solvers, leaders, and so on. Strong and Yoshida (2014) find that K-12 teachers at Michigan public schools associate teacher autonomy with classroom management.

Teacher autonomy is good for both educators and students. "Teacher autonomy is also usually conceived of as including the ability to understand the students' learning needs" Reinders and Balcikanli (2011) state, "and the ability to support them in their development towards autonomy" (pp. 16–17). For example, Feryok (2013) interviews and observes a teacher at a college in New Zealand. She finds that this teacher has autonomy ("real control, choice and responsibility for the syllabus and curriculum" [p. 223]) and uses their autonomy to create lessons that are student-centered and relevant to students' lives and interests.

Teacher autonomy is a real thing. But does every teacher have autonomy? From their research, Worth and Van den Brande (2020) find that "the average teacher has a lower level of autonomy compared to similar professionals" (p. 3). Referencing scholars like Phillips and Norwood, Lamb-Sinclair (2017) states, "One of the biggest reasons teachers quit, contributing to the increasing teacher shortage in the U.S., is a lack of autonomy in the classroom" (para. 12; original embed).

In an era of neoliberalism, high-stakes accountability has reduced teacher autonomy, impeding psychic rewards. Rooney (2015) researchers how high-stakes testing impacts teaching experiences at public elementary schools in an urban area of northeastern US. From observations and interviews, Rooney finds that this testing forces teachers to teach to the test, controlling or restricting what they teach. She states, "teachers... linked the increased control of their work, specifically a narrowed curriculum, to an inability to feel good about the work they did" (p. 485).

Literature suggests that teaching assistants are unique in the sense that, despite neoliberal conditions, TAs generally have restricted autonomy. This is because being a TA means assisting professors or course instructors, doing teaching tasks that these instructors request or assign. Again, restricting autonomy can be defeating, preventing psychic rewards. This is supported by the literature. At Lancaster University, Park and Ramos (2002) survey and interview graduate students who work as graduate teaching assistants (GTAs). They discover that these individuals "expressed dissatisfaction over the very limited discretion they had, as GTAs, over matters of course content, delivery and assessment" (p. 51). Park and Ramos further explain, remarking:

[M]any GTAs felt that they were simply "carrying out the job", with little sense of ownership, engagement or job satisfaction. This has an important bearing on the GTA's sense of identity and academic value, particularly for those who see themselves as apprentice academics. It severely restricts the GTA's ability to exercise academic leadership and responsibility, and compromises the way their students see them. (p. 51)

Undergraduate students often perceive GTAs to be novices (e.g., Alhija and Fresko, 2018; Conner and Rubenstein, 2014) and having no real power or authority (e.g., Kendall and Schussler, 2012).

Where is teacher autonomy? Ramos (2006) states, "Autonomy is not an 'all-or-nothing' concept; it can be developed and may be present in some aspects of a person's life and absent from others" (p. 185). Lamb-Sinclair (2017) talks about a language-arts course she co-taught at a high school in the United States. While this course had restrictions (i.e., there was prescribed curriculum and an associated textbook), she says there was freedom in how course content was taught. This prompted an interest in a drama-based approach, where Pogrow's book *Teaching Content Outrageously* became important to the lesson planning process. Using drama seemed to benefit students, Lamb-Sinclair notes, with students showing "excitement" during class lessons (para. 6) and better "test scores" (para. 8). "Teaching outrageously, it seems, also put us [as teachers] at a decreased risk for burnout" Lamb-Sinclair states, "because it allowed us to take control of our craft" (para. 12).

Collegiality

From his research, Lortie (2002) finds that teachers have "relational preferences", wanting "limited, specified, and circumscribed cooperation" from colleagues and "do not endorse denser and more intense relationships among adults" (p. 211). However, Lortie does say, "Relationships among teachers may deepen and broaden" (p. 209). In recent years, the literature provides evidence of deepening teacher relationships with teachers getting together to share teaching experiences, learn more about teaching, and generally improve their teaching practices.

Literature positions teacher collegiality as a form of professional growth and development. This is supported by Hargreaves (1994a), who states that "relationships between teachers

and their colleagues... provide a vital context for teacher development and for the ways that teachers teach" (p. 165). Teachers work together to improve how they accomplish teaching tasks (see Jensvoll and Lekang, 2018; Jones, Stall and Yarbrough, 2013). Improvement is key here, and central to performativity. "Performativity invites and incites us to make ourselves more effective," Ball (2012) insists "to work on ourselves, to improve ourselves" (p. 31). Below, I provide a brief overview of three common features of teacher collegiality presented in the literature: knowledge-share, collaboration, and support.

Teachers *share knowledge* with colleagues. This includes sharing teaching strategies, resources, ideas, and skills. For example, Richmond and Manokore (2010) research a professional learning community (PLC) at an urban school in the United States, sitting in on PLC meetings with elementary science teachers. From analyzing field notes and transcripts of audio recordings, they find these teachers have "a common aim of sharing and learning" how to improve their approach to teaching science (p. 559). Trust and Horrocks (2017) interview K-12 teachers affiliated with the Discovery Educator Network (DEN), a teacher community in the United States. They find that after becoming members of DEN, these teachers have "greater interest and confidence in sharing their expertise with other educators" (p. 653). Others like Choi and Sazawa (2016) study a learning community that involves a group of world language teachers at a private university in midwestern US. They find that when these teachers get together, they share "practical applications and new ideas about cultural teaching" (p. 74).

Teachers also *collaborate* with colleagues. This may include planning, reflecting, and dialoguing together. At a public middle school in California, Lieberman (2009) researches math teachers who take part in lesson study (i.e., co-planning lessons, implementing and observing lessons, and analyzing and revising lesson plans). Results show that these teachers learn to appreciate "co-developing lessons, not just giving or receiving a completed activity" (p. 88). Burton (2015) finds that elementary teachers in South Carolina consider "effective" or successful teacher collaboration to be goal oriented, built around "sharing of common goals and objectives" (p. 68). At an elementary school in rural Newfoundland, Canada, Briscoe (2017) conducts an action research project with her teacher colleagues. The purpose of this project is to collaboratively inquire into why their teaching methods fail to

raise student achievement. Results point to teachers recognizing their "unquestioned beliefs, thought patterns, and biases" (p. 47) and working to change their "thinking and practices" (p. 44).

Support is also central to teaching. This includes educators turning to their colleagues for encouragement, empathy, feedback, and assistance. Keogh et al. (2012) study group email conversations that new teachers have about their experiences working at schools in Queensland, Australia. They find that emailing is a support tool, finding these teachers write emails to share teaching experiences, challenges, advice, and commiserate with colleagues. Likewise, Bond (2013) investigates a PLC that was developed for student teachers at a public higher education institution in southwestern US. They find that this learning community provides student teachers with opportunities for sharing their anxieties about teaching, giving/receiving encouragement, along with other emotional support.

But do educators find it psychically rewarding to work with colleagues? Literature gives the impression that educators like connecting and sharing and learning with colleagues. In Adelaide, Australia, Kern et al. (2014) survey both teaching and non-teaching staff at St. Peter's College, finding these employees claim work relationships and involvement are crucial to their "job satisfaction and organizational commitment" (p. 503). Tan and Ramayah (2014) survey faculty members at post-secondary schools in Malaysia about what motivates them to share knowledge with colleagues. They find one's "commitment and enjoyment in helping others (i.e., intrinsic motivators)" is positively associated with their outlook on sharing knowledge (Abstract). Others like Reaves and Cozzens (2018) survey teachers in West Tennessee, finding "teachers who feel safe and supported had significantly higher intrinsic motivation and self-efficacy compared to teachers that did not feel safe and supported" (p. 59).

Conclusions: Performative Cultures

Literature in this chapter provides strong support for Lortie (2002) and followers (i.e., Hargreaves and Shirley, 2009). Here, literature reinforces the idea that teaching cultures exist around Presentism (Endemic, Adaptive, Addictive), Conservatism, and Individualism and underpinned by psychic rewards.

In this chapter I also include literature on collegiality, an emerging trend that is diminishing Individualism in teaching. During the 1960s, when Lortie conducted his research on teaching cultures, he found evidence of teachers wanting "limited, specified, and circumscribed cooperation" from colleagues (Lortie, 2002, p. 211). But Lortie suspected collegiality "may deepen and broaden" considering "effort... being expended... to foster closer working relationships among teachers" (p. 209). I refer to scholars like Choi and Sazawa (2016) and Keogh et al. (2012) who point to teachers and other educators sharing knowledge, collaborating, and supporting each other. This proves Lortie's suspicions about collegiality correct.

Presentism, Conservatism, Individualism, and even collegiality, are "performative" orientations. They function to help educators accomplish teaching activities. But is teaching only about reaching targets? In the next chapter, other discussions emerge. Teaching is described as value-laden where personal politics and ethics shape teaching experiences.

Chapter 4: Teaching Cultures are Valuable (Framework)

In the previous chapter, conversations revolve around the teaching orientations of Presentism (Endemic, Adaptive, Addictive), Conservatism, and Individualism, and even more collegial tendencies. These orientations, discussed by Lortie (2002) and followers (i.e., Hargreaves and Shirley, 2009), are "performative" and underpinned by psychic rewards. The argument here is that these orientations help educators accomplish teaching tasks or teaching ends, where value is placed on productivity, efficiency, and self-accountability when teaching. "The ends give no attention in teaching, curriculum, and learning" Hargreaves (2010) states, "to goals and contents such as environmental sustainability, human rights, local history, or creativity and performing arts" (pp. 150–151).

In this chapter, extending Lortie (2002) and others (i.e., Hargreaves and Shirley, 2009), I argue that teaching is not a cold, calculated chore or duty. Rather how an educator completes teaching activities is shaped/impacted by their personal commitments or ethics and values. This is supported by Grant and Hurd (2010), who discuss their teaching practice: "Typically our actions are guided by our personal beliefs, and thus our teaching activities are in many ways an extension of the values and passions which guide all facets of our lives" (p. 4). Leiserowitz, Kates and Parris (2006) state, "Values define or direct us to goals, frame our attitudes, and provide standards against which the behavior of individuals and societies can be judged" (p. 414).

In times of a global pandemic (Covid-19), sustainability is positioned as a much-needed value. The global pandemic has shined a light on racism, injustices, inequities (e.g., Devakumar et al., 2020), the environmental crisis (e.g., Barouki et al., 2021), the health crisis (e.g., Mallah et al., 2021), the economic crisis (e.g., Pak et al., 2020), the democratic crisis (e.g., Flinders, 2021; Klassen, 2020), and the need for scientific literacy (e.g., Motoki, Saito and Takano, 2021). "Our challenge therefore, is to live like little children no longer," Hargreaves and Shirley (2009) declare "absorbed in the present and oblivious to our future" (p. 2529). Sustainability is about making the world better for present and future generations: working towards social prosperity (economic development), environmental preservation, caring and democratic relationships, socially progressive alternatives, among other things.

In this chapter, I include literature on three popular, divergent sustainability pedagogies: environmental/sustainability education, inquiry pedagogy, and critical pedagogy. These pedagogies are underpinned by *sustainability values* like altruism, social responsibility, social justice, and environmental conservation (see Dahl, 2001). This chapter concludes with literature that presents sustainability pedagogies as not (necessarily) easy or something students are interested in, making an educator's psychic rewards unreliable. Sustainability pedagogies are connected to previous conversations of sustainability in higher education.

Environmental/Sustainability Education

According to UNESCO (2006), following their endorsement of sustainability in the 1980s, the United Nations designed a parallel concept called *education for sustainability*. Education for sustainability is about recognizing the role education can play in advancing sustainability, placing emphasis on using education to promote social and ecological balance. Most recently, the United Nations launched a decade for education for sustainability to advance the vision of people everywhere having "the opportunity to benefit from quality education and learn the values, behaviour and lifestyles required for a sustainable future and for positive societal transformation" (p. 24; original embed).

Below, I organize literature in relation to Sterling (2003), who proposes education for sustainability can be unpacked as: education about sustainability; education for sustainability; and sustainable education.

For Sterling (2003), *education about sustainability* is usually content based, where students study or learn about sustainability through books and lectures and other information sources.

Education about sustainability is important. Teaching sustainability content is foundational to students developing knowledge and understanding of social and environmental problems. As Duffy and Raymer (2010) state, "lectures, demonstrations, and other 'instructional' approaches are very often an important part of the learning environment" (p. 4). For instance, Scott (2014) gives an account of a photography course at Edith Cowan University in Australia. In preparation for an environmentally themed photography competition,

students are lectured, and assigned readings, on sustainable methods of living. Tilley et al. (2009) report how a lecture series is used in an engineering course at University of Leeds to introduce dominant cultural narratives of social and environmental problems. Maher and Burkhart (2017) state that in a food and nutrition course at University of the Sunshine Coast, Australia, a dietician gives a "lecture on sustainability and the food system" (p. 1110).

Education for sustainability, Sterling (2003) states, represents an attempt to implement sustainability, to have students reform existing systems using sustainability ideas. Emphasis here is on teaching sustainability through experiential and active learning approaches like internships or practicums, role-play, and field trips.

Internships or practicums offer students opportunities to work with businesses or industry on sustainability projects. Rios et al. (2018) refer to a graduate program in sustainability and energy development at University of Calgary where students work as interns in Ecuador. Students work with local stakeholders in Ecuador to support local sustainability measures affiliated with energy conservation, renewable energy resources, water management, and eco-tourism. Weybrecht (2015) writes about Hanken School of Economics in Finland establishing partnerships with industry, enabling students to work with companies like Vaisala to consider how issues like corporate social responsibility and environmental sustainability can play a role in business operations.

What about role-play? As Killen (2007) reports, role-play is an active learning approach, one that requires individuals taking on roles and improvising what they might do in certain situations. Cleaves et al. (2009) write about an earth science course at University of New Hampshire. This course involves students interviewing and role-playing campus leaders at a "mock negotiation" where the aim is to negotiate "strategies for the university to reduce emissions" (p. 258). Emblen-Perry (2018) describe students in a business course at University of Worcester, UK, playing a role-based game. These students pretend to be business leaders and consider the role sustainability can play in business challenges, such as how to balance profit while also being considerate of local communities and natural environments.

Field trips offer experiences. Ting and Cheng (2017) mention students at a private higher education institution in Malaysia taking a field trip to a Malaysian rainforest. They state that this field trip includes a guided tour and allows students to observe and experience, firsthand, the complexity of an ecosystem, with its many organisms and associated habitat. Through surveys and interviews, they find that this field trip has a meaningful and favorable impact on students' pro-environmental behavior. Çaliskan (2011) provides a case for virtual field trips, specifically in earth and environmental science courses at universities in Turkey and elsewhere. He explains that virtual field trips are accessible using computers, affordable, safe, and can take place anywhere in the world. However, Çaliskan states, how memorable or lasting virtual field trips are for students remains unknown, which raises other questions about "geologists and ecologists... trained in virtual environments" (p. 3242).

Sterling (2003) conceives *sustainable education*, or *learning as sustainability*, as "a strong yet critically open interpretation of sustainability, and giving rise to a transformative education paradigm" (p. 285). Here learning is perceived as holistic, relational, uncertain, ambiguous, participatory, iterative, imaginative, exploratory, cooperative, negotiated, and reflecting a systematic approach. Sustainable education is aligned with approaches like living labs, self-reports or self-audits, community-based learning, and intra-active pedagogy.

Evans et al. (2015) explain that living labs provide students, faculty, and other stakeholders the opportunity to learn about and research sustainability in real-life settings. Take the Sustainability House (SH) for example. Kim et al. (2018) interview graduate students studying international sustainable tourism at University of North Texas about their involvement with SH, a "hospitality and tourism business-learning center" in Costa Rica. This center gives students a chance to live, learn, and research sustainability. During interviews, Kim et al. find that all students respond positively to SH, suggesting that this center affords them the opportunity to implement and experiment with sustainability, verifying and testing problems affiliated with sustainability implementation.

Higher education campuses have become living labs, real-life settings to learn about and research sustainability. At Montana State University, Ahmed et al. (2018) refer to courses that entail students designing, implementing, and evaluating an intervention intended to scale back food waste in a campus cafeteria. They find that this "food waste intervention led to a 17 per cent reduction in total food waste" (p. 1075). Others like Choate, Davis and Verrecchia (2018) report how, in a research methods course at Allegheny College, students design and distribute a survey to Allegheny's students for the purpose of finding ways to decrease the use of plastic, disposable water bottles on campus. This survey has helped to transform Allegheny College, with survey results leading this campus to increase the total of water refilling stations and supply students with a reusable water container. Information is also now included near water refilling stations outlining the health and safety and social and ecological advantages of drinking tap water.

To explore environmental sustainability, students can use self-reports or self-audits. At University of the Sunshine Coast, Maher and Burkhart (2017) discuss a food challenge in a food and nutrition course where the objective is for students to embrace more environmentally friendly food practices like limiting food waste or cutting back on eating certain foods (meat products) or opting to purchase local, sustainable, in-season foods. Students blog about and reflect on this food challenge. Results indicate that this activity benefits students, advancing "their knowledge and skills, and insight into issues relating to environmental sustainability and dietary practices" (p. 1118). At University of California, Savageau (2013) states that students in a design course conduct a self-audit of their consumption (gasoline, electricity, and water) and waste (garbage, not recyclable items). In general terms, she finds that students are surprised by the audit results and show an interest in adopting a more sustainable lifestyle.

There is also community-based learning. Schmitz, Stinson and James (2010) state that a community provides a frame of reference, a setting for civic discussions, shared interactions, and mutual beneficial knowledge creation. Cachelin, Rose and Rumore (2016) report on the New England Climate Adaptation Project, a project designed to prepare coastal towns in New England to adapt/respond to climate change. This is a project that brings together researchers and students at Massachusetts Institute of Technology and local

partners (e.g., key stakeholders, public officials) to learn, share, and participate in discussions about the climate risks associated with New England coastal communities and potential options for climate adaptations and climate risk management. Kawabe et al. (2013) describe an outreach project that brings together members of Ohta and Minato communities and students and staff at Tokyo university to discuss what it might mean to develop Tokyo Bay, a local waterway, in a sustainable manner.

Drawing on Barad and others, Taguchi (2009) identifies intra-active pedagogy as being about intra-actions. This is about how one feels about, understands, and experiences the world through interconnections. There is "inter-connectedness between bodies, matter, space, theory, rational thinking and the bodily senses" (p. 3) which provides "multiple possibilities of understanding and knowing" (p. 6).

What does intra-active pedagogy look like in practice? Regier (2017) gives an account of the Seed Program at Aden Bowman Collegiate in Saskatoon, Saskatchewan. The goal of this program is to teach students about "a healthier life, and world" (p. 146). For example, in this course, Regier mentions that students take an overnight bicycle trip, to a local retreat center, which helps them to build a connection to each other and to the natural world. On this trip, through activities like interviewing nature (e.g., a river, the wind) and cooking a meal by campfire, students are encouraged to learn from nature, build a reciprocal relationship with place, not simply "consume a nature experience" (p. 149). Rose and Cachelin (2014) write about place mapping, which involves layered thinking. This mapping exercise begins with students identifying their geographic location and how their experiences in this place are attached to "systems of production, consumption, disposal, and the social relationships that form and are formed by these processes" (p. 13).

O'Neil (2018) mentions using *Kitchen-Based Learning*, an intra-active pedagogy, in a course on sustainable food systems at University of Wisconsin. Opting to teach in a kitchen, rather than a classroom, she says that conversations are focused on food as: fundamental to everyday life; a method of therapy, helping one deal with life experiences; a connection between humans and nonhumans. She speaks about using sensory panel activities like having students describe food using their senses (taste, smell, touch) and sharing stories of

food, where food is associated with memories and present situations creating new meaning. O'Neil suggests that her food course entails students learning about food through preparing food, eating food, and connecting with food and using food and food places (kitchen, garden) to connect with others. This is in attempt to improve and create nurturing, considerate, and reparative relationships with each other and the natural environment (e.g., land, water, nonhumans).

But why environmental/sustainability education? A few reasons emerge from the literature, all associated with psychic rewards. Educators may feel they are doing a good thing by including environmental/sustainability education, thinking it may help inspire students to create a better world. Rose and Cachelin (2014) provide an argument for outdoor education. "Our task as outdoor educators" Rose and Cachelin state, "is to bring the faraway nearby and inspire students to engage in the myriad challenges we face as individuals, citizens, and as members of a global ecological community" (p. 7).

Some educators have commitments to environmental/sustainability education. It may make these educators feel good to include these commitments in their practice. Chowdhury (2015) interviews educators working at elementary schools, high schools, and outdoor education centers in Toronto, Ontario, who implement environmental education. She finds that these educators have "a deep passion for environmental education... a strong degree of personal connection to the environment and... concern for environmental issues" (p. 39). Paige (2017) states that student teachers took "an environmental pledge" (p. 285) "to reduce their ecological footprint" (p. 286) when they were at University of South Australia, and now, even though they have graduated, she finds that they are "still keeping their personal pledge" and some are even including a feature of this pledge within their work as new teachers (p. 296).

Inquiry Pedagogy

Inquiry is a constructivist approach. It is about having students construct meaning by actively participating in the teaching-learning process. The emphasis here is on students doing activities like dialoguing, exploring, questioning, synthesizing, and analyzing. This happens by the teacher shifting away from more traditional, teacher-led approaches and

towards more student-centered methods (see Cleverly, 2003; Eltanahy and Forawi, 2019). Postman and Weingartner (1969) insist that inquiry teaching helps develop "a new kind of person" (p. 218). This person is, Postman and Weingartner explain:

[A]n actively inquiring, flexible, creative, innovative, tolerant, liberal personality who can face uncertainty and ambiguity without disorientation, who can formulate viable new meanings to meet changes in the environment which threaten individual and mutual survival. (p. 218)

Below, I look to Postman and Weingartner to help me organize literature on inquiry pedagogy.

First, Postman and Weingartner state that the inquiry teacher seldomly advises students on what to think. Rather they place emphasis on students learning on their own, making their own discoveries (Postman and Weingartner, 1969). Murray (2019), a schoolteacher in southern Ontario, recalls taking part in professional development that situated "the educator not as knowledge keeper but rather as a keen observer and questioner who felt comfortable transferring the power of knowing over to students" ("Influential Shifts and Resources," para. 1). In Newfoundland and Labrador, Power and Goodnough (2019) speak about a professional learning program on STEM subjects, inquiry pedagogies, and action research. They find that elementary teachers who take part in this professional development "become much more student-centered in their pedagogical approaches... not simply providing the students with answers, but challenging them to find the answers themselves" (p. 288).

Second, the inquiry teacher asks questions to provoke student thinking (Postman and Weingartner, 1969). Ramnarain (2011) finds that science teachers in South Africa assist students with their scientific investigations by asking questions. He states that these questions aim to encourage students to examine, re-examine, rethink, make meaning of, and develop a clearer understanding of their inquiries. Kiss and Wang (2017) research Social Studies teachers at a primary school in Singapore. They that find the curriculum at this school, having been reformed to include Knowledge Building, an inquiry-based approach, positively influences these teachers to ask students higher-order questions that are divergent or open-ended. Hähkiöniemi (2017) investigates student teachers at high schools in Finland to consider the subtypes of probing questions they use during math lessons. They find that

these instructors use seven types of probing questions which invite students, in one way or another, to explain or elaborate on their thinking.

Third, Postman and Weingartner (1969) argue that the inquiry teacher prioritizes student interactions. For example, MacDonald (2016) interviews kindergarten teachers and students at a public elementary school in Fonthill, Ontario, about an outdoor inquiry-based classroom. Kindergarten teachers refer to this classroom as "unrestricted" and "guided by the students' interests" (p. 44) and students describe it as "informal and student-led" (p. 44), offering them the opportunity to make independent decisions about how they play. From observing a science teacher at a middle school in south-central Kentucky, Craft (2016) discovers that the teacher supports student discourse by implementing and facilitating various group activities, such as cooperative group work, peer teaching, laboratory tasks (demonstrations, writing lab reports), and roundtable discussions.

Fourth, the inquiry teacher has students investigate "a problem" using techniques like "defining, questioning, observing, classifying, generalizing, verifying, applying" (Postman and Weingartner, 1969, p. 36; original embed). In an era of environmental devastation and social crisis, a common trend in the literature is having students research social and environmental problems. Juntunen and Aksela (2013) give details about how high school science teachers in southern Finland implement a life-cycle project in their classrooms. This project calls for students working in groups and investigating the positives and drawbacks of a product from cradle-to-grave. Here, students use inquiry approaches. They work together to develop research questions, answer these questions, and outline and present their findings.

Teaching students to question is important in inquiry classrooms. Rothstein and Santana (2011) describe the Question Formulation Technique, something they developed from working with adult learners/communities throughout the United States. They explain that this questioning approach is designed to teach students how to use and create their own questions. They suggest that when individuals learn to question, it helps them to become self-directed learners and autonomous thinkers. It can help them advocate for themselves and take part in civic discourse/decisions that impact them. Rothstein and Santana provide

examples of teachers and researchers who have adopted their questioning strategy in practice. They suggest that a teacher at a Boston public school, for example, uses their questioning technique to help adult learners formulate/improve/prioritize their questions, while researchers at Yale University examine how this strategy helps students in adult literacy programs think more about adopting and implementing civic action initiatives.

Fifth, in inquiry learning environments, Postman and Weingartner (1969) insist that the teacher designs lessons with students in mind, trying to anticipate, answer for, and attend to their questions, problems, viewpoints, and so on. This tenet aligns with Schwartz-Bloom, Halpin and Reiter (2011). They mention a workshop where US high school science teachers learn how to teach biology and chemistry through pharmacology issues, like drug use and drug abuse, subject matter perceived to be appealing to secondary students.

But why inquiry? Literature implies that educators use inquiry methods because they believe they support student learning. When educators assume their teaching methods benefit students, this can result in psychic rewards. In Dubai, Eltanahy and Forawi (2019) survey science teachers at a private middle school about their thoughts on teaching science through inquiry. They find that teachers react positively to inquiry, believing it is "an effective learning approach that enhances students' learning" (p. 18). Similarly, Ramnarain and Hlatswayo (2018) survey and interview science teachers at rural high schools in Mpumalanga, South Africa. They find that these teachers are convinced that inquiry approaches "can help motivate learners" and "make some abstract science concepts more understandable to learners" (p. 5). Similarly, Maass, Swan and Aldorf (2017) interview math teachers across Europe who take part in a professional development course on inquiry-based learning. They uncover that after taking part in this PD, teachers perceive inquiry approaches to be "worthwhile" and "very useful" to increasing student participation, conceptual understanding, and interest in math (p. 10).

Critical Pedagogy

Darder, Baltodano and Torres (2009) state that critical pedagogy is based on emancipatory teaching practices. Critical educators attempt to breakdown and transform unequal power relations between teachers and students and develop "a politically emancipatory and

humanizing culture of participation, voice, and social action within the classroom" (p. 10). Darder et al. explain that critical pedagogy has roots in critical theory, connected to theorists like McLaren, Giroux, DuBois, Gramsci, Marcuse, and others including Freire. In Giroux's (2010) opinion, "Freire is one of the most important critical educators of the twentieth century" (p. 715).

In *Pedagogy of the Oppressed*, Freire (1970/2009) argues for education to be "the practice of freedom – as opposed to education as the practice of domination" (p. 81). For Freire, this requires rejecting what he calls "banking education" (p. 73) and adopting "problem-posing education" (p. 79). As specified by Freire, banking education involves "deposit-making" (p. 79), where a "bank-clerk educator" transfers information to students, treats students as passive (p. 76). This helps to maintain the status quo. Problem-posing educators, on the other hand, see students as having the ability to think, question, and act on their own – to transform their lives and world. Below, I refer to three central aspects of Freire's problem-posing education: praxis, conscientization, and dialogue.

For Freire (2009), *praxis* is about acting and reflecting. Freire states:

Liberation is a praxis: the action and reflection of men and women upon their world in order to transform it. (p. 79)

Grant and Hurd (2010) provide an account of action and reflection in a business management course at University of Waikato, New Zealand. They explain that this course begins with students taking action: drawing pictures, depicting how they imagine their careers or professional journeys. Grant and Hurd find that many students draw themselves walking down pathways, sailing waterways, scaling mountains, climbing ladders, putting together jigsaw puzzles. This imagery is rooted in ideas of "meritocracy and individual responsibility" (p. 6), embedded "in a narrow western work-oriented view of success and 'opportunity'" (p. 7). In attempt to disrupt this thinking, Grant and Hurd state that they encourage students to return to their drawings throughout the course and reflect critically, recognizing the impact of hegemony and privilege, among other things, on career trajectories.

Naiditch (2010) explains that he teaches reading using a praxis approach. He begins with an issue or problem students can connect with or relate to, based on their experiences in the world. This is followed by students reading about this problem, developing an informed understanding of it – and eventually taking social action. It is important "to encourage learners to reflect on what they read, create and discuss possible interpretations, and move toward some kind of action based on what is read" (p. 95).

Naiditch provides a detailed example of his critical reading approach. Naiditch states that when he worked as a reading teacher at a US high school, there was an incident involving a gay teen. This teenager publicly announced to the student body that he would be taking his boyfriend to senior prom. This prompted students in his class to want to learn and talk more about same-sex relationships. With the help of students in his class, Naiditch says that he developed a course unit dedicated to reading and studying about "the emotional, psychological, and social processes a teenager goes through in search of his or her sexual identity" (p. 103). Following this reading, students engaged in social actions like collecting funds to purchase gay themed books for the school library; having gay guest speakers talk to students about sexuality issues; and initiating a school club (Gay-Straight Alliance).

Reed, Saunders and Pfadenhauer-Simonds (2015) give another example of praxis. They write about a yearly food drive at a rural Vermont elementary school. The objective of this food drive, they explain, is for students to bring in canned and other foods to donate to the local food bank. The classroom that collects the most food wins a pizza party. However, one year, in a grade two/three class, a handful of students "quietly confided" to teachers that they did not have food to give to the food drive (p. 56; original embed). Reed et al. state that teachers felt that not being able to contribute made these children feel "isolated from the rest by a sense of shame" and that "none of the children in the room" fully grasped why people use food banks (p. 57; original embed).

To confront the issue of poverty with students, Reed et al. discuss how these teachers created a series of activities for students. Teachers began by having students read personal stories or first-hand accounts of people who use local food banks. Teachers then had students use these stories to create a hallway display, documenting how the local food bank

helps families in need. To explore "the wealth inequality that lay behind these stories", teachers had students work as a class to construct a graph, showing the drastic differences between the income of a typical Vermont family in comparison to the CEO of a big company (Reed et al., 2015, p. 58; original embed). In the end, students started questioning income discrepancies, deeming them unfair, and imagining how things might change. In the end, students took action to support the food drive, contacting a food wholesaler for food donations as well as donating produce from the school garden. "In this way," Reed et al. explain "every child in the class contributed substantially to the food collection effort, regardless of family circumstances" (p. 58; original embed).

Conscientization, Freire writes, represents an "awakening of critical consciousness" (Freire, 2009, p. 8). This is about exposing students to the harsh realities of the world, the inequalities. This is designed to provoke students to make change, intervene, transform oppressions, harms, social ills. The emphasis here is on transformation, not adaptation.

For example, Vargas (2019) writes about a teacher workshop in Santiago, Chile, that explores the usefulness of using Drama in Education (DiE), a variety of dramatic and theatrical techniques, to introduce critical pedagogy. Teachers who work with Vargas to plan and implement DiE lessons in their classrooms, talk about DiE strategies being useful, especially role-play, in enhancing "students' critical reflection by fostering empathy, questioning the taken-for-granted, free expression of ideas, and greater understanding of social issues" (p. 171).

Bartolomé (2010) analyzes graduate courses in linguistics at University of Massachusetts, geared towards preparing students to become English language teachers. In these courses, students learn about language development and literacy acquisition through a critical pedagogical lens. From exploring these courses (analyzing syllabi and having interviews with instructors), Bartolomé finds that a common thread among courses is naming and questioning English-only traditions in English language teaching. This is intended to encourage students to resist traditional ways of teaching English and to think up teaching alternatives.

Freire (2009) conceives *dialogue* as an egalitarian approach, where both students and teachers talk and share and otherwise "teach each other" and learn from each other (p. 80). Dialogue offers opportunities for building community in classrooms. For instance, Taylor and Hikida (2020) research an elementary teacher at a public school in central Texas. Through interviews and observations, they find that daily interactions this teacher has with students includes dialogue or discussion. This discussion is instigated by students, other times by the teacher. However, what is discussed centers around students' interests, knowledge, and feelings. Taylor and Hikida state, "positioning of the teacher as following the lead of her students seems an important aspect of the ways... [the teacher] engaged with students in dialogue" (p. 281).

At University of North Carolina, Greensboro, Alarcón (2016) states that she talks about privilege and racialization and other social justice topics with student teachers, believing this helps prepare students to teach "diverse populations" (p. 150). However, one semester, she explains that course evaluations showed students were opposed to hearing about social justice. This pushed her to change up her teaching. Instead of simply talking, she placed emphasis on doing. She says that she created opportunities for "open dialogue" between herself and students (p. 163), an attempt "to model the critical pedagogy... [she] expected... students to employ in their future classrooms" (p. 150).

Why critical pedagogy? Literature points to educators implementing critical pedagogy because they believe it makes a world of difference. Thinking they are doing something positive by using critical pedagogy can produce psychic rewards for educators. McElearney (2020) finds UK educators in the Lifelong Learning sector enact critical pedagogy partly because it enables "transformation in students and the desire for social justice" (p. 34). FitzSimmons, Suoranta and Uusiautti (2019) state that as professors and teachers at public universities in Finland they implement critical pedagogy because it gives "students the tools necessary... to be agents of social change" (p. 92). And in general, Sarroub and Quadros (2015) argue critical educators associate critical pedagogy with ideals like "students' stronger engagement with curriculum, empowerment through dialogue and involvement in their communities" (p. 254).

Conclusions: Psychic Rewards Pending

This chapter introduces literature on three divergent sustainability pedagogies that help to extend Lortie (2002) and Hargreaves and Shirley (2009): environmental/sustainability education, inquiry pedagogy, and critical pedagogy. Sustainability pedagogies are inherently political and ethical. Applying these pedagogies in practice demonstrates "the existence of an 'attitude' and an 'ethical framework' within which teachers... in schools, colleges and universities are having to work and think about what they do and who they are!" (see Ball, 2000, p. 2).

Educators may feel *good* about using sustainability pedagogies in their practice, thinking that they are making a positive difference in the world, supporting ideals like environmental accountability, democracy, and independent thinking. But if students do not respond well to these pedagogies, this thwarts an educator's enjoyment of teaching. Lortie (2002) is adamant that "psychic rewards of teachers fluctuate" (p. 103) in part due "to the ebb and flow of student response" (p. 211). This is clearly articulated by Reichstein (2018), who researches K-12 teachers in Vancouver, British Columbia. Reichstein states:

[P]ositive responses from students... factored strongly in educators' own feelings of satisfaction. In other words, when students were satisfied, teachers were as well. This finding is useful because it points to the need to attend closely to designing activities that students will enjoy and respond to. It also suggests a student behavioural component. When students reacted well to the experiences, educators did too (and conversely, unruly behaviour was associated with lower educator satisfaction). (p. 44)

Literature points to students responding well or positively to sustainability pedagogies. Let's begin with environmental/sustainability education. Boarin, Martinez-Molina and Juan-Ferruses (2020) survey architecture students at higher education institutions (University of Auckland, University of Texas at San Antonio, CEU Cardenal Herrera University) about whether they consider sustainability topics/concepts important to think about/apply in architecture programs. They find that nearly all students regard sustainability as valuable or extremely valuable to their learning. Sharma and Kelly (2014) interview students at Delta Business School, New Zealand, about how they perceive sustainability education in business and accounting courses. They find that "a majority of the interviewees appreciated

the importance of having sustainable development knowledge for the 'future'" (p. 137). Further support for environmental/sustainability education is evidenced by *Teach the Future* (2020), a campaign led by high school and university students in the UK that advances the notion that education at UK schools needs to be reformed for climate change.

The inquiry method is another sustainability pedagogy. At high schools in the United States, Thoron and Burleson (2014) research how students in agriscience courses respond to learning about soil science and other agricultural education through inquiry. They discover that these students prefer inquiry and are even keen on enrolling in additional courses that adopt inquiry methods. Similarly, Eltanahy and Forawi (2019) survey students at a private middle school in Dubai about how they perceive inquiry activities during science classes. They find that most students are partial to inquiry over more traditional methods.

As for critical pedagogy, FitzSimmons et al. (2019) gather feedback from Social Science and Education students at University of Lapland, Finland about their experiences taking a course that includes critical pedagogy. Feedback implies students are fond of critical pedagogical approaches with "a strong desire for more teacher/peer contact and critical discussions in the learning process" (p. 91). Acharya (2016) survey graduate students studying English Language Teaching at Tribhuvan University in Nepal about their perceptions of critical pedagogy. They find that students mainly like features of critical pedagogy like dialogue and reflection.

However, sustainability pedagogies are also risky. There is always the possibility of students resisting or responding negatively to these pedagogies, which impedes an educator's psychic rewards. Take critical pedagogy for instance. Jeyaraj (2020) explores how undergraduate students in business, accounting, and finance at a private higher education institution in Malaysia perceive critical pedagogical approaches, such as learning about social justice topics in undergraduate courses. She finds some student resistance, partly due to students being reluctant to participate in political, religious, and racial conversations. Springett (2010) talks about how, at University of Hong Kong and Massey University, she includes sustainability discourse in business courses and teaches these

courses from a critical perspective. She states, "My experience is that such perspectives are not introduced to students without some resistance on their part" (p. 80).

Students may also resist inquiry pedagogies. While student-to-student interactions are central to inquiry processes (Postman and Weingartner, 1969), students may be hesitant or reluctant to interact with their peers. Stover and Holland (2018) find that nursing students, at a post-secondary institution in midwestern United States, initially have an extreme amount of resistance to group work. Other literature points to similar findings. Isaac (2012) talks about teaching English literature courses at Elon University, North Carolina, and surveying students in these courses about their perceptions of group work. Results indicate that these students strongly object to working in groups, which is largely due to finding group work annoying, disliking having to depend on classmates.

Student resistance is also linked to environmental/sustainability education. Wilson and von der Heidt (2013) interview business teachers at Southern Cross University, Australia, about obstacles or difficulties they encounter when teaching sustainability principles in business courses. One problem that teachers mention is opposition students and/or fellow teachers have to sustainability in course content, many times communicated as "a lack of support and interest" in sustainability (p. 139). In western Oregon, Crayne (2015) interviews science teachers at public middle schools about their experiences educating students on climate change. She finds that these teachers encounter problems teaching climate change due to students being skeptical, indifferent, and lacking knowledge of climate change.

Just as teachers have conservative tendencies and may oppose change in teaching (see Hamlaoui, 2021), the same is true of students. Sustainability pedagogies are designed to subtly bend or break teaching traditions and students may resist this change. Foucault claims that resistance is a form of power (see Darder et al., 2009; Thorpe, 2012). But is student resistance a productive power? Darder et al. (2009) explain that student resistance can be healthy and productive and otherwise *good* or it can be the exact opposite – harmful and damaging. "The principle of resistance" Darder et al. argue, "seeks to uncover the degree to which student oppositional behavior is associated with their need to struggle against elements of dehumanization or are simply tied to the perpetuation of their own

oppression" (p. 12). Also, there is always the possibility that student resistance may not actually be student resistance. Hargreaves (1998) states, "Teachers frequently misconstrue their students' exuberance for hostility, bored compliance for studious commitment, embarrassment for stubbornness and silent respect for sullen resistance" (p. 839).

Over the last few chapters, my focus has been on literature that exists on teaching cultures. Now I attempt to add to this literature. In the remaining chapters, I describe a study I conducted on the teaching cultures of TAs. I begin by discussing my research methods and methodology.

Chapter 5: A Research Roadmap

In this chapter, I provide an overview of the methodology and methods I use in my research on the teaching cultures of TAs. I start by outlining my research questions and research setting, followed by detailing sampling techniques, tools of data capture, and data analysis procedures. Heeding the advice of Rawson (2017), I also include research documents and exemplars to help ensure transparency and credibility of my research. This study received ethical clearance from the Office of Research Ethics at York University (STU 2017 – 021).

Research Questions

Having worked as a TA at York University, I am interested in knowing more about the teaching cultures of TAs in southern Ontario. My research is structured around two questions:

- 1. What teaching activities do graduate students do as teaching assistants (at a university in southern Ontario), how and why? What "psychic rewards" underpin this teaching?
- 2. When, where, how and to what extent are TAs affected by their broader political and ethical commitments when teaching? How might "psychic rewards" be gained by sustaining these commitments?

Case University Profile

I recruited participants from a public university in southern Ontario. This university is equipped with gymnasiums, sports arenas, libraries, takeout restaurants, student dormitories, and on-campus museums. It has globally recognized academic programs and international partnerships. There are more than 500 TAs on campus. A union on campus represents TAs, however most of the teaching staff is unionized. There are a range of undergraduate and graduate level programs offered across a range of faculties like Science, Education, and Fine Arts. Courses are presented in online, blended, and traditional in-person formats. This university has contributed considerably to the sustainability movement by implementing "green" initiatives on campus (e.g., energy monitoring, waste management programs, sustainable transportation) and courses and programs in environmental and sustainability topics. I select this university, as a research setting, because of its large TA population and dedication to environmentalism and sustainability.

Inclusion Criteria

I recruit current graduate students (Master's and PhD students) at a case university in southern Ontario. I am asking that graduate students have some (recent) experience working as TAs at the case university, within any course, regardless of the academic discipline, for any length of time. Also, it is important that these graduate students broadly have environmental/sustainability education commitments. In my research, I explore the extent to which sustainability cultures (in terms of social equity, social prosperity, environmental conservation) shape/affect teaching cultures of TAs.

Research Schedule

My study is divided into two research phases:

- The first research phase (early March 2017) consists of me conducting pilot interviews [N = 2] with graduate students at York University.
- The second research phase (late March to early May 2017) involves me conducting interviews [N = 17] with graduate students at a single case university in southern Ontario. I also refer to this phase as the full study research.

Research Sampling Methods

To recruit participants, I use three sampling techniques: convenience, purposive, and snowball. Henry (1990) asserts that *convenience sampling* refers to "a group of individuals who are readily available to participate in a study" (p. 18). In the first research phase, I choose the convenient option. I interview graduate students at York University who are friends of mine (see Appendix B).

I use *purposive sampling* in my second research phase. Moule and Goodman (2009) state, "purposive sampling aims to sample a group of people or events with specific characteristics or set of experiences" (p. 274). I knew it would be impossible to recruit participants who fit my inclusion criteria by wandering the hallways of the case university. So, I rely on emailing. I draft an e-mail about my upcoming research study, indicate I am looking for participants. I proceed by reaching out to groups at the case university (i.e.,

student groups, faculty union, academic programs), asking them to forward this e-mail to graduate students on their listservs (see Appendix C). These groups (kindly) agree to help me, and e-mail becomes the primary way in which I recruit participants. Seidman (2013) writes, "E-mail has become a prominent component of the contact process" (p. 51). Other than emailing, I attend a union meeting, a study group for graduate students, a graduate student conference, and a public lecture at the case university to discuss my upcoming research and encourage participation.

I also adopt *snowball sampling*, where I rely on others spreading word of my research. "*Snowball* sampling occurs when the research benefits from one participant suggesting or introducing another participant to the researcher" (Harrell and Bradley, 2009, p. 32; original embed). I end interviews by asking participants to spread word of my study to other graduate students (see Appendix E).

Background of Participants

I invite all participants in my full study to complete a background questionnaire (see Appendix D). This is for a few reasons: for me to know more about participants and to ensure participants fit my inclusion criteria. This questionnaire is designed to gather information about participants, their age, gender, education, race, dis/ability, sexuality, TA work experience, and commitments to environmental/sustainability education.

Results from this survey are as follows: Out of 17 participants, 4 identify as Master's students, 13 PhD students. Gender distribution is almost evenly divided: 7 men and 9 women (1 undisclosed). Racially, participants identify as: 9 White; 1 Pakistani/Indian; 1 Black; 1 Latinx; 1 Iranian; 1 Persian; 1 Punjabi/Tamil; 1 Mixed (race) (1 undisclosed). In terms of economic status: 10 are from working-class; 4 middle-class; 1 between working-class and middle-class (2 undisclosed). Only 2 participants report having a dis/ability (1 undisclosed). When it comes to sexual orientation: 12 identify as heterosexual; 2 bisexual; 1 bi-curious; 1 fluid (1 undisclosed). Participants are between the ages of 24 and 48 (1 undisclosed).

Participants have between 4 and 40 months of TA work experience, with an average of 18.5 months. Participants have experience working in the following courses: 16 traditional inperson (or face-to-face); 3 online; 4 blended. Participants reveal having TA work experience within a range of academic disciplines: 10 Environmental Studies; 5 Liberal Arts; 5 Education; 1 Science; 1 Engineering. All participants identify with having broad commitments to environmental/sustainability education. I conduct this research in late March and early May 2017. Out of 17 participants, 15 participants identify as currently working as TAs or having recently completed a teaching assistantship in March, April or May 2017. Appendix I includes a profile on each participant.

As for me, the lead researcher in this study, I am a PhD student in Education at York University. I have six years (48 months) of experience working as a TA at YorkU, in the Faculty of Liberal Arts and Professional Studies. I am a White female in my 30s, heterosexual, without a disability, and working-class. I acknowledge my White privilege, heterosexual privilege, and able-bodied privilege. I have broad environmental/sustainability commitments.

Nature of the Research

As specified on the consent form for this research (see Appendix A), participation in my study is completely voluntary. All participants who take part do so willingly and by choice. I fully ensure confidentiality by assigning each participant a pseudonym. I also remove all references to course titles, organizations, higher education institutions, and so on, from interview transcripts. As a small token of gratitude, all participants, in both my first and second research phase, receive a \$20 gift card of their choice for their participation in my study.

Tools of Data Capture

Interviewing is my method of choice. Interviewing is a qualitative research method, what Butin (2010) considers, "a seemingly concrete and simple means for collecting key data from relevant individuals in an effective and controlled manner" (pp. 96–97). In this research, I conduct one-time, individual, in-depth, semi-structured interviews with graduate

students who have (recently) worked as TAs at the case university in southern Ontario. The purpose of interviewing these graduate students is to find out what they do as TAs, how and why. I want to give voice to the TA.

Interviewing is not new to me. As a Master's student, I conducted a research project where I interviewed a high school teacher about their teaching practices and their interest in including sustainability in their teaching. Since I planned on interviewing again, this time as a PhD student, I turned to scholarly books (e.g., Seidman, 2013), articles (e.g., Fontana and Frey, 1994; Leech, 2002), and training manuals (e.g., Harrell and Bradley, 2009) to reacquaint myself with interview procedures. However, it was conducting pilot interviews, in my first research phase, that allowed me to practice interviewing (again).

In my second research phase, I conduct most interviews, in-person, in a conference room at the case university. Participants inform me that this room is a convenient place to meet for interviews. I am also in favor of using this room, considering it offers "visual and auditory privacy" (see Gorden, 1992, p. 49). I held pilot interviews in a conference room. So, I am accustomed to conducting interviews in this type of environment. Since some participants are unable to meet me in-person, I conduct a few interviews over the phone. While I conduct phone interviews from the comfort of my home, interviewing over the phone comes with its own set of challenges including the lack of visual cues. "In phone interviews," Rubin and Rubin (1995) state, "all sorts of conversational cues are missing, making for difficult interviewing under the best of circumstances" (p. 141).

Consistent with semi-structured interviewing (see Blee and Taylor, 2002), I use an interview guide in my research (see Appendix E). My interview guide includes a set of questions (scripted, open-ended, and probing questions), inspired by my experiences working as a TA. This interview guide helps me gather "a very consistent source of reliable data that can be compared across interviews" (see Leech, 2002, p. 665). Topics on this interview guide include:

- 1. Teaching duties and responsibilities TAs perform;
- 2. Teaching approaches TAs are most and least comfortable with;

- 3. TAs' struggles; and
- 4. How a TA's broad political, ideological commitments, specifically to environmental/sustainability education, influence their teaching.

Pilot interviews give me an opportunity to test my interview guide and tweak any "unanticipated shortcomings such as problems associated with the ordering or structure of the questions" (see Seebaluck and Seegum, 2013, p. 453). One problem I encounter during pilot interviews relates to how I word or phrase interview questions. For example, I ask questions about "TA practices" (e.g., Can you tell me about your TA practices? What practices are you most and least comfortable with?). But I find participants often struggle with understanding what I mean by *practices*, asking me to clarify my questioning. When I tell them I am interested in their teaching methods or approaches, they seem comfortable and can (easily) respond. As a result, I modify my interview guide in my second research phase, emphasizing "teaching approaches" and "teaching methods" over "teaching practices".

I adopt what Leech (2002) describes as an ethnographic interviewing style where the interviewer "tries to enter into the world of the respondent by appearing to know very little" (p. 665). Let me elaborate. While I have worked as a TA, I do not disclose this to participants. Rather I try to act as if everything they are telling me is new to me. This is because, like Leech, "I don't want someone to leave something out [of an interview] because they assume I already knew it" (p. 666).

During interviews, I ask participants probing questions to learn more about their TA work experiences. King and Horrocks (2010) state that probing questions are "follow-up questions that encourage a participant to expand on an initial answer in order to obtain more depth in their response" (p. 40). I ask probing questions until I believe I attain "saturation, a full understanding of the participant's perspective" (see Legard, Keegan and Ward, 2005, p. 152). This helps me increase the reliability and validity of interviewing as a method.

I ask two types of probing questions during interviews: scripted and spontaneous probes. Scripted probes are follow-up questions that I prepare in advance and include them on my interview protocol (see d'Ardenne, 2015). This includes me asking a lot of *why* questions

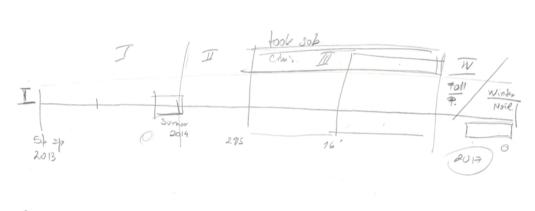
(e.g., Why did you use these teaching approaches?). Spontaneous probes, Willis (1994) suggests, are probes created by researchers "during the course of the interview, based on either the subject's verbal report or non-verbal behavior" (p. 12). I ask three types of spontaneous probes during interviews: elaboration, clarification, and silent probes.

Patton (1987) explains that *elaboration probes* prompt interviewees "to keep talking" (p. 125). I mainly use elaboration probes when interviewees are brief in their responses (e.g., Can you tell me more about your TA duties? Can you elaborate on how you lead tutorials?).

Patton states that *clarification probes* help to clear things up for researchers, to get more from interviewees – "more information, or a restatement of the answer, or more context" (Patton, 1987, p. 125). I consistently ask interviewees for clarification, ensuring that I walk away from interviews having a good grasp of what is discussed. I may ask something like: Can you tell me again why you struggle with that teaching approach?

In terms of *silent probes*, silence is key. Gorden (1992) states, "remaining silent at the end of a respondent's sentence, the interviewer in effect invites the respondent to continue talking without exercising any control over the direction of the conversation" (p. 149). I remain silent during interviews when I feel interviewees have something to say but need more time to think before responding.

Figure 1.0 Timeline of TA History



Same clas.

^{- 4} years

⁻ Environmental studies

During pilot interviews, participants talk about working with one course instructor or many instructors; working in the same course for years or different ones; and teaching in one or more academic disciplines. I quickly learn that participants have a lot of (different) TA work experiences and I am unable to keep these experiences separate or distinct in my mind. During my second research phase, I rectify this issue by beginning interviews with an activity: asking participants to create a timeline of their TA work history (see Appendix F).

Figure 1.1 Line-by-Line Open Coding: What Work Do TAs Perform?

Interview Excerpt	Line-by-Line Codes
1 MELISSA 2 Tell me the typical duties and responsibilities	
3 you performed, as a TA, in your most recent	
4 teaching assistantship? 5 CHARLES	
6 Like so, ya, I am TA-ing a course right now	
7 on Natural Resource Management. My	
8 everyday duties or my week-to-week:	8 Work schedule
9 attending the lectures, doing the readings for	9 Weekly TA duties
10 the course and I lead two, one-hour tutorials	10 Weekly TA duties
11 every week. Generally in the tutorials	11 Tutorial structure
12 students are giving fifteen minute	12 Activities during tutorials
13 presentations. I guess they are only 50-	13 Time schedules during tutorials
14 minute tutorials, not an hour long. There is a	14 Limited/restricted time for tutorials
15 generally back-to-back fifteen minute	15 Curriculum activities
16 presentations and then I fill up the rest of the	16 How tutorial time spent
17 time either discussing the readings or going	17 Activities during tutorials
18 over other materials for the course and then	18 Activities during tutorials
19 I do all the marking for the course. They	19 TA as gatekeeper (grader)
20 have the presentations that they give every	20 Activities during tutorials
21 week that I have to mark. They had a	21 TA as gatekeeper (grader)
22 written assignment due a couple weeks	22 Curriculum activities
23 back and I had to grade that and the mid-	23 TA as gatekeeper (grader)
24 term happened the start of March. And then	24 TA as gatekeeper (grader)
25 the final exam is coming up. I mean that's	25 TA as gatekeeper (grader)
26 generally the life.	26 TA as tutorial leader (in-person)

This timeline is useful. For me, it is something to refer to during interviews and later, when reviewing interview transcripts. For interviewees, it serves as a way for them to verbalize and visualize their TA work experiences. This is significant, d'Ardenne (2015) claims, since "not all participants may be comfortable thinking aloud" and "even participants who are naturally good at thinking aloud may not verbalise all of their thought processes" (p. 114).

Referring to Bagnoli (2009), timelines are a visual method used in interviewing to encourage participants to reflect on their lived realities. See Figure 1.0 for an example of a timeline created by a participant in my research.

Each participant signed the consent for this research, agreeing to be interviewed and audio recorded (see Appendix A). I audio record each interview using a small, handheld, Sony ICD-PX333 digital voice recorder. Interviews last between 30 and 100 minutes. Ultimately, the length of the interview depends on how much participants are willing to share with me about their TA work experiences and the number of probing questions I ask during interviews.

To transcribe interviews, I use a word processor (*Pages*) and transcription software (*Express Scribe*). Express Scribe offers variable speed playback, enabling me to speed up, slow down, fast-forward or rewind an audio recording of an interview (NCH Software, n.d.). This playback function makes the transcription process easy, allowing me to listen to an audio recording of an interview at a speed in which I can comfortably type it up (verbatim), ensuring the accuracy of the transcript. It takes me between 1 to 5 hours to transcribe a single interview. I only transcribe interviews I collect in my second research phase since these interviews are the only ones I analyze in my present study. Refer to Appendix H for a sample excerpt of an interview transcript.

Before, during and after interviews I write field notes about the research process. I find that notes I write during interviews are the most useful. This is because this note taking helps me to remain attentive, to listen closely to what participants have to say, to think about questions I would like to ask before concluding interviews. My field note template is included in Appendix G. I practice writing field notes during pilot interviews and continue this practice in my second research phase.

Data Analysis

In this research, I draw on principles of grounded theory (but depart from inductivist methods in particular ways). I begin with *open coding*, a traditional grounded theory technique. I start with line-by-line open coding, what Glaser (1978) refers to as a researcher

"constantly coding each sentence" (p. 57). Figure 1.1 is an example of how I code my interview data line-by-line. To move beyond analyzing lines of text, I start chunking or begin "fracturing... data into analytic pieces which can then be raised to conceptual level" (p. 56). In Figure 1.2, I include an example of how I chunk the data.

When coding the data, I also utilize another traditional grounded theory approach: the constant comparative method. Glaser and Strauss (2006) explain that comparative analysis helps researchers continuously compare the data for "many similarities and differences" (p. 36). They state, "while coding an incident for a category, compare it with the previous incidents in the same and different groups coded in the same category" (p. 106; original embed). While participants have working experience in different subject areas, I really did not sense a difference between participants who worked in different courses. This is because in my research I look for patterns across interviews. I constantly compare all seventeen interviews for general patterns, similarities and differences emerging throughout the data.

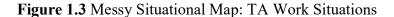
From using methods like open coding and constant comparison, I get to know the data, develop a closeness to it. I read all the interview data (more than once). I code, re-code, and compare this data continuously. Eventually I can recall (parts of) interview conversations in detail. This allows me to take my analysis to the next level: situational analysis.

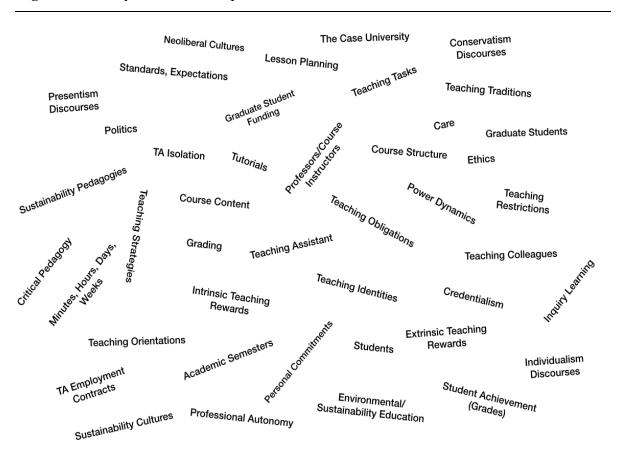
Figure 1.2 Chunking Interview Data: Why do TAs complete teaching tasks?

Question	Chunking Interview Data	Code	Code Definition	Category
Why did you perform these duties and responsibilities?	"because I kind of enjoy doing it" "I actually kind of enjoy it" "I have always enjoyed teaching"	Teaching Enjoyment	Participants complete teaching tasks because they enjoy doing them, accumulate intrinsic job satisfaction from their teaching work.	Endemic Presentism This type of Presentism is described by Hargreaves and Shirley (2009, p. 2508).

Since grounded theory is traditionally "abstract of time, place and people" (Glaser, 2004, "Introduction," para. 4), I turn to Clarke (2003) and her "situational maps and analyses as innovative supplements to the basic social process analyses characteristic of traditional

grounded theory" (p. 553; original embed). Clarke (2005) advises situational mapping as an analytical activity after coding (some) and becoming acquainted with the data. Clarke asserts that situational mapping entails thinking about "all the analytically pertinent human and nonhuman, material, and symbolic/discursive elements of a particular situation as framed by those in it and by the analyst" (p. 87; original embed).





In my research, I create a messy situational map and include elements on this map that I consider important to TA work situations. For a copy of this map, see Figure 1.3. In line with Clarke (2005), after creating my messy situational map, I produce a series of questions to consider relations between map elements. This helps me create new, complex, and dynamic ways of comparing the data. Some of these questions include: How are TA contracts tied to extrinsic teaching rewards? What are the power dynamics between TAs and students? How is grading and student grades (academic achievement) broadly

connected to credentialism? What is the relationship between ethics and politics and tutorials? How is lesson planning linked to minutes, hours, days, and weeks?

To respond to questions that emerge from situational maps, Clarke (2005) advises memoing. Memoing is a traditional grounded theory strategy. I memo to figure out what is going on in the data. I write memos to consider the relationship between professional autonomy, teaching assistants and teaching identities. I memo about how course content and grading is associated with teaching restrictions. I think about how teaching practices discussed by TAs during interviews are related to the teaching orientations of Presentism, Conservatism, and Individualism discussed by Lortie, the theoretical framework for this research. This gives me an "opportunity to confront just how adequate... [this] framework is, and where it needs to be revised" (see Miles and Huberman, 1994, p. 74). See Figure 1.4 for an example of a memo I create to discuss the relationship between teaching strategies and conservative discourses.

Figure 1.4 Memoing Example: Teaching Strategies and Conservatism in Teaching

Lortie (2002) writes about Conservatism as being about how "teachers... are heavily influenced by past experience" (p. 208). Nellie talks about doing as other teachers have done, mimicking or imitating how "past teachers" taught her. She states, "All the places where I have been educated – all the university that I did my undergrad, the college that I did my teacher training plus here at the case university – all of those institutions influenced the way I think, the way I behave, and the way the I carried out my duties as an educator myself". This emphasizes how Nellie sustains teaching traditions, maintaining continuity between her past as a student and her present as a TA. This points to, what Lortie speaks about as, "the drift is toward continuity rather than change" in teaching (p. 210).

Mary, on the other hand, tells me that she comes from "a critical pedagogical background" which has "really shaped" her approach to teaching. The word "background" conjures up ideas of Conservatism (past experience). But does this align with Lortie's view of Conservatism? For Lortie, Conservatism in teaching is all about sustaining "centuries of tradition" (Lortie, 2002, p. 230). Is critical pedagogy part of this tradition? While critical pedagogy has become a tradition in some academic circles, it is by no means a traditional method of instruction. Rather, critical pedagogy is more progressive and contemporary, a political and ethical teaching approach. By Mary insisting that her teaching is guided by critical pedagogues like "Freire" and "Maxine Greene", this shows how Mary diverges from Lortie, breaking from teaching traditions.

My research is an example of research as inquiry (e.g., Burke and Soffa, 2018). I code and recode the data on a continuous loop. This iterative process is intended to ensure that my

research findings are reliable (see also Yin, 2018). I continue to code until I am confident that I have found the ideas that appear repeatedly and consistently across transcripts and no further data is found to create a new category. This aligns with the traditional grounded theory approach known as theoretical saturation. Glaser and Strauss (2006) state, "Saturation means that no additional data are being found... [to] develop properties of the category" (p. 61; original embed).

Ultimately, I compile all categories that emerge across interviews and arrange them in a didactic model, what I term the *Didactic Model for Teaching* (see Figure 1.5, in Chapter Eight). This model helps to verify, extend, and refute how Lortie (2002) and followers (i.e., Hargreaves and Shirley, 2009) depict teaching cultures. In other words, this model verifies and generates theory about teaching cultures. Glaser and Strauss (2006) explain that grounded theory is about "the discovery of theory from data" (p. 1), but certainly "no conflict between verifying and generating theory is logically necessary during the course of any given research" (p. 2). In line with grounded theory, I recognize that categories included in the model must have what Glaser and Strauss refer to as "fit" (p. 3). This means that "categories must be readily (not forcibly) applicable to and indicated by the data under study" for the finished research product to "fit the situation being researched" (p. 3).

Conclusions: I Have Biases

My research describes a classic insider perspective on TAs – TAs researching TAs, in many respects. I worked as a TA and this work experience affects how I research the teaching cultures of TAs (i.e., from the questions I ask during interviews to how I analyze the data). I cannot erase my TA experiences from my life or take off my "TA glasses" or "TA hat". My past as a TA is part of me and influences the research process. As Clarke (2005) states, "Not only are there no tabula rasa researchers, but also we usually come with a lot of baggage" (p. 85). Postman and Weingartner (1969) maintain, "We see things not as 'they' are, but as we are" (p. 95). Keeping this in mind, in the next chapter I start to unpack my research findings.

Chapter 6: Going Through the Data or Down the Rabbit-Hole

The rabbit-hole went straight on like a tunnel for some way, and then dipped suddenly down, so suddenly that Alice had not a moment to think about stopping herself before she found herself falling down what seemed to be a very deep well.

– Lewis Carroll, *Alice's Adventures in Wonderland*

Looking at the interview data, I feel like Alice in Wonderland, falling fast, tumbling down a rabbit-hole. While I have worked as a TA, I am on shaky ground. Something is different. Conversations I have with graduate students provide me with new perspectives and understandings about what it means to be a TA. These conversations are only brief, but their impact on me has lasted years. Since these conversations were audio-recorded, the transcripts have become a souvenir (of sorts) or reminder of everything that was said. The broader significance of these transcripts I intend to explore in this chapter.

The central empirical questions in this chapter are: What teaching activities do graduate students do as teaching assistants (at a university in southern Ontario), how and why? What "psychic rewards" underpin this teaching?

This chapter, and the next, is supported by interview data and organized as a didactic model. In this chapter, I begin unpacking my interview data by considering three teaching orientations discussed by Lortie (2002) and followers (i.e., Hargreaves and Shirley, 2009): *Presentism (Endemic, Adaptive, Addictive), Conservatism*, and *Individualism*. In this chapter, I also write about variations, and extensions, of these orientations, what I term: *Quondam Conservatism, Managed Individualism*, and *Professional Collegiality*. All these orientations are underpinned by psychic rewards.

Teaching orientations discussed in this chapter are "performative". They guide TAs to accomplish teaching tasks. What is valued here is productivity, efficiency, self-accountability in teaching. While my research focuses on teaching cultures, with specific attention paid to the teaching cultures of TAs, the didactic model is not exclusive to teaching assistants but also relevant to other educators including schoolteachers.

Presentism

This chapter begins with Presentism. In this section, I consider Lortie's Presentism and how it has been reflected on and revised by Hargreaves and Shirley, who distinguish between *Endemic*, *Adaptive*, and *Addictive Presentisms*.

As the idiom goes, "There is no time like the present". Presentism is about the daily lives of teachers. Lortie (2002) states that in everyday classrooms and school settings teachers complete multiple and distinct short-term activities. This includes tasks like lesson planning, grading student work, tutoring, and so on. This is not by random or accident. Lortie says that "breaking teaching up into short units (e.g., lesson plans, study units)" is "related to the special nature of teaching tasks" (pp. 211-212). As Hargreaves and Shirley (2009) argue, "Lortie's explanation of presentism is that it is an ingrained or *endemic* feature of teaching" (p. 2508; original embed).

When analyzing interview data, I find numerous examples of Presentism. Interviewees (17) regularly talk about their teaching as a series of short, discrete teaching tasks or activities. I identify these teaching activities as short-term because interviewees speak about performing them over a short period of time (e.g., hours, days, weeks). Some examples of teaching tasks interviewees describe completing over an academic term (over a period of 3 to 6 months):

Isaiah recalls performing three main teaching activities: attending course lectures, holding tutorials, and grading student work. He lists his duties below:

So, I attended weekly three-hour long lectures and then gave two separate, once a week tutorials. And in addition, I marked the mid-term essays and final exams for the students within my tutorial.

Charles speaks about going to course lectures, reading course material, leading tutorials, grading student assignments, holding office hours, and replying to students' emails. He gives me an account of his work:

My everyday duties or my week-to-week... attending the lectures, doing the readings for the course and I lead two, one-hour tutorials every week. [...] They had a written assignment due a couple weeks back and I had to grade that [...] Tutorials I lead are kind of where I most actively perform my duties and then I have office

hours on Monday [...] I think preforming a lot of the duties is responding to peoples' questions and comments on e-mail.

Nellie is similar, saying she attends course lectures, leads tutorials, grades student work, supervises exams, and replies to work-related emails. She comments:

Okay, I attend lectures and before doing the tutorials. I mark assignments, submit grades to the prof, I record grades on final sheet. I invigilate mid-term and final exams. I respond to emails both from students and the prof. Basically that was it.

I understand Isaiah, Charles, and Nellie to have presentist tendencies. These interviewees fill me in on their typical teaching tasks over an academic semester: "attending the lectures", "doing the tutorials", "mark assignments", "have office hours", "respond to emails", "invigilate mid-term and final exams", and so on. This emphasizes how teaching activities are not designed to be performed over the long-term but rather over a short timeframe.

Interviewees identify as being short-term thinkers, absorbed in what they must do in the immediate: grading, going to lectures, leading tutorials, holding office hours, among other activities. But why? During interviews, I ask interviewees why they do many short, discrete teaching tasks. There are two popular responses:

First, interviewees imply that teaching activities are connected to extrinsic (monetary) rewards and therefore, an obligation. Interviewees (17) often admit to signing TA employment contracts, which binds them to doing certain teaching tasks in exchange for graduate student funding. Some examples from interviews:

Charles insists that teaching is "tied to funding" he receives as a graduate student. He notes:

I mean where TA-ing is tied to funding in the program and is part of the deal that you are given. I am doing what I see myself needing to do.

Mary agrees, saying that she teaches out of contractual obligation, knowing that doing teaching activities gives her access to graduate student funding. She declares:

I mean, I understand TAs are funded by the University and so we're contractually obligated to do the things that are in the contract for the course.

Almanzo introduces similar ideas. He speaks about being "contractually obligated" to do teaching tasks in order "to maintain funding" as a graduate student. He discloses:

Well, at a very base level, I'm contractually obligated to [...] through my TA assignment and my funding offer to maintain funding and to continue to be funded by the University.

It appears Charles, Mary, and Almanzo also have presentist leanings. They describe being "contractually obligated" to do teaching activities, suggesting "part of the deal" they are given as graduate students involves them doing TA work in exchange for graduate student "funding". This stresses how extrinsic rewards (monetary assets) motivate these participants to do teaching activities opposed to more psychic or intrinsic rewards.

Employment contracts for TAs differ compared to teacher contracts. Teachers usually have continuing contracts and can work in classrooms for an (endless) number of years (e.g., two, five, ten or twenty or more years). There is more-or-less a permanence or stability associated with being a teacher. The emphasis here is on, what Lortie (2002) refers to as, the "career of teachers" (p. 211). Working as a TA, on the other hand, is not a career (in the traditional sense). Only graduate students are eligible to work as TAs. Since graduate students must eventually graduate or leave graduate programs, being a TA is not a permanent position. This accentuates the fragility of TA employment and associated graduate student funding.

Second, interviewees indicate that they get psychic rewards from doing teaching activities. Interviewees (12) regularly let me know that they genuinely enjoy accomplishing teaching tasks. This is in line with Lortie (2002), who states: "Teachers are more likely to experience reward if they can punctuate their work, concentrating on short-range outcomes as a source of gratification" (p. 212). Some examples, selected from interviews:

Albert says that he does teaching tasks because he enjoys teaching. He states:

Well, so to be completely frank, it started off with the TA-ship being offered to me and it being, you know, a paid gig during school. So, it was great. But I have always enjoyed teaching.

Harriet also says that she does teaching activities because she derives enjoyment from doing this work, commenting:

So, really it is part of my contract. I have to do it, that's what I get paid for, but mostly because it's really a learning process and I actually kind of enjoy it.

In a similar vein, Isaiah insists that doing teaching tasks can be enjoyable. He says:

I have a feeling I put in more hours than I am allotted under my contract, which I don't really mind because I kind of enjoy doing it.

I interpret Albert, Harriet, and Isaiah's comments to mean that educators gain psychic rewards from doing teaching activities. They comment that they "always enjoyed" and "kind of enjoy" teaching. Enjoyment is a present state of being. In other words, enjoyment is short-term and cannot exist over the long-term.

However, Hargreaves and Shirley (2009) talk about how Presentism has also evolved, becoming something called *Adaptive Presentism*. In response to "large-scale, fast-paced, and high-stakes reform initiatives" (p. 2509), educators have adopted "short-term, calculated, and conscious adaptation or coping" strategies (p. 2522). What is interesting here, Hargreaves and Shirley note, is how coping strategies "can easily turn into an ingrained and accepted culture and discourse of action and change" (p. 2522). During interviews, interviewees (17) frequently tell me that they aim to complete teaching tasks in ways that quickly raise student grades on course tests and assignments. Raising grades, and associated student achievement, is a popular objective of educational reform. Some interview data:

Lars speaks about using tutorial sessions to review course material with students and prepare them for exams. He says:

I also held additional sort of office hours on two separate occasions. And I also hosted an extra tutorial session to review for the final exam.

Charles says that he lectures on course readings during tutorials because he wants students to have knowledge of course material when "doing their assignments or studying". He states:

[T]he exams are generally focused on the core concepts [...] So, it's trying to pick out what are the core messages are [...] kind of just my judgement what feels important and throwing that out in a way that hopefully gets the students to be thinking about it... or considering it... when they are later doing their assignments or studying.

Albert tells me that each week he spends time preparing students for course assignments and exams. He lets me know:

I think, ya, the approach I was most comfortable with was being able to give the students... a breakdown on a weekly basis of whatever they needed to know for their exams or their essays.

Lars, Charles, and Albert disclose their present teaching goal: raising student scores. They inform me that they host "an extra tutorial session to review for the final exam"; offer "a breakdown on a weekly basis of whatever they needed to know for their exams or their essays"; and lecture on course readings, believing this helps students with "doing their assignments or studying". Here, interviewees discuss using teaching strategies with the aim of improving students' grades (and affiliated student achievement). This is similar to the RATL project, a school reform discussed by Hargreaves and Shirley (2009), geared towards teachers at under-achieving high schools in England working together to raise student achievement. Hargreaves and Shirley state: "Headteachers [associated with RATL] had a voracious interest in and enthusiasm for strategies that could 'game the system' to improve pupil achievement results" (p. 2518).

Interviewees describe wanting to improve student scores. But what encourages participants to adopt this performance-driven perspective? During interviews, I inquire into this, finding one reason dominates: short-term improvement culture. Interviewees (17) often suggest that they feel responsible or accountable to improve students' grades in the short-term. They identify as "gatekeepers", recognizing that their role is to ensure students have developed the knowledge and skills to earn grades (see Kleinsasser, Collins and Nelson, 1994, p. 118). When students achieve, psychic rewards follow – with participants thinking they played a role in this achievement. Some specific examples, drawn from interviews:

Alice makes clear that she is responsible for helping students develop their academic skills (linked to grades). She notes:

They have weekly responses and we're going to grade them at the end of the Module. So, if I see that someone's writing is not up to par, then I email them. Because as much as possible, in this Faculty, we want students to have an A or B+ grade. That's what you need to get your teaching certificate.

Caroline tells me that she gives students feedback on their course assignments because she is "responsible" for improving student writing (tied to grades). In her own words, she says:

Because I am responsible for giving them feedback on their writing and I want to make them better writers for next year and for their upcoming courses. I hope that my feedback will help them in their future courses.

Nancy says that she answers students' questions, prepares students for exams, and adjusts assignment deadlines for students because she believes it is her "privilege" to help students "reach a goal" (earn grades). She comments:

But I understand teaching is a privilege. You have the privilege to help another mind to reach a goal, ya? And I'm part of that. I'm a privileged person.

Alice, Caroline, and Nancy talk about how teaching is about "action and change" (again, see Hargreaves and Shirley, 2009, p. 2522). They accept that their role, as TAs, is to take *actions* to "help" students make temporary *change* to their academic record: "reach a goal", "make them better writers", earn "an A or B+ grade". Interviewees tell me that this is something that they "want" to do and consider a "privilege", implying that they acquire psychic rewards from helping students achieve (academically). This is much like the RATL project: "Student performance effects were often immediate, and by raising students' achievement above critical cut scores, faculty morale improved" (Hargreaves and Shirley, 2009, p. 2519).

Hargreaves and Shirley (2009) also write about *Addictive Presentism*, suggesting Presentism persists because teachers are "*addicted*" to using "simple to employ, widespread, and available" short-term strategies to complete teaching tasks (p. 2524; original embed). I also find this is the case in my study. During interviews, participants (17) are forthcoming, telling me that they regularly use short-term methods to accomplish their teaching activities. They hint at how they have become overly reliant or dependent on these methods when teaching. Some interview evidence:

Albert says that he relies on a lecturing style when there is a lot of course content to cover during tutorials. He states:

You know, some weeks when there's way too much... there's way too many concepts and definitions for students to know. I just found it easier to go with the simple sort of PowerPoint method rather than having, you know, fully write it out on the chalkboard and define every single word. You just have it up and just say, "This is what the term means. Here's a quick little example to associate with it".

When I ask Alice about what teaching method she is most comfortable with, she replies:

The lecture approach. It's ineffective. It's easy.

Isaiah reveals being from the United States and looking for an easy teaching strategy to help him introduce course content on Canadian environmental policy. He mentions "podcasts" were his solution, saying:

Partially because the one course I TA-ed is --. It's essentially a crash course in Canadian environmental policy and there's a variety of reasons why I looked towards the podcasts. First, it made me feel comfortable because I'm not Canadian. I'm from the States. And it took some of the prep work off my shoulders because [...] I had essentially as much background about foundations of environmental policy as the students did. So, using podcasts was something of a scaffold for me at first because I was able to lead the discussion rather than deliver content. And the podcasts were delivering the content.

I understand Albert, Alice, and Isaiah's statements to be about the simplicity and immediacy of short-term strategies. They speak about how they use short-term methods to complete teaching tasks because they consider these methods: "easy", make their work "easier", take "some of the prep work off". These methods do not require a lot of teaching resources or time commitments since they are quick and easy to implement.

Participants speak about relying on short-term approaches to complete teaching activities. But why? During interviews, I find one main reason emerges. Participants (17) regularly report how these approaches, which are quick and easy, help them to complete teaching activities efficiently, making them out to be productive educators. Being efficient and productive is psychically rewarding. Below I provide some interview excerpts:

Nels lets me know that grading online multiple-choice tests is "most" enjoyable because being multiple-choice, he can grade easily, with "low investment". He declares:

I would say the most comfortable would be like the online grading for multiple choice tests... only because it was the absolute easiest, low investment activity of all my teaching assistantships where I could perform the work from home. I could do it at any time of day. And because the answers were multiple choice, I didn't have to do any interpretation to grade things.

Harriet says that having a "rubric or answer key" is "good" since it helps her "quickly" grade student work. She tells me:

I mean, it's a science course. There is a right and a wrong answer. And so, you know, it's good to have that rubric or answer key for assignments, so that you can just quickly go through.

Alice says that she lectures because it allows her to teach course content quickly and easily. She says:

Oh [lecturing], I could do it in my sleep. You know what I think it means – it's about control, right? When you do a lecture, you have control over time. You have control over content. You have control over the visuals. And you can dress yourself in the right suit and wear the right make-up and glasses and you can control the way you look... you know. I was once caught with my zipper down. I just turned zipped it up and carried on. That's what I mean by "it's easy". It's easy because all the thoughts can be done outside of the lecture. You just go up there and perform your part.

I interpret Nels, Harriet, and Alice's statements to be about efficiency and productivity in teaching. These participants suggest that being efficient and productive is a good thing, something that helps them obtain psychic rewards as TAs. Their language indicates that it makes them feel "good" to use short-term methods, suggesting that these methods help them complete teaching tasks in "easy" ways, "quickly", with little time and effort required ("low investment"). But are short-term methods the best way forward? Hargreaves and Shirley (2009) offer some food for thought, stating that while short-term methods can "be used right away", they fail to "challenge or encourage teachers to question and revise their existing approaches to teaching and learning" (p. 2524).

Conservatism

Just like Hargreaves and Shirley (2009) revisit Lortie's Presentism, referring to it as "an ingrained or *endemic* feature of teaching" (p. 2508; original embed), I consider Lortie's account of Conservatism, calling attention to how what once was (formerly or *Quondam*) as profoundly influencing teaching. Lortie (2002) suggests that "teachers... are heavily influenced by past experience", relating "present practice to historical rather than recent standards" (p. 208).

In my study, interviewees focus on two former experiences that affect how they teach. First, interviewees (10) commonly describe how their prior employment, in a teaching role, influences how they accomplish teaching activities. They talk about teaching in ways that they taught sometime before. Some examples from the data:

Nels speaks about his years as a "swimming instructor" shaping his teaching. This is captured in his statement below:

I was a swimming instructor for a number of years in high school. And so that was sort of like my intro to thinking about teaching styles and teaching environments. So, some of that, I think sticks around in the back of my brain.

Nancy tells me that her past experience as a professor helps her to recognize "plagiarism" in student work. She makes me aware:

I'm an experienced professor. I'm not just a TA. When you find a change in the pace, maybe the rhyme of the text... makes you notice something is different. Then you put that piece into the internet and you notice that the last is copied and pasted from something else. Ya, it was terrible. You have to deal with that.

Albert informs me that his previous experience as "an Education Director" guides how he leads tutorials. He states:

I used to be an Education Director out of the Faculty of Science at ———. So, I ran a lot of science programming for youth. So, between Grades 3 to 12. [...] You know, a lot of the methods that kinda came up, from having taught so many students over time there, I kind of applied here. Even though I was dealing with a much younger crowd, the method of learning or the pathways to learning are pretty much the same. It's just, you know, grow them up a little bit and apply them in a tutorial rather than in a classroom.

Nels, Nancy, and Albert use conservative language to explain their teaching practices. They describe how it is their prior employment as a "swimming instructor", "Education Director", "professor" that influences how they teach. They use again, teaching methods that they used from this past employment in their teaching assistantships. This emphasizes how participants consider these teaching methods to have a classic quality, to never go out of style, believing that they are transferable from one teaching situation to another.

Second, interviewees (10) consistently talk about their prior schooling experiences, ways they were taught in K-12 education and/or post-secondary, as affecting how they complete teaching activities. Some examples:

Charles says that he relies on his "memories of tutorials" to lead tutorials. He declares:

I have never been taught how tutorial is supposed to look. So, I am basing it on my own memories of tutorials that I had in undergrad. [...] I think my memories of what my tutorials looked like are pretty vague. But basically, it was the TA either lecturing or kind of opening up for discussion around things.

When I ask Harriet about how she teaches, she states:

[K]ind of what I kind of experienced as an undergrad myself, right?

Nellie also insists that her prior schooling experiences influence her approach to teaching. She notes:

All the places where I have been educated – at the university that I did my undergrad, the college that I did my teacher training, plus at – – . All of those institutions influenced the way I think, the way I behave, and the way I carried out my duties as an educator myself.

I read Charles, Harriet, and Nellie's statements as illustrative of how teaching is socially reproduced, passed down from teacher to student. These interviewees admit that they teach in certain ways because this is what they know, this is how they were taught. They talk about how their teaching is based on "memories" of how they were taught in "undergrad" and "teacher training". This emphasizes Lortie's (2002) Apprenticeship of Observation, stressing how teaching becomes "intuitive and imitative rather than explicit and analytical" (p. 62).

Participants detail how their past experiences impact their teaching. It is these experiences that have pull over how they complete teaching tasks. But why? Why hold onto past ways of doing things? During interviews, I investigate this question. One dominant reason surfaces connected to psychic rewards. Participants (14) regularly talk about identifying with what is already established, seeking continuity. As Lortie (2002) states, "the drift is toward continuity rather than change" where teachers have "a preference for doing things as they have been done in the past" (p. 210). Some interview data that captures this idea:

Harriet talks about wanting to use teaching strategies she knows or is familiar with as a TA. She says:

Not that I am partial to certain, you know, techniques or methods but it's kind of what I know.

Nancy speaks about "always" wanting to teach in a way that she has taught before. She states:

I always try to teach in a way, to give the classes in a way I know how to do it. I've been teaching the same class [as a TA] for four years.

Nellie confesses to being "comfortable" with teaching methods she has used in the past. She tells me:

I am comfortable using those [methods] because these are methods that I have used in the past and it worked for me. And I used it with my class and I got results. So, moving forward it's something that I would want to use and use again because it worked.

Harriet, Nancy, and Nellie depict getting psychic rewards from continuity tendencies. These participants express being "comfortable" with and "always" wanting to use teaching methods that they "know" about, have "used in the past", been using for "years", "know how" to use, and "got results" using. This emphasizes how teaching becomes a product of what once was, that it is enjoyable to use teaching strategies that are familiar to them. In this sense, teaching becomes set, routine, fixed or in Lortie's language, "tradition" (Lortie, 2002, p. 63).

Individualism

For Lortie, individualism is about how teachers work alone in classrooms and "learn to cope on their own" (Lortie, 2002, p. 210), having "freedom" as part of "their official status" to get teaching tasks done (p. 209). However, in my research, I find that Individualism plays out differently for TAs than teachers. My interview data suggests that while TAs also work alone, the freedom or autonomy (personal volition) they have as educators is managed to a greater or lesser extent by course instructors. This is what I term, *Managed Individualism*. During interviews, interviewees (17) usually describe course instructors prescribing them varying degrees of autonomy to complete teaching activities. Some examples found in the interviews:

Ruthie discloses that the course instructor gives her "a little bit of leeway" over how she leads tutorials. She claims:

Nobody was really looking over me [...] I had a little bit of leeway as opposed to you walk into the class and you do this and you do that.

Nels finds that the course instructor is very open, offering him "a lot of flexibility" over how he leads tutorials. He says:

So, for the -- class I had a lot of flexibility. So, I feel like I was able to make those tutorials pretty much what I wanted them to be within the hour framework... within the room that we're in.

Hiram admits that course instructors give him "a lot of leeway" over how he communicates with students. He makes plain:

Typically, TAs, my experience anyway, have a lot of leeway over how they respond to students. How they deal with, you know, students missing class for family emergencies or personal health crises or mental health issues or stress or anxiety or whatever.

Ruthie, Nels, and Hiram discuss being prescribed varying degrees of freedom over their work. These interviewees suggest that, depending on the course instructor they work with, they are prescribed "a lot of flexibility", "a lot of leeway", and "a little bit of leeway".

But how does it make participants feel to have their freedom managed: to have a lot or a little leeway, for example, over how they teach? During interviews, I inquire into this issue. Two responses stand out:

First, interviewees find it psychically rewarding to be prescribed autonomy, to some degree, over their work. Interviewees (17) generally suggest that they like having autonomy because it enables them to make teaching decisions and to have more control over their teaching practices, supporting their professional identities. This is consistent with Lortie (2002), who states that teachers have "a stake in autonomy" (p. 210). Examples from interviews:

Ruthie reveals that it is "nice" to have "a little bit of leeway" as a TA. She states:

I was happy that I had that kind of flexibility over here. [...] It was nice.

When I ask Nels to tell me how having "a lot of flexibility" makes him feel, he responds by saying:

I loved it. It was like really empowering cause I was able to like, you know, adapt to the students... like in the classroom setting on the day of if I needed to. Like there was like a set curriculum. I would just kind of do what made sense to me at the time. And I was able to make it fun for myself also. I had my own interests in — — and I was able to incorporate those as much as I wanted to into the course content.

Hiram talks about how having "a lot of leeway" over how he responds to students is something he considers "beneficial". He says:

So, I think that's beneficial to TAs because that allows [...] me to sort of find solutions to students' issues or concerns by talking with the students directly.

I interpret Ruthie, Nels, and Hiram's statements to be about how having autonomy allows psychic rewards to flourish. Interviewees speak about how having "flexibility" in some sense, over how they complete their work, is something that makes them "happy", consider "really empowering" and "beneficial". Autonomy opens avenues for self-accountability in teaching.

Second, interviewees find their psychic rewards thwarted when their autonomy is restricted or limited to some degree. Interviewees (17) disclose that when they are expected to teach curriculum or implement a specific teaching activity or use specific evaluation criteria to grade student work, for example, this restricts their autonomy (see also Park and Ramos, 2002). Lacking autonomy causes interviewees to feel helpless and vulnerable, preventing psychic rewards from flourishing. Below, some interview excerpts:

Mary speaks about disliking rubrics, as a grading tool, but that course instructors expect her to use rubrics to grade student work. She states:

In our first meeting, I mentioned that this [rubric] was something that I thought was not great. But the course instructors said, "This is what we're doing because of the students". You know, there's reasons I guess, and the reasons are it's clear. The students want clarity in terms of knowing what to do to get a good grade. So, I said I would [use rubrics] because that is what the course demanded.

Ruthie tells me that course instructors have the final say over grade distribution and this makes her feel "helpless". She says:

But then again, I felt helpless because I've never been that helpless and even with the final markings of the essays, he [the instructor] looked over every single one and says, "Too high, too low, too this... [inaudible]". And I say, "Okay". That's the way it is.

Caroline talks about how the course instructor heavily "managed" how she lead tutorials and all other teaching duties and this made her "uncomfortable". She comments:

Well, I don't know if it was a teaching approach that I was uncomfortable with, but my first teaching experience was with a professor that didn't want me to add

anything. So, her approach was to control all of it. So, I had no flexibility or creativity. So, I was uncomfortable with that. To a certain extent... on one hand it was very easy cause I didn't have any need to prepare. But on the other hand, I felt managed... micro-managed.

Mary, Ruthie, and Caroline represent course instructors as powerful, having authority over them as TAs. This is made evident by their statements, pointing to instructors controlling or restricting their practices as TAs. These participants convey that these restrictions make them feel "helpless", "managed... micro-managed", silenced. This shows that when TAs lack autonomy it causes a degrading effect, paralyzing psychic rewards.

How I organize the data, from a quick glance, it appears that course instructors either grant TAs a degree of autonomy or restrict this autonomy. But this is misleading. To be clear, autonomy is not presented as an either-or concept during interviews. Rather participants tell me that they have autonomy in some ways, but not in other ways. For instance, some participants describe having "flexibility" or "leeway" over how they communicate with students but lack freedom over how they grade student work. Again, this highlights Ramos (2006) who states: "Autonomy is not an 'all-or-nothing' concept; it can be developed and may be present in some aspects of a person's life and absent from others" (p. 185). Autonomy is everywhere in teaching assistantships and nowhere at the same time. This highlights the slipperiness of psychic rewards when it comes to individualistic tendencies.

Professional Collegiality

Lortie (2002) presents an image of the lone teacher – focusing on how teachers work on their own and desire limited collegial interactions. But the possibility remains, Lortie says, that collegial relations "may deepen and broaden" considering significant "effort is being expended today to foster closer working relationships among teachers" (p. 209). I find evidence of closer collegial relations in my study.

Interviewees report building close working relationships with fellow TAs and even course instructors. Although collegial relationships normally contain values like Care, Inquiry, Criticality – I take up *Professional Collegiality* in a particular way. In my study, TAs describe working with their colleagues to "improve" how they accomplish teaching

activities. They get together to learn quick and easy teaching strategies, to create teaching handouts and other activities, to find a quick solution to a teaching problem. These interactions involve professional discretion. These relationships are performance driven. This is much like the RATL project. Hargreaves and Shirley (2009) state that RATL teachers work together following "principles of professional discretion and collaboration" to reach teaching targets (p. 2517). Below, I organize my interview data around three ways interviewees describe working with colleagues: sharing knowledge, collaborating, giving/seeking support.

To start, interviewees (7) often talk about sharing knowledge, suggesting that they get together with colleagues to share/learn about teaching strategies, resources, and experiences. A few interview excerpts:

Rose states that she meets with her TA colleagues to share "best practices". Telling me about this experience, she says:

[I]t was my first-time distance learning and the —— program is quite good about, you know, having meetings where TAs come together, and you know, discuss best practices. So, a lot of that came from hearing from other TAs about what worked for them and what didn't work for them.

Caroline mentions how she is part of a "TA team" and this entails getting together with her TA colleagues to share "pedagogical style and ideas" and "worksheets". She remarks:

So, we had a very strong TA team that the professor really helped form... a really great working group. So, we had a couple of team meetings and we shared our pedagogical style and ideas via email. If we created worksheets that we were going to do that week, we would share it via email with the whole team.

Also, Harriet says that she has learned teaching practices from her colleagues. In her words:

I've also learned a lot from my peers. So, you know, in our Faculty we're lucky because we have all kinds of researchers... all kinds of students teaching really different research. And so, they have different methods.

Rose, Caroline, and Harriet describe getting together with colleagues to talk about teaching. These interviewees indicate that they "shared" with and "learned" from colleagues including "best practices", "pedagogical style and ideas" and "different methods". The RATL intervention also promotes teachers sharing knowledge. "RATL staff encouraged

headteachers to consider innovative strategies, such as... consulting university professors affiliated with RATL to disclose inside knowledge about successful student work" (Hargreaves and Shirley, 2009, p. 2518).

On many occasions, interviewees (9) report collaborating with colleagues, where they work jointly on teaching-related activities. Some interview data:

Mary recalls collaborating with her colleagues on writing prompts. She says:

Every week there is a prompt for students to respond to like in relation to the reading. The course directors would write the prompts in the summer and then we [the instructors and TAs] would get together... all of us... and edit them, talk about them, and change them.

Caroline lets me know that she is part of a "community of practice" and collaboration is a key goal of this community. She states:

So, the present teaching team I am working with and the professor – when we have ideas, we bring it to the table, and we ask: Is this a good idea? Is this going to work? What's it going to look like? And what's the end-folding of it? There is a discussion and a kind of community of practice to figure out what that looks like and how to do it. It becomes a group discussion.

Harriet describes "co-teaching" with a course instructor, collaborating on lectures. She lets me know:

But again, what I really liked about that professor was that he left space open for me to ask students questions and provide like critique and, ya, like left me that space so I could do that in class. So, it was really a joint effort. So, for example, if a student did a presentation and we had a discussion about it after, we both were likely to ask questions that built on each other...

Mary, Caroline, and Harriet describe collaborating with colleagues. They talk about working with colleagues to "edit" course activities, "to figure out" teaching ideas, and coteach. Collaboration is also key to RATL, especially to develop project targets. Hargreaves and Shirley (2009) state, "targets [for RATL] are made available to, developed by, and shared among schools working with other schools on improvement and achievement goals together" (p. 2517).

Interviewees (11) repeatedly express how they turn to their colleagues for support. They describe approaching their colleagues for assistance, advice, encouragement, helpful reminders, and other informational and emotional supports. Some evidence of this, included in interviews:

Ruthie identifies the course instructor that she works with as "very supportive" – feeling that she can turn to them for help. She explains:

I think they [the instructor] were very supportive when I had questions. [...] And a couple of times when I did ask for help it was, you know, my instructor was very forthcoming. He said, "Sit down, tell me what's bothering you. What do you think? Do it this way. Do it that way".

Grace also brings up feeling "supported" by the course instructor. She states:

Through the entire process I felt incredibly supported by the course instructor who was very open from the very beginning to say, you know, "This is a collaboration between us, bring me any concerns or questions at any point in time". He very much embraced a mentor kind of role [...] he knew I didn't have TA experience...

Similarly, Lars comments that he finds the instructor "supportive" when he needs assistance. He says:

Actually, the instructor is a remarkably hands-off and like he's supportive. He's not distant or anything. He like offers support when necessary.

Ruthie, Grace, and Lars' statements point to support TAs receive from course instructors. Their language here suggests that course instructors are "very supportive", "embraced a mentor kind of role", and offer "support when necessary". This implies that creating opportunities for support can create more harmonious relations between TAs and instructors. Teaching supports are also discussed in the RATL project. Hargreaves and Shirley (2009) describe how headteachers at RATL schools are "brought into relationship with other educational leaders... who could be contacted to provide assistance on both larger conceptual issues as well as on the daily nitty-gritty challenges of educational change" (p. 2515).

Interviewees frequently tell me that their collegial relationships affect their teaching identities. "A teacher's identity" Beauchamp and Thomas (2009) state, "is shaped and reshaped in interaction with others in a professional context" (p. 178). As evidenced by the

data, working with colleagues can change how TAs think and act. Advice a TA receives from a colleague, for example, can affect how they lead tutorials, grade student work, respond to students, and perform other teaching duties.

But why work with colleagues in the first place, especially when teaching is such an individual activity? From analyzing the interview data, I find one popular reason. Interviewees (14) frequently speak about finding it psychically rewarding to work with colleagues, since these work relationships improve their individual experiences as TAs. Consider the following examples taken from interviews:

Mary says that sharing teaching experiences with colleagues is "helpful". She states:

We meet a lot. So, we see each other a lot and we are sharing our experiences, which is helpful because you don't feel isolated.

Grace insists that having the support of the course instructor makes her feel "valued" as a TA. She says:

I felt like if ever I had a question or a concern, even if I felt like it wasn't a very big one, I felt comfortable bringing it to the course instructor. And I felt valued so... it increased my motivation to like do a really good job...

Alice insists that it is "awesome" to collaborate with colleagues. She reveals:

I was working with a PhD student who got hired --- [as a course instructor]. And so basically, she let me team teach with her. So, that was awesome.

Mary, Grace, and Alice talk about feeling good about their collegial interactions, stressing psychic rewards. In their words, they consider their working relationships "helpful", "awesome", making them feel "valued". Here, working relationships offer possibilities: to commiserate, to learn teaching strategies, to create something (better) together.

But is everything *better* when educators work together? The interview data suggests that when participants get together with their colleagues, what is shared, developed, learned, and passed on are short-term teaching strategies. These strategies are the same old, already established (tired) teaching strategies. There is no evidence of participants working with their colleagues for the purpose of transforming or reforming their teaching practices. This is much like RATL teachers, who are drawn "out of the isolation of their classrooms in

emotionally effervescent exchanges of instant strategies that enhance effectiveness in what already exists rather than reflecting on and reforming what already exists" (Hargreaves and Shirley, 2009, p. 2526).

Conclusions: Teaching is About Ends

My interview data supports Lortie (2002) and followers (i.e., Hargreaves and Shirley, 2009). I find evidence of Presentism (Endemic, Adaptive, Addictive), Conservatism, and Individualism in the data, along with variations and extensions of these teaching orientations, what I term: Quondam Conservatism, Managed Individualism, and Professional Collegiality. All these orientations help TAs and other educators accomplish teaching tasks in efficient and productive ways. In my study, TAs discuss how accomplishing teaching tasks is very satisfying, fulfilling, and even enjoyable. This showcases how psychic rewards are tied to performativity.

Yes, TAs and other educators are required to complete teaching activities. Interview data suggests that TAs are paid to do teaching duties. But when talking to Nancy, she explains that doing what needs to be done, such as grading student assignments, is only one part of being a TA. Nancy tells me: "I'm not a machine... I cannot just grade and go back home". She says that she needs to connect with students in ways that are "participatory, democratic". This raises questions about how ethics and politics shape TA-student relationships. In the following chapter, I consider the extent to which a TA's values or commitments influence their teaching.

Chapter 7: Continuing the Adventure

For, you see, so many out-of-the-way things had happened lately, that Alice had begun to think that very few things indeed were really impossible.

– Lewis Carroll, Alice's Adventures in Wonderland

In earlier chapters, the interview data supports Lortie (2002) and followers (i.e., Hargreaves and Shirley, 2009), calling attention to how TAs desire to complete teaching tasks in efficient and productive ways and obtain psychic rewards in the process. But, in this chapter, I expand this argument, proposing that TAs also seek to complete teaching activities in ways that support "sustainability values" and earn satisfaction from thinking they are making a difference.

In this research, I purposely recruit participants who have some experience working as TAs, but also broad commitments to environmental/sustainability education. Returning to my second research question, I ask: When, where, how and to what extent are TAs affected by their broader political and ethical commitments when teaching? How might "psychic rewards" be gained by sustaining these commitments?

Interviewees speak about three, divergent sustainability pedagogies that are important to their practice: environmental/sustainability education, inquiry pedagogy, and critical pedagogy. These pedagogies help interviewees teach course content, respond to students, grade student work, and lead tutorials, for example, in ways that prioritize sustainability values, what I am calling: *Caring Values*, *Inquiry Values*, and *Critical Values*. Interviewees talk about how drawing on these values when teaching is psychically rewarding, thinking that these values are valuable, worthwhile, good, and otherwise useful for students.

Caring Values

Care is a feminist notion. Care is relational (see Langford and Richardson, 2020). To care means one strives to protect or safeguard a connection, a bond, an association with someone or something. This is supported by Noddings (1988) who underscores the relational aspect of care, suggesting that an individual "who is concerned with behaving ethically strives always to preserve or convert a given relation into a caring relation" (pp. 218–219). In *The*

Care Manifesto, Chatzidakis et al. (2020) state, "care... means recognising and embracing our interdependencies" (p. 5; original embed).

In times of the global coronavirus pandemic, there has been much written on care. Nurses and other health care professionals are providing care, selflessly and to the point of burnout, to support patient wellbeing (see Merritt, 2020). Teachers are caring for the mental health of students (see Wong, 2022). Politicians and labor groups are lobbying for paid sick days, caring about the health and wellbeing of frontline workers (see Boisvert, 2021). People are caring for their neighbors and communities by being vaccinated, slowing the spread of Covid-19 (see Haelle, 2021). It is wonderful to see this care. But care unfolds differently during interviews. To explain how care is discussed in my study, I draw attention to *Caring Values*.

In my study, participants suggest that their commitments to environmental/sustainability education ground their thinking and knowing in Caring Values. These values are positioned as necessary in an ever-changing world, centered around promoting more caring relations between people, the planet, and the nonhuman. Puig de la Bellacasa (2012) states that "care means standing for sustainable and flourishing relations, not merely survivalist or instrumental ones" (p. 198). In this section, I organize the interview data around two forms of "thinking care" discussed by Puig de la Bellacasa (2012, p. 207), inspired by Haraway's feminist work: thinking-with and dissenting-within.

Thinking-with, Puig de la Bellacasa says, refers to caring about making connections to many different things or "thinking with many people, beings and things" (Puig de la Bellacasa, 2012, p. 199). These connections are "mostly, not easy" but work to resist oversimplification (p. 205). I turn to the interview data with this distinction in mind. I find interviewees (8) regularly talk about caring about course material, acknowledging that they teach this material by relating it to many things, such as current news events, environmental issues, feelings. This is an act of care, helping to enrich course conversations and resist disciplinary boundaries. Some examples from interviews:

Lars says that he brings up environmental issues when teaching a course on politics and economics. He outlines his reasoning for this:

I would draw attention to issues around environmental sustainability that aren't dealt with in the course material. Like I would relate what we're learning in the class like to issues around the environment or how we think about the environment. Even though that's not part of the course content. I mean there is one week that we spend on the environment. But I was bringing in these kinds of issues pretty often.

Albert says that he has students think about environmental studies topics and concepts in relation to current (news) events. He provides a detailed account of this below:

I would talk about issues of the day and sort of ground them or relate them to concepts that we discussed. [...] "Hey, tell me anything interesting you learned in the last week or so". Somebody would have animal news. Or somebody would have something to do with an extinction. Or somebody would have something to do with a new type of technology or whatever. And then, you know, getting the students to really engage with that topic, but from the lens of the things that we had learned, you know. "So, the extinction of the black rhino: How does that fit in with what we have talked about in terms of feminism? Does it relate and how does it relate?"

Nancy talks about using "feelings" to teach science, believing science can benefit from an emotional connection. She argues:

I think feelings are more important than maybe facts in the process of learning. You have to create a feeling, create a connection. And I know that we are struggling a lot defending the science as rational without feelings or without any subjectivity, but I think we are human beings [...] I tried to connect with feelings... tried to show students, move students, the inner center of who they are like, "Look at this, this is our planet, this is what is happening". I understand there is a limit... because you [can] obtain the total opposite feeling like numbing the person... like, "Oh ya, whatever, another poor people are dying". And I try to be careful with that. But with the first moments of teaching, I try to create this feeling of amazement.

I read Lars, Albert, and Nancy's statements as caring for ideas. These participants make known that they care to "relate" course material to other things like "issues of the day" (current news events), "feelings", and scholarly ideas like "environmental sustainability". This highlights how thinking with care enhances thinking "by adding layers of meaning", "cutting across fixed theoretical and academic divides" (Puig de la Bellacasa, 2012, p. 200).

Puig de la Bellacasa (2012) also writes about *dissenting-within*, arguing: "We cannot possibly care for everything" (p. 204). This means it is inevitable that one will reject, disagree, have a conflict with something – refuse to care. But dissenting-within challenges one to care – to dissent within conflict by finding ways of caring and relating to what is difficult to care about. This means being willing to think in ways that encourage connection

between the hard to care for (and about) rather than flat out rejection and disagreement. I find evidence of dissenting-within in my data. Interviewees (6) confess that they do not care for all course material they are assigned to teach. However, they find ways to care, thinking about this content from other perspectives that are important to them. Some interview data:

Laura says that when course content objectifies and otherwise supports violence against the nonhuman, she raises alternative perspectives that object to this violence. She states:

I mean to be clear, you know, when I wanted to bring these up [alternative perspectives] we were talking about drastic measures like... Okay one, you know, pretty standard talking about animals as natural resources... which in my mind is objectifying and they're treated like property and they have basically zero legal protection. But some of the things we were talking about would go even further from that. So, we have this language that supports a particular viewpoint and then we would have like a study that was all about poisoning animals who were considered exotic and no longer able... just believed to be unhealthy for the eco-system by conservationists and therefore poisoned.

Hiram tells me that since course content he is assigned to teach introduces research from "White dominant, Western culture", he cares to include other research examples. He explains:

It's important to talk about context and, for example, talk about the ways that research has been used as a tool of social control or as a justification of social control or settler colonialism or imperialist conquest or something like that, right? The way that research was used to suggest that, you know, Indigenous peoples were inferior or that Black peoples had sub-human intelligence or something like that... Or just the general sort of like exoticization of different people and cultures through anthropology or ethnography... or these various sort of instances in which research has been used for nefarious purposes or for the purposes of cementing violence types of power. So, I think it's important to bring in those discussions. So, I think my politics push me to do that as much as possible. And I think sometimes that means bringing in things like case studies and examples that do not exist on the course syllabus, but that we can talk about as well.

Nancy says that when she disagrees with how course content presents topics like "colonialism, imperialism", she will offer an alternate reading of this material. She provides an example:

You have to deal with the problems of colonialism, imperialism, capitalism, destruction, I don't know... exclusion, inequality, disabilities. And you want a better Environmental Studies feel in general. [...] I remember one concrete reading we have on civilization collapse... something like that. [...] And they say in the readings that the Mayan empire collapse and that people disappeared. And this is the

biggest lie of all because if you go to Guatemala right now what you are going to see is Mayan people. Mayans just moved out the biggest places they lived before and [inaudible] because of extreme environmental change and forced people to move out and forced people to move out of the big city [...] you go to the coast of Guatemala... it was abandoned but people didn't disappear. [...] And I remember a group of TAs decided to do something... prepared a document for our students, for something extra over our workload. We prepared presentation on [...] the Mayan people. Everything was against the reading. And that kind of thing, kind of tension, we face in our regular teaching experience, you know.

Laura, Hiram, and Nancy's statements bring attention to how dissent is part of care. These interviewees reveal that they do not always agree with course material they are assigned to teach. This creates a "kind of tension" in their teaching. But they reconcile by finding ways to connect with this content, caring to introduce alternative perspectives. Providing this care is something interviewees describe as "important to bring" into their teaching, helping to avoid dogmatic thinking. This emphasizes how tension in teaching can be a positive thing. Tension can help create other ways of looking at course content, developing a fuller understanding of course topics.

Interviewees often communicate how their commitments to environmental/sustainability education shape their teaching, grounding how they think and know in care. But knowing their commitments provoke them to care and "caring or being cared for is not necessarily rewarding and comforting" (see Puig de la Bellacasa, 2012, pp. 198–199): Why apply their commitments in their teaching? During interviews, two possible explanations surface:

First, interviewees present their commitments to environmental/sustainability education as central to their identities. Interviewees (13) routinely state that their commitments are a core value in their lives, something that colors everything they do, including their teaching practices. Interviewees get psychic rewards from connecting with their commitments, aligning their teaching with their personal beliefs. Some examples pulled from interviews:

Nancy tells me that her commitments influence her teaching because she considers them critical to her identity. She says:

I think my political commitments impact my teaching experience... my teacher techniques or whatever and I'm gonna sustain [these commitments] all the time. You have to deal with that in my classroom. I am a feminist. I am a defender of the

environment. I believe that all human and animals have rights. I'm bisexual. [...] I like everything. I love everything. [...] I'm going to teach you through the instrument which is me.

Rose says that her commitments affect her teaching because they are part of her. She remarks:

These are my kind of life commitments, right? [...] So, to come into the classroom and just, you know, leave that [commitment] outside – it's not possible for me...

Likewise, Isaiah claims that his commitments filter into his teaching because they are "inescapable". He argues:

Well, I think part of it is inescapable. We all see the world through various lens. And I can't take off my political lens, if you will, when I step into the classroom, ya.

I understand Nancy, Rose, and Isaiah's statements to be about how personal commitments influence teaching. These participants openly admit to having commitments, describing them as their "life commitments", "inescapable", something they "sustain all the time". They disclose carrying these commitments "into the classroom" and acquiring psychic rewards from doing so. These commitments are part of them, so bringing them in their teaching can make them feel good.

Second, interviewees identify their commitments to environmental/sustainability education as an ethical obligation. Interviewees (12) regularly speak about feeling ethically obligated to share their commitments, thinking their commitments are connected to "positive" societal change. It can be psychically rewarding for participants to believe that introducing their commitments in their teaching is the "right" thing to do. Referring to my interview data, some examples:

Nancy tells me that her commitments are essential to her teaching practice, believing that they can "transform everything" for the better. She says:

The way I think is worth to fight for, worth to die for. Something that is so important that has to transform everything... come to transform my relationship with my partner... transform my relationship with my cat, with my plants... and the amount of life I open to the window each day. How is it not going to be part of my teaching practice, you know? We have to be tools for freedom. We have to be for change in this world.

Grace says that she thinks her commitments are important to include in her teaching, thinking they help foster critical and compassionate thinking. She notes:

I think that my commitments are commitments that I would like to share with other people. And, you know, I don't want to force anybody to think the way I do. But if I can help people think more critically and compassionately both about themselves and others and the wider world then I feel like I'm doing a good job.

Laura makes clear that she feels "an ethical responsibility" to bring up her commitments. She stresses:

So, I do feel when you're sort of faced with sort of violence that's not being challenged or not looked at critically or ethical dimensions are not even being brought up, I do feel there's an ethical responsibility to bring it up and not be silent in that kind of case. [...] I do think there is an obligation to do it.

I read Nancy, Grace, and Laura's statements as an example of how personal commitments can become an ethical obligation. These participants tell me that it is not enough for them to have commitments to environmental/sustainability education. Rather they believe it is their "ethical responsibility" to share these commitments, considering they serve to make things better (to "think more critically and compassionately", challenge "violence", work "to transform everything"). These participants suggest that including their commitments in their teaching makes them feel like they are "doing a good job" as TAs. This demonstrates how educators can gather psychic rewards from doing what they think is "right" and ethical.

Inquiry Values

During interviews, participants speak about having commitments to inquiry pedagogy, which are associated with *Inquiry Values*. Participants describe how inquiry pedagogy involves students actively learning: questioning, exploring, synthesizing, analyzing, and so on. What is valued here is having students take control of their own learning, not depending on TAs and other educators for the answers. Below, I organize my interview data according to three practices of inquiry teachers, outlined by Postman and Weingartner (1969): asking questions to students; encouraging student-student interactions; and being responsive to students.

Postman and Weingartner insist that inquiry teachers ask questions. While this teacher asks content type questions, they consider divergent questions more significant as they help

spark thinking and endless possibilities (Postman and Weingartner, 1969). Interviewees (12) generally speak about adopting questioning strategies in their practice. Some interview evidence:

Albert says that he asks students "open-ended questions" during tutorials to encourage students to share their ideas about course content. He states:

I think I was most comfortable being able to sit down and ask open-ended questions that the students could jump in and answer. [...] there was really no right or wrong answer because a lot of these [course] concepts [...] there is kind of two sides to a coin...

Harriet also insists that she poses questions during tutorials to inspire students "to talk" about course material. She spells this out:

But for the seminars, ya, I mean it's hard to get people to speak. Often, I just come up with questions around the readings and then ask the questions and try to get students to talk about those.

In a similar vein, Rose tells me that she asks "discussion questions" during tutorials to get students talking about course content. She comments:

So, I kind of really like that interactive element of TA-ing. So, to me that's most important [...] So, that means bringing in clips... bringing in, you know, just different things that would generate discussion. Having, you know, a range of discussion questions, ya.

Albert, Harriet, and Rose's remarks indicate that inquiry involves posing questions to students, not providing answers. During interviews, these participants mention how asking questions creates possibilities for students: different ways of thinking ("really no right or wrong answer"), conversation ("generate discussion"), and sharing ideas about course content ("try to get students to talk").

Postman and Weingartner also write that the inquiry teacher supports student interactions and normally refrains from mediating or judging these interactions (Postman and Weingartner, 1969). During interviews, I find interviewees (14) frequently speak about creating opportunities for students to work together. Here interviewees describe how it is important to give students the freedom to think and act without TA interference. Some examples found in interviews:

Grace claims that she lets student discussions "play out" and largely avoids intervening in these conversations. She makes this clear:

There would be times when I did intervene in [student] discussions... [...] I tried not to cause it was kind of the agreed approach between me and the course director was to kind of let things play out a little bit and see what would happen [...] to see if maybe students would kind of step in and lead the discussion wherever it needed to go.

Ruthie tells me that during tutorials she stays "in the background" because she wants students to share ideas and discuss and not "feel judged" by her. She states:

When I was most comfortable was when I was in the background and I could see the conversations flow. And all I would do is take notes. So, when the conversation stopped, I would bring up something to get it going. But probably the most satisfying was when I was not part of it. [...] you let them discuss and they're not shy and they're not afraid and they don't feel judged. So, they can actually express their opinions [...] kind of draw their own conclusions.

Nancy states that she spends time during tutorials "watching" students work together, distancing herself from judging or being critical of this process. She discloses:

I love when students do things like making an experiment in classes or maybe, I don't know, trying to prove an idea. They have to prove it and work with other students to do it. [...] I feel comfortable watching them [students] doing. I'm not critical. [...] it doesn't matter to me if someone commit a mistake in the process. At the end, I can sit with you and talk like, "You did this wrong, and we can kind of fix it this way".

Grace, Ruthie, and Nancy's comments suggest that inquiry methods create opportunities for students to work together. These interviewees note that inquiry encourages students to come together and "prove an idea", "experiment", "lead the discussion", "express their opinions", and "draw their own conclusions". Here, emphasis is placed on students learning with and from their peers, distancing their dependency on TAs.

Postman and Weingartner (1969) state that inquiry teachers respond to students. They plan their lessons around students' problems, viewpoints, questions, answers, and so on, tailoring their teaching to "the *way* students think" (p. 36; original embed). I find this is also the case with TAs in my study. During interviews, I find interviewees (12) regularly refer to teaching in ways that respond to students' thinking – their issues, experiences, outlooks, interests, pedagogical preferences. Some examples from interviews:

Nellie reports giving students the option of discussing course material in-person or online, recognizing that some students "prefer to write than to speak". She tells me:

I was most comfortable with the small group discussion and the online discussions because still even though I tried to put the students in smaller groups to work... still I find some persons are shy and they prefer to write than to speak. So, behind the walls of a computer nobody seeing them... I realized that some people, they give beautiful blogs on the online session. They write beautifully, but when they are inclass they are almost nonverbal. So, that's why I push for more than one approach. A single approach for me limits the true potential in each student. But when you use a variety of approaches you allow all the students to be included in the teaching-learning process.

Alice says that student "issues" are central to her teaching. She explains:

I sometimes think depending on what's going on in the media, depending on what are the issues my students bring to the classroom... those often get prioritized. So, for instance I had a situation where students were referring to each other as "gay" in a way that was kind of like, "Don't be gay, come out with us". And so that was a major area of tension that I wanted to address. And so, looking at how language is used as a way of bullying and sometimes as a way to minimize or stereotype... that became an important part of this year's course.

Ruthie asserts that she tries to teach course topics in ways that are "meaningful" to students. She provides an example:

[The students were] very young, where some of them had voted this past election, but most of them had been too young. So, they had no concept of taxes, no concept of policy. And the discussion... it was one of the most painful experiences. I lovingly refer to these students as *The Walking Dead* because they were there in body, but there was no sign of life. But it's not their fault. It's just that it's a heavy course and when you don't have any frame of reference. It can be happening on Mars for all you care because you don't feel a connection. So, I would try to kind of frame it in ways that would maybe be meaningful to them based on their own experiences in high school. So, kind of change the tone of the conversation to get them engaged.

I regard Nellie, Alice, and Ruthie's statements as inquiry-based learning, stressing how they teach in response to students. Instead of creating generic or standardized lessons, these interviewees report teaching in a manner that is "meaningful" to students, recognizing "issues" that "students bring to the classroom" and how students "prefer" to learn. This emphasizes how teaching is a relational activity. These interviewees do not position their

teaching as separate or unattached from students, but rather in connection to them. They aim to make their teaching relatable and relevant to students they teach.

In short, interviewees identify as inquiry teachers (or TAs). They speak about adopting inquiry pedagogy, where value is given to students thinking and acting (on their own). But why do they feel so strongly about including inquiry in teaching? During interviews, one response stands out. Interviewees (16) often give the impression that they gain psychic rewards from helping students develop into confident, skillful, capable learners. This follows Postman and Weingartner (1969), who suggest "that the purpose of the inquiry method is to help learners increase their competence *as learners*" (p. 31; original embed). There are examples in the interview data, such as:

Lars says that he asks students a lot of questions because he wants students to be able to discuss and explore (ideas) and think on their own. He tells me:

I find like my role is to help students to help themselves. I think like the best teachers are those who can teach their students to teach themselves.

Isaiah explains that he prioritizes student discussion during tutorials because he wants students to be able to have an informed conversation. He says:

I think it can be useful to force the students to sort of assert themselves in the classroom a bit and take some ownership of their learning...

Nancy contends that she has students work together during tutorials because she wants students to be effective problem solvers. She opens up, saying:

You're going to say something that is going to upset someone else. And you're going to have to solve it. We're humans. We're not machines. You're going to say something that is going to upset someone else and you're going to have to solve it. I'm not going to be here. Your professor, your mom... not going to be here always. You're going to have to do it. And that's the experience part of the process that I love to watch... how they solve it.

Lars, Isaiah, and Nancy single out inquiry methods. These participants specify that they "love" and feel "best" when they adopt inquiry approaches, emphasizing psychic rewards. They state that they believe inquiry methods help students: "help themselves", problem "solve", "assert themselves", and "take some ownership of their learning".

Critical Values

Interview data demonstrates that participants are committed to critical pedagogy, which are underpinned by *Critical Values*. Ellsworth (1989) suggests that critical pedagogy is "highly abstract and utopian" (p. 297; original embed), promoting "classroom analysis and rejection of oppression, injustice, inequality, silencing of marginalized voices, and authoritarian social structures" (p. 300). In other words, critical pedagogy is ethical. Critical educators are critical of traditional power relations and hierarchies in classrooms. Below, I organize interview data according to two critical pedagogical strategies discussed by Ellsworth: student voice and dialogic teaching.

In critical pedagogy circles, Ellsworth states that *student voice* is about teachers being interested in what students have to say. Here the teacher is interested in "student expression", for students "to make themselves visible and define themselves as authors of their own world" (Ellsworth, 1989, p. 309). I turn to the interview data with this in mind. I find participants (11) frequently talk about valuing students' contributions/input, encouraging students to speak up and share. Some examples I find in the data:

Ruthie states that she encourages students to speak up and share their "different" ideas. She claims:

I'm very open about where I stand [what I think, my perspectives]. But on the other hand, I've also encouraged students with different backgrounds and different thinking to express their opinions. "Why do you think so?" Not a question of debating them in class...

Hiram says it is important for him "to make space" for the student voice, to hear what students are "thinking and feeling". He elaborates on this idea:

I speak from a particular ideological perspective doesn't mean... that's the ideological perspective that, you know, suppresses everything else in a particular classroom space because that would become fundamentally opposed to the politics and ideological perspectives that I have. But I think that's important too. So, we still want to make space for people to try out perspectives and theories and actually have the ability to talk about the things that they are thinking and feeling in a way they're not going to get shamed or yelled at or belittled or something like that.

Nancy lets me know that she encourages students to share their thoughts and experiences during tutorials. She explains:

Then I tried to go one-by-one with my students, "What do you think about that? Have you hear about that before or...? What kind of recycle you use in your house? What decision do you make about your clothing or your food or whatever? Do you cook?" I always try to move my students to answer because when they start talking... you notice that they're not so empty of ideas as you think.

I understand Ruthie, Hiram, and Nancy's statements to be critical of teaching traditions. Traditionally, teachers teach, and students learn. But participants are keen on learning from students, hearing what students have to say: open to students "talking", sharing their "ideas", "opinions", "thinking and feeling". Here, the student voice is looked at, put under the microscope, but the TA, their position, is unrecognized. As Ellsworth (1989) argues, this "relation between teacher/student becomes voyeuristic when the voice of the pedagogue himself [sic] goes unexamined" (p. 312).

Ellsworth states that *dialogue* is another critical pedagogy strategy. Dialogue entails teachers creating space to talk or discuss with students. "Dialogue has been defined as a fundamental imperative of critical pedagogy" Ellsworth writes, "and the basis of the democratic education that insures a democratic state" (Ellsworth, 1989, p. 314). During interviews, participants (9) often describe that they welcome or are open to having discussion with students. A few examples from interviews:

Charles tells me that he uses tutorials to discuss with students. He makes this plain:

I don't have anything planned out [for tutorials] because I am living on this [inaudible] that we'll have a good discussion.

Lars states that he tries to have discussions with students during tutorials. He says:

So, I tried to have a group discussion. I mean... I encouraged my students like to speak up as much as possible.

Laura also talks about being open to TA-student discussion. She confirms this by stating:

I'm always open to discussion.

I interpret Charles, Lars, and Laura's comments as critical of the traditional notion of teacher as expert. These participants want to discuss with students, as a way of sharing knowledge. Their language implies that they are "always open" to discussing with students,

structure their teaching around "discussion", and encourage students "to speak up as much as possible" during "group discussion". Ellsworth (1989) claims that classrooms may be perceived as special places, where teachers and students can safely share ideas and equally have a chance to talk. But it is "the power dynamics" both within and external to classrooms that makes "democratic dialogue" unattainable (p. 315).

Participants identify as critical pedagogues, adopting critical strategies like student voice and dialogic teaching. But why the interest in these strategies? From analyzing interviews, I find one answer. Participants (14) routinely describe being critical of traditional teacher-student relationships. They suggest that they do not want to be traditional, authoritarian educators. Rather they desire to create more democratic relationships between themselves and students. Participants talk about gaining psychic rewards from building connections with students, learning from and learning with students. Some examples, taken from interviews:

Nellie says that it is important to listen to students, recognizing that they have knowledge to share. She expands on this idea below:

In my classroom, I believe in sharing knowledge. That's one thing I hold dear to my heart. Because by sharing we're impacting other people's lives cause we have experiences that persons can learn from. And some of these experiences are really worthwhile sharing because it could prevent somebody from making mistakes in the future.

Nancy states that listening to students is an important part of her practice, part of her "ethics in general terms". She notes:

I am trying to give voice to people who are excluded from the process. I try to understand that my students are human beings with rights and with a lot of knowledge who have to share. This [is] part of my ethics in general terms.

Hiram claims that educators and students discussing together is a step towards creating a "better" world. In his words:

I see teaching as way that we can talk about politics, we can talk about the way that the world works and how collectively we can create something better.

Nellie, Nancy, and Hiram speak about how they acquire psychic rewards from adopting an egalitarian teaching style, distancing themselves from more traditional authoritarian

approaches. They mention how creating space in their practice to "learn from" students and work "collectively" with students, for example, is something that they "hold dear" to their "heart", part of their "ethics".

Ellsworth (1989) asserts that approaches to critical pedagogy like student voice and dialogic teaching "give the illusion of equality while in fact leaving the authoritarian nature of the teacher/student relationship intact" (p. 306). This is because the teacher always has power and privilege, and this can never be transformed or erased. This is emphasized by the fact that educators are "gatekeepers" typically responsible for evaluating students, determining who passes tests and assignments and who fails (see Kleinsasser et al., 1994, p. 118; see also Blanchard and Muller, 2015).

Conclusions: Teaching is More than Ends

In the previous chapter, supported by interview data, I argue that TAs like getting teaching tasks done. This supports Lortie (2002) and followers (i.e., Hargreaves and Shirley, 2009) who represent teaching cultures as "performative" cultures. In this chapter, I extend this argument, proposing TAs like to do teaching activities in ways that support "sustainability values". This underscores how teaching cultures are also value-laden.

In this chapter, I discuss three sustainability values: Caring Values, Inquiry Values, and Critical Values. Caring Values are connected to environmental/sustainability education, centered around building caring relations between people, the planet, and the nonhuman. Inquiry Values are linked to inquiry pedagogy, where the emphasis is on having students' question, discuss, explore, synthesize, analyze, and so forth. Critical Values are associated with critical pedagogy, where the focus is on creating teaching and learning experiences that question and are critical of traditional power relations and hierarchies in classrooms. Students may be receptive to sustainability values and, then again, may resist.

For example, interviewees regularly discuss how they use inquiry methods in their practice but often find students resist these methods. Laura tells me that she asks discussion questions during tutorials but finds "it's difficult to get the students to participate" in discussion. Similarly, Isaiah explains that he finds "it very difficult to put students around a

table and sort of facilitate 50-minutes of conversation because students [...] are not necessarily the most talkative". When students do not respond well to inquiry methods, this makes it difficult for these TAs to attain psychic rewards. In the next and final chapter, I answer the "so what" question about my research, arguing that my study has meaning and practical implications.

Chapter 8: The End or The Beginning

My study is on teaching cultures, with a special interest in the teaching cultures of TAs. Two overarching research questions guide my study:

- 1. What teaching activities do graduate students do as teaching assistants (at a university in southern Ontario), how and why? What "psychic rewards" underpin this teaching?
- 2. When, where, how and to what extent are TAs affected by their broader political and ethical commitments when teaching? How might "psychic rewards" be gained by sustaining these commitments?

These questions consider how teaching cultures are "performative" and "value-based". The first question is concerned with "performative" teaching orientations or rather what teaching tasks TAs accomplish, how and why. The second question refers to ethics and politics in teaching or "value-based" teaching orientations. Emphasis here is placed on a TA's personal political and ethical commitments and how they shape teaching experiences. Psychic rewards are mentioned in both questions. This is designed to get at "the core sentiments" of teaching, to explore how teaching is an emotional experience (see Lortie, 2002, p. 187; see also Hargreaves, 1998, 1999).

This research is based on seventeen one-time, in-depth, individual, semi-structured interviews I conduct with graduate students at a case university in southern Ontario. I interview these graduate students about teaching tasks they perform as TAs, how and why, and how their commitments to environmental/sustainability education shape their teaching. From reviewing interview transcripts, I also find these graduate students have commitments to inquiry pedagogy and critical pedagogy. I use grounded theory principles to analyze interview data. Results are arranged in a didactic model and serve to verify, extend, and refute Lortie (2002) and followers (i.e., Hargreaves and Shirley, 2009).

This chapter is a conclusion to my research but, in many ways, serves as a beginning. Below, I review the results of my study, outline study limitations, and future research directions. I also consider the practical implications of my research. I propose that my study offers TAs and other educators the opportunity to improve their knowledge about teaching and decisions they make about their practice.

Figure 1.5 Didactic Model for Teaching

Psychic Rewards	
Presentism	Endemic
	Adaptive
	Addictive
Conservatism	Quondam
Individualism	Managed
Professional Collegiality	
Caring Values	
Inquiry Values	
Critical Values	

Didactic Model for Teaching

In this study, I arrange research results in what I call the *Didactic Model for Teaching* (see Figure 1.5). This being a didactic model is key. Wickman (2012) states that the objective of didactics is to enhance "the teacher's systematic knowledge base for making decisions about teaching and how to purposefully organize human and material interactions in the classroom" (p. 144). The Didactic Model for Teaching is intended to improve a TA's knowledge about teaching cultures, helping TAs (and other educators) "to be cognizant of the implications of pedagogic choices" (see Dragon, 2015, p. 25). This model illustrates that what educators do in classrooms and other school settings is not random or accidental. Rather it is intentional, methodical, rationalized (see also Hargreaves, 1994b). In other words, there is a science to teaching and educators can benefit from knowing this science.

From interviewing TAs, I find support for Lortie (2002) and followers (i.e., Hargreaves and Shirley, 2009). In the interview data, I find evidence of *Presentism (Endemic, Adaptive*,

Addictive), Conservatism, Individualism, along with variations and extensions of these teaching orientations, what I term: Quondam Conservatism, Managed Individualism, and Professional Collegiality. All these orientations offer a "performative" reading of teaching work and are underpinned by psychic rewards.

Performativity is a neoliberal manifestation. Ball (2012) states, "performativity is the quintessential form of neo-liberal governmentality" (p. 31). Critical theorists often portray performativity as a danger or threat in teaching, establishing "teaching as a skilled and apolitical craft, based on technical expertise" (Reid, McCallum and Dobbins, 1998, p. 251) and turning "the classroom into a space of performance and efficiency" (Portelli and Konecny, 2013, p. 92). However, Ball insists that "performative systems [also] offer us the possibility of being better than we were or even being... excellent... in its own terms" (Ball, 2012, p. 31). Ball explains that when it comes to performativity, it "is not in any simple sense a technology of oppressions; it is also one of satisfactions and rewards, at least for some" (p. 31).

Participants in my study fall into Ball's thinking about performativity. They discuss harnessing enjoyment, satisfaction, happiness, and so on, from completing teaching activities independently, efficiently, productively, and in ways that raise student achievement. This implies that TAs collect psychic rewards from adopting a performative reading of teaching work, showing how neoliberal cultures are part of teaching cultures.

While TAs in my study discuss performing teaching activities, they also talk about teaching in ways that prioritize sustainability values, what I am calling: *Caring Values, Inquiry Values*, and *Critical Values*. In my study, TAs imply that it can be psychically rewarding to uphold sustainability values, revealing that it makes them feel good to support democratic processes, egalitarianism, care in teaching. In other words, these TAs feel like they are making a difference when they promote more sustainable ways of thinking and acting. By TAs gathering psychic rewards from engaging with sustainability ideas (and ideals) shows how sustainability cultures become part of teaching cultures.

As brought up previously, in Chapter Two, sustainability has become a dominant ideology

in higher education. Sustainability is a long-term goal. Assuad (2020) states, "the long-term is an almost ideal space to be imagined... goals are set but not quantifiable in the form of probability distributions" (p. 1110). Sustainability, an inherently political and ethical concept, is about imagining what can be (for present and future generations). It is about chasing a particular future, one based on aspects like relationality, social responsibility, environmental conservation, ethics, critical thinking, civic engagement, anti-authoritarian politics, and anti-racism. There is an abundance of literature on how higher education institutions have introduced sustainability in research, policy, physical operations, and campus activities (e.g., Batisani and Ndiane, 2014; Healy and Debski, 2017). Sustainability has, in essence, changed the daily operations of post-secondary institutions. But most of this change has taken place outside of classrooms.

The literature specifies several reasons for why sustainability politics and ethics are typically absent from higher education courses. Some of these reasons are "few educators are being taught how to teach about sustainability" (Velazquez, Munguia and Sanchez, 2005, p. 386). Also, instructors find it hard "to add sustainability issues to usually dense curriculum" (p. 386). More than this, higher education institutions have academic traditions. McRoy and Gibbs (2009) state that higher education institutions are based on "established academic cultures and modes of behaviour" (p. 690). They say that at "universities... the tension of modernity and tradition are often an issue of power struggles and barriers to change" (p. 696).

Sustainability is generally perceived as positive change and needed more than ever considering the widespread social and environmental problems facing the world today. We are living in times of rampant racial discrimination, xenophobia (e.g., Devakumar et al., 2020), poverty (e.g., Herd, Kim and Carrasco, 2020), sexism (e.g., Bates, 2013), homophobia (e.g., Xu et al., 2017), climate change (e.g., Wong-Parodi and Feygina, 2020), mental health issues (e.g., Opoku-Gyeni, 2019), and a global health care crisis (e.g., Tuyisenge and Goldenberg, 2021). Where do we go from here? Continuing down this path is unsustainable. Being more sustainable is the only way forward. Music like Melissa Etheridge's (2009) "I Need to Wake Up", Elvis Presley's (2018) "If I Can Dream" and of

course, John Lennon's "Imagine" (johnlennon, 2017) helps to get the message across that sustainability is urgently needed.

Since sustainability is value-laden, is it appropriate to teach/expose students to sustainability? Jickling (1992) claims that teaching the concept of sustainability is important but teaching sustainability as a belief system needs to be avoided. "The prescription of a particular outlook" Jickling states, "is repugnant to the development of autonomous thinking" (p. 8). This raises the idea that introducing sustainability through pedagogy and even course content requires a check and balance of sorts. "When looking to the future of sustainability education" Hensley (2017) states, "we must recognize the ethical implications of how curriculum and pedagogy in... education influences the trajectory of future generations" ("A New Story," para. 2).

The didactic model is designed to be read as a complete whole. While the model is split or divided into discussions of performativity, values, and psychic rewards: these discussions need to be considered together, as co-existing in teaching, not separate. The performative or technical educator and the value intended educator is one and the same and (the possibility of) psychic rewards are attached to everything they do. In reference to Hargreaves (1994b), fixating solely on performative orientations can establish teaching as "a narrow, utilitarian exercise"; concentrating exclusively on values or ethics can produce "missionary fervor" (p. 32) and make educators out to be "carping and hypercritical" (p. 33); and focusing entirely on psychic rewards can make teaching "disturbingly narcissistic and self-indulgent" (p. 33). Hargreaves argues that what is important are "the interactions among and integration between" these teaching elements (p. 32).

Practical Implications

In this section, I explore the practical implications for the model. I consider implications for theory, practice, and research.

This model offers various approaches to *theory*. To begin, the model serves to verify Lortie (2002) and followers (i.e., Hargreaves and Shirley, 2009), affirming that teaching cultures are structured around "performative" teaching orientations: Presentism (Endemic, Adaptive,

Addictive), Conservatism, Individualism and underpinned by psychic rewards. This model also includes variations and extensions of these orientations, what I term: *Quondam Conservatism*, *Managed Individualism*, and *Professional Collegiality*. The argument here is that teaching is a "performative" activity, where the goal is for TAs (and other educators) to accomplish teaching tasks and that it is intrinsically or psychically rewarding to do so.

The model also extends Lortie and followers, proposing that how an educator teaches is impacted/affected by their personal political and ethical commitments, or in the case of my research "sustainability values". Here, TAs are shown as focused on the future (long-term goals), placing emphasis on caring relations, democratic relations, civic participation, and so on, when teaching. TAs in my study express how they acquire psychic rewards from incorporating ethics and politics in their teaching that they believe are "right" or good.

Technically, this model can also be read as a refutation, advancing the idea that Lortie and followers are wrong. Instead of conceiving teaching cultures as Presentism, Conservatism, Individualism – teaching cultures can be understood as organized around teaching identities. The model implies that how TAs and other educators teach depends on their identities as short-term thinkers, "gatekeepers" (see Kleinsasser et al., 1994, p. 118), efficient and productive educators, continuity-seekers, critical pedagogues, inquiry teachers, among others. Day et al. (2006) state that "identity is a key influencing factor on teachers' sense of purpose, self-efficacy, motivation, commitment, job satisfaction and effectiveness" (p. 601).

The model provides implications for *practice* in at least three ways. One, this model can be used to reform and develop professional development for TAs. Hargreaves (1994b) explains that PD for teachers usually centers around "knowledge and skill development" and is "neatly packaged in courses, materials, workshops and training programs" (p. 8). However, "moral, political and emotional aspects of teacher development are less well understood and less widely practised" (p. 8). The emergent model grapples with how teaching is more than a technical skill, suggesting it is also an ethical, political, and emotional exercise and this needs to be recognized in PD for TAs. This sounds wonderful, but what would this PD look like? Below I provide an example.

I recommend designing a TA workshop or program where TAs conduct self-audits of their teaching. TAs could start by considering what teaching activities they do, how they do these activities and why. But doing this audit is not enough. It needs to be reflected on. TAs could individually and collaboratively reflect on these results using the emergent didactic model. This model would help TAs analyze their teaching practices – to develop an understanding of how their practices are connected to "beliefs, values, habits and assumed ways of doing things among communities of teachers" (see Hargreaves, 1994a, p. 165). This would enable, referring to Briscoe (2017), "professional learning... to move beyond the acquisition of skills and strategies, and include the critical reflection necessary to deconstruct problematic beliefs and thought-patterns that can impede student learning" (p. 43; original embed).

Two, this model can be used to reform and develop professional development for professors or course instructors. Course instructors work with TAs. But do they truly understand the TA? Do they grasp TA cultures? Do they know how hardworking, brilliant, collegial, managed, and so on, TAs are as educators? Course instructors can use the didactic model to make better decisions or judgements about how they work with teaching assistants.

Three, this model can be used to reform policy and contracts for TAs. A key takeaway from the model is that TAs have varying experiences due to course instructors they work with. The interview data suggests that working as a TA can either be amazing or agonizing. Alice states that one course instructor she worked with basically let her "team teach with her" which was "awesome". Caroline says that her "first teaching experience" involved her having "no flexibility or creativity" which was "uncomfortable". I recommend that as part of their official status, TAs be given (more) opportunities for input and participation. This might include TAs working with course instructors to select course readings, team teach, design course assignments, and so on. This would give TAs more professional experience, making working as a TA more psychically rewarding while offering further assistance to course instructors.

The didactic model also presents opportunities for research. This model could be used in an action research study where the goal is to become more "sustainable" TAs. For example,

TAs could use the model to first identify how their practices are conservative and otherwise unsustainable. Do they teach how they were taught? Do they use the same teaching methods year after year? The aim here would be to consider how to shift away from using traditional methods of instruction by planning, implementing, observing, and evaluating more "sustainable" teaching practices. Again, when implementing sustainable practices, there needs to be a check and balance. TAs might ask: To what extent are these practices really "sustainable"? Do they support equity, diversity, justice, indigenous perspectives? Do they "give rise to repressive myths" (Ellsworth, 1989, p. 297; original embed)? This could be followed by doing the cycle again: plan, implement, observe, and evaluate (see Dickens and Watkins, 1999).

Limitations and Future Directions

While I argue that my study is important (i.e., teaching assistants are marginalized and under-researched in higher education), my research still has shortcomings. In this section, I outline limitations of my study and offer recommendations.

To start, this research involves me using a single data source: interviews. I interview graduate students to develop a better understanding of the responsibilities, duties, commitments, and strategies they adopt as TAs. While Fontana and Frey (1994) state that "interviewing is one of the most common and most powerful ways we use to try to understand our fellow human beings" (p. 361), this method is not without flaws. Yin (2018) states, "interviewees' responses are subject to the common problems of bias, poor recall, and poor or inaccurate articulation" (p. 121). Bias is a very real problem when it comes to interviewing. According to Butin (2010):

Researchers have long noted something called the "response effect bias," where people will tell interviewers what they want to hear. This is not to suggest people lie; it is simply that we modify our answers to be more socially acceptable and in general mute perspectives that are not culturally sanctioned. (p. 97)

It may be beneficial to combine interviews with other methods. In reference to Kunter et al. (2011), it seems valuable to observe an educator (in action) and then interview this educator about their practice. This may reduce the likelihood of poor recall during interviews. For an

example of how both interviews and observations are used in a teaching study, see Taylor and Hikida (2020).

In my present research study, observation was not a technique I employed. There was insufficient time to conduct observations. I recruited participants near the end of the Winter academic term, and, at this point, participants were busy finishing up teaching duties for the semester. Also, when I started interviewing, I soon realized that there was a richness to the interview data that could be used to develop the didactic model and therefore, there was no need for me to collect additional data. Interestingly, Lortie (2002) and Hargreaves and Shirley (2009) both use interviewing in their studies, so I followed their tradition of interviewing. By interviewing participants, what I gain is access to their thoughts on teaching. However, since I do not observe participants, I am unable to draw further conclusions about their teaching practices.

In this research, I interview a small number of TAs [N=17] at a case university in southern Ontario. Participants mainly report having worked in the Faculty of Environmental Studies (59%), followed by the Faculty of Education (29%). Future research might entail recruiting TAs from multiple faculties. This would help "to ensure adequate representation" of TAs across faculties (see Dallaire et al., 2018, p. 843). Also, recruiting TAs from other universities in Canada and elsewhere in the world would be useful, furthering conversations about teaching cultures. As LeGros and Faez (2012) suggest, "What is considered effective teaching varies across cultures, institutions, and disciplines" (p. 7; original embed).

The weakness of the emergent didactic model is that it gives the impression that psychic rewards are guaranteed for TAs. But this is not true. Psychic rewards are not guaranteed for any educator. Since teaching is a relational activity, how an educator feels about what and how they teach is based on how "others" respond to their teaching. As Lortie (2002) explains, "psychic rewards... [remain] scarce, erratic, and unpredictable... vulnerable to the ebb and flow of student response" (p. 211). If students respond well to a lesson, it could leave an educator feeling good about their teaching. But if students show resistance, it could make an educator uneasy or uncomfortable, preventing them from feeling good about their

practice. Future research might focus on the instability of psychic rewards for TAs and other educators.

Final Thoughts

As I write my final thoughts, the future of the world is uncertain. Covid-19 is ongoing (Connolly, 2022). Climate change is becoming a more severe threat (Intergovernmental Panel on Climate Change, 2022). The war between Russia and Ukraine is escalating (Garcia-Navarro et al., 2022). The future seems dark. But then I think of my research and all the wonderful things TAs are doing to create better futures.

TAs in my study discuss helping students reach academic goals, and, more broadly speaking, achieve credentials and qualifications. Doing so helps students enter the labor market. In general, preparing the next generation of laborers is an important goal of education (see Furia et al., 2010; Lauder and Mayhew, 2020).

Beyond the school-to-work transition, TAs I interview describe encouraging students to be caring, critical, curious, independent thinkers, who are politically engaged and open to discussion. The fundamental idea here is that TAs I talk with are concerned with creating a better tomorrow. They promote more sustainable lifestyles, urge students to imagine social and environmental change. These TAs offer hope for a brighter future and hope may be the medicine we need in these dark times.

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Appendices

Appendix A: Informed Consent Form

Study name: Project TA: A Grounded Theory Study of Teaching Assistants and the Politics and Tensions they Associate with their Teaching

Principal Researcher:

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Purpose of the research:

The objective of this research is to learn about experiences graduate students have working as TAs at a university in southern Ontario and the tensions and politics they encounter with their TA work. Data I collect in this research will be presented in my dissertation, a requirement of my graduate program.

What you will be asked to do in the research:

You will be asked to take part in one, roughly 40-minute, informal, open-ended interview with me, the principal researcher involved with this project. This interview will involve you responding to a series of open-ended questions about your experiences teaching as a TA and politics and tensions you encounter in your teaching assistantship. I plan to audio record this interview.

Risks and discomforts:

I do not foresee any risks or discomfort from your participation in the research.

Benefits of the research and benefits to you:

A potential benefit of your participation is that you are given an opportunity to (a) reflect on your experiences as a TA and (b) contribute to the advancement of knowledge about teaching assistants and teaching assistantships. You will also be given a \$20 gift card, of your choice, as a token of gratitude for taking part in this study. A \$20 gift card will be offered to you even if you decide to withdraw from the study.

Voluntary participation:

Your participation in the study is completely voluntary. You may choose to stop participating at any time. Your decision to not volunteer in this research will not influence your relationship with me or the nature of your relationship with York University, either now or in the future.

Withdrawal from the study:

You may stop participating in the study at any time, for any reason, if you so decide. Your decision to stop participating in this study, or your decision to not answer particular questions during the interview, will not affect your relationship with me, York University and/or any other group associated with this project. In the event that you withdraw from the study, all associated data collected will be immediately destroyed wherever possible.

Confidentiality:

Confidentiality will be provided to the fullest extent possible by law. You will remain anonymous in this research.

This research involves me interviewing you. I plan to audio record the interview. I also plan to securely store this audio recording on my personal computer, which is password protected.

I will delete the audio recording of the interview from my computer once I have created a transcription of it. I plan to keep two versions of the interview transcript: a paper version and an electronic version. I plan to store the electronic version of the transcript on a memory stick.

I will handwrite field notes on the interview and keep these notes in a spiral bound notebook.

Field notes, the paper copy of the transcript and the memory stick will be securely stored in a locked filling cabinet for a duration of five years. After five years, I will shred all field notes along with the paper copy of the transcript. I will also remove (delete) the transcript stored on the memory stick.

Only me and my supervisory committee (Dr. Steve Alsop, Dr. Lyndon Martin, Dr. Ray Rogers) will have access to data I collect in this research. I may share portions of interview transcripts and field notes with my supervisory committee and I may quote some of your responses in my dissertation. In addition to this, I may present research findings from this study within other papers and/or publications at York University as well as within other research contexts. However, throughout all of this sharing and quoting of your responses, you will remain anonymous.

Questions about the research? If you have questions about this research or about your role in this study, please feel free to contact me, Melissa Fockler, the Principal Researcher by email at melissa_fockler@edu.yorku.ca. You may also contact Steve Alsop, my Principal Supervisor by phone at (416)736-2100 (ext. 20665) or by email at salsop@edu.yorku.ca. The Graduate Program Assistant in the Faculty of Education (Loretta Fiorini) can also be reached by phone at (416)736-2100 (ext. 22051) or by email at lofi@edu.yorku.ca.

This research has been reviewed and approved by the Human Participants Review Sub-Committee, York University's Ethics Review Board and conforms to the standards of the Canadian Tri-Council Research Ethics guidelines. If you have any questions about this process, or about your rights as a participant in the study, you may contact the Senior Manager and Policy Advisor for the Office of Research Ethics, 5th Floor, York Research Tower, York University, telephone at (416)736-5914 or email at ore@yorku.ca.

, consent to participate in

Legal Rights and Signatures:

Ι

Project TA" by Melissa Fockler. I understand the nature of this project and wish to participate. I am ot waiving any of my legal rights by signing this form. My signature below indicates my consent.		
To be filled out by the Participant:	To be filled out by the Principal Researcher:	
Name of Participant (Print)	Name of Principal Researcher (Print)	
Signature of Participant (Sign)	Signature of Principal Researcher (Sign)	
I consent to be audio recorded during the interview.		
Date	Date	

Appendix B: Arranging for Pilot Interviews (Email Message)

Dear:

You previously mentioned to me that you were interested in taking part in my study on teaching assistants and the "politics" and "tensions" encountered in teaching assistantships. Are you still interested?

- 1. This research would involve you taking part in one interview with me. This interview will be roughly 40-minutes. This interview needs to take place in a quiet space, so I can clearly capture our discussion. Would it be convenient for you to have this interview in a conference room at York University? What days and times are you available to meet next week? To best accommodate you and others I am interviewing, could you please give me a few dates and times that you are available to meet for an interview.
- 2. I plan to audio record our interview. Is this agreeable with you?
- 3. As a token of appreciation, I am offering all participants a \$20 gift card of their choice. What gift card would you like? Please list a few choices, so I can obtain one of your liking.

Please email me at your earliest possible convenience.

Thank you,

Melissa Fockler PhD Candidate, Faculty of Education York University

Appendix C: Participant Recruitment for Full Study (Email Message)

PLEASE FORWARD TO ALL MASTER'S AND PHD STUDENTS

Are you currently a graduate student (at the case university)? Do you have experience working as a TA on campus? Do you have commitments to environmental/sustainability education? I am conducting a research study to learn about TA work experiences and the "politics" and "tensions" TAs encounter in teaching assistantships. I am looking for graduate students (at the case university) who have some (1) experience as TAs on campus and (2) commitments in any way, shape or form to environmental/sustainability education. This research would involve you taking part in one interview with me for roughly 40-minutes. As a token of appreciation, I am offering all research participants a \$20 gift card of their choice.

If you are interested in taking part in this study, email me at: melissa_fockler@edu.yorku.ca

Please forward this message to graduate students within your social network.

Thank you,

Melissa Fockler PhD Candidate, Faculty of Education York University

Appendix D: Background Questionnaire (Email Message)

Dear:	
Prior to our interview on	, please complete the following
questionnaire and email it back to me. An	swer as many questions as you like. Your
responses will be used to develop your pa	rticipant profile.

- 1. What is your name? Asking for you to include your name on this profile is simply to help me, as a researcher, pair any research data I gather from your participation in this research with your participant profile. Your name will not be included in my research study. You will remain anonymous.
- 2. What is your age?
- 3. What is your gender?
- 4. What is your race/ethnicity?
- 5. What is your sexuality?
- 6. Do you identify with having any dis/abilities?
- 7. How would you identify your economic status (e.g., working class, middle class, upper class)?
- 8. What is your level of study (e.g., Master's student)?
- 9. What is your year of study (e.g., 1st year Master's student)?
- 10. When did you last work as a teaching assistant (at the case university)?
- 11. How many months/years of experience do you have working as a TA (at the case university)?
- 12. In what disciplines have you worked as a TA (e.g., traditional face-to-face, online, blended courses)?
- 13. Can you briefly explain your commitments to environmental/sustainability education?

Thank you,

Melissa Fockler PhD Candidate, Faculty of Education York University

Appendix E: Interview Guide

Introduction (6 minutes)	I will be asking you a series of questions about your work as a teaching assistant (at the case university): what you do as a TA, how, and why. I will also be asking you questions about how (if at all) your commitments to environmental/sustainability education impact your teaching. Before we begin the interview, do you have any questions about the study? I would like to begin by having you create a timeline of your TA work history (at the case university). This is so you can refer to this timeline, if need be, throughout today's interview. It will also help me better understand when and where your TA work experiences took place. To help you create your timeline, feel free to refer to the "timeline template" in front of you (see Appendix F).	
Topic 1 (12 minutes)	 Topic #1: TA Duties and Responsibilities Tell me the typical duties and responsibilities you performed, as a TA, in your most recent teaching assistantship? a. PROBE: Why did you perform these duties and responsibilities? What teaching approaches did you use to perform this work? b. PROBE: Why did you use these teaching approaches? c. PROBE: What guided how you taught? 	
Topic 2 (6 minutes)	 Topic #2: TA Comfort Feel free, as we proceed with the interview, to talk about any courses that you have worked in as a TA at the case university. What teaching approaches are you most comfortable using as a TA? a. PROBE: Why do you associate being most comfortable with these approaches? What teaching approaches are you least comfortable using as a TA? b. PROBE: Why are you uncomfortable with these approaches? c. PROBE: If you are uncomfortable using these approaches, why do you use them? 	

Topic 3 Topic #3: TA Struggles (10 minutes) What teaching methods do you struggle with or find difficult as a TA? Struggles: PROBE: Why? b. c. PROBE: Do these struggles have anything to do with the course instructor(s) you work with? Why or why not? Topic 4 Topic #4: TA Commitments (10 minutes) 1. Take a few minutes to review the commitments you shared with me on your background questionnaire (see Appendix D). 2. Do you feel your commitments impact your teaching? PROBE: Tell me how your commitments impact your teaching. In what sense? Why? Why not? 3. Do you believe your commitments should impact your teaching? Why? Final I asked all the questions I planned on asking. Thoughts (3 minutes) 1. Is there anything else you would like to discuss? 2. Please be aware that I may contact you, via email, if I need you to clarify something that you said during the interview. The email contact I have for you – is this your preferred email address? Also, in case I cannot get in contact with you via email, do you mind giving me your phone number? 3. Do you know any other graduate students who have TA work experience and commitments to environmental/sustainability education? If so, could you tell them about my study? Thank you!

Appendix F: Visual Timeline of TA Work History (Handout)

When creating your timeline, think about the following questions:

- How many courses have you worked in as a TA?
- What types of courses did you work in (e.g., blended, online, traditional face-to-face)?
- What typical duties and responsibilities did you perform in these courses?
- What academic departments or faculties were these courses associated with?
- What course instructor(s) did you work with (use pseudonyms)?

Appendix G: Field Note Template

ate:	Time:	Location: _	Interview With:
Before the In	nterview (e.g., Wh	ere does this inter	view take place? Are there any distractions?)
Point Form	Notes		Expanded Notes
During the I	nterview (e.g., Wh	nat follow-up ques	tions do you want to ask?)
Point Form	Notes		Expanded Notes
		t are your overall u collect pertinent	thoughts and feelings about the interview? Who
Point Form	Notes		Expanded Notes

^{*}This field note template was inspired by Harrell and Bradley (2009).

Appendix H: Sample Interview Excerpt (End-Section)

Albert, April 11, 2017

Melissa: Do you feel your commitments impact your teaching?

Albert: Absolutely they did so because of the fact that my political/ideological leanings are that a) I don't think that enough people truly understand the issues inherent in the idea of climate change or the idea of habitat destruction and so on. There is this very disjointed understanding of all these things taking place taking place in separate kingdoms somehow – that climate change happens in the air and that habitat destruction happens in the forest and that these things have no correlation to economic instability and social injustice and, you know, feminist movements and all these different things. There is a distinct lack of understanding the interconnections between all these different things: that somehow ecologists are just ecologists that work with the trees and the plants and the life and then there is the social scientists that go around striking and fighting for human rights and so on. But at the core of it all it's all part of the same thing. And so, needs to be, you know, for me it was important for me to really relate to the students how insane of a climate we're now in politically, economically, physically, all kinds of things. So, an actual true understanding of what these things mean and what these things imply and be that, you know, there are many correlations between a lot of different things. And to be, you know, "an environmentalist" or "a social scientist" does not necessarily mean that you're not, that your efforts aren't going to change these overarching issues. That you need to understand that if your passion is, you know, like volunteering at the daily food bank or whatever that there is an inherent connection there to climate. You don't need to be, you know, a scientist researching whales and that's the only way to be an environmentalist or whatever. There is a larger thing out there. That there are different ways you can apply your skills and your understandings and your perspective to this huge issue. And yes, so, it definitely [impacted] the way that I approached my teaching because I approached my teaching with a sense of urgency and a sense of needing the students to understanding what I am saying and understand what is being taught by them by the professor because it's you know a really immediate thing to know and to learn about.

Melissa: I was wondering if you could tell me again... in what sense do your commitments impact your teaching?

Albert: Well I think, as I just said, partly it added a sense of urgency to my teaching methods because of the fact that, you know, learning about all of these different issues on a global scale in terms of political strife, inequality, economic concerns and mostly climate change – that learning about all these different things really lit a fire under me to make sure that as many people as I could get my voice out to understood that these issues exist and that these issues are happening now and affect all of us, you know, unequally. And ya, it definitely added a sense of pressure and a sense of urgency and a sense of coming up with ways that I could get these concepts to absorb into my students as quickly as possible, as impactfully as possible, needing to come up with ways that really helped these students absorb these concepts almost on the fly. Because I only have 50-minutes a week with a

particular group and I need to make sure that they walk away having learned something about this, having realized something deeper about this because there is very little time and I need to come up with as many as quick and efficient ways to get them to understand as I possibly can.

Melissa: You mentioned earlier that you used statistics. Did you use any other methods?

Albert: Ya, I mean, I would talk about issues of the day and sort of ground them or relate them to concepts that we discussed, you know, a particular political regime taking over a certain part of the world or a different country and so on. And how that actually fits in with this overall picture was another way that I tried to approach the students. Or that I would ask them, you know, "Hey, tell me anything interesting you learned in the last week or so..." Somebody would have animal news. Or somebody would have something to do with an extinction. Or somebody would have something to do with a new type of technology or whatever. And then, you know, getting the students to really engage with that topic, but from the lens of the things that we had learned, you know, "So, the extinction of the black rhino: How does that fit in with what we have talked about in terms of feminism? Does it relate and how does it relate?" You know, getting that sort of contextualization on an often [inaudible] was key as well, ya.

Melissa: Do you believe your commitments should impact your teaching? Why?

Albert: That's a very good question. Should it impact? I would say that in an academic context it should not because you should be, you know, sort of the stoic scientist that just teaches the material in kind of moves on. Because I mean, the only reason I say that because my political/ideological leanings tend to fit well within the Faculty I'm in and fit well within the academic sphere that I'm in. But if I had political and ideological leanings that were, you know, xenophobic or racist in some way or classist or sexist in some way and I was teaching based in those constructs, that's a slippery slope. Because you cannot really differentiate saying, "Well your ideological leanings are fine, and your ideological leanings aren't". Maybe you can, in an ideal world you could. But in a giant academic construct where everyone is trying to do the same job it's tricky. But at the same time in my personal case, knowing the science that affect my political and ideological leanings, knowing the government and legislative issues that really impact and being having documented by, you know, highly respected groups of people and being supported by my Faculty itself as well... these aren't ideas that are, you know, are out there. It's almost my responsibility to make sure that students understand the urgency of these factors that they are studying because of the fact that unfortunately there isn't really a lot of time for debate on some of these things because they are happening now. They are occurring on a global scale. They are affecting many, many people. They are hurting many, many people. They are impacting global decisions. So, you know, for me to stand back, you know, and say, "It's kind of an openended question this whole idea of climate change or this idea of economic inequality... jury is still out" is a disservice of all the work that has been done in these fields before me. On the flip side of things, if I was to hold some kind of, you know, political ideology that suggests that one religion was better than the other or whatever – one group of people was better than another group of people, there is plenty of research to the contrary to that, right?

There is plenty, there is a lot of science, social science, political science that flies in the face of those widely held beliefs. And so, I feel like whatever your ideologies are, and whatever your teaching, you should be able to back them up. And that's a huge part of how I approach my teaching. I need to make sure that I am not just saying stuff because the professor said this stuff and I'm now repeating it. I need to make sure I can back this up. I need to make sure that I can ground this. I need to make sure that the students understand there are facts to back these things up. There are statistics to back these things up. That there are actual global phenomena to back these things up. This isn't, you know, I'm not just making these things up because I am a guy that likes to hug trees. Students need to understand that this is based in real research and hundreds of thousands of people who have done work in these fields. So, you know, should it impact my particular experience? I think so. If you try to generalize that rule, I think it becomes tricky, but not impossible.

Appendix I: Participant Profiles

Below I include a profile on each participant who took part in my full study research. For confidentiality, I refer to each participant by a pseudonym. To develop these profiles, I asked each participant to fill in a background questionnaire. See Appendix D for a copy of this questionnaire.

Charles, 27, a PhD student, has 7 months of TA work experience at the case university. He has worked in traditional, in-person, environmental studies courses. He identifies as a White, heterosexual male, with a dis/ability. He does not disclose his economic class. He has broad political/ideological commitments to land pedagogy, anti-oppressive politics, and challenging human exceptionalism (and exemptionalism). Charles last worked as a TA during the Winter 2017 academic term.

Caroline, 46, a PhD student, has 16 months of TA work experience at the case university. She has worked in traditional, in-person, education and liberal arts courses. She identifies as a White, sexually fluid female, with a dis/ability. She discloses being between working and middle-class. Caroline has broad political/ideological commitments to environmental/sustainability interrelationships. Caroline last worked as a TA during the Winter 2017 academic term.

Mary, 32, a PhD student, has 20 months of TA work experience at the case university. She has worked in traditional, in-person, and blended education courses. She identifies as White, heterosexual, female, and upper middle-class. Mary's broad political/ideological commitments are to veganism, feminism, and environmental education. Mary last worked as a TA during the Winter 2017 academic term.

Albert, 24, a Master's student, has 8 months of TA work experience at the case university. He has worked in traditional, in-person, environmental studies courses. He identifies as Pakistani Indian, heterosexual, male, and working-class. Albert's broad political/ideological commitments are to understanding climate change and environmental destruction from an interdisciplinary perspective. Albert last worked as a TA during the Winter 2017 academic term.

Nellie, 45, a Master's student, has 8 months of TA work experience at the case university. She has worked in traditional, in-person, education and liberal arts courses. She identifies as Black/Jamaican, heterosexual, female, and working-class. Nellie's broad political/ideological commitments are to environmental conservation, life-long learning, and anti-oppressive politics. Nellie last worked as a TA during the Winter 2017 academic term.

Nancy, 44, a PhD student, has 36 months of TA work experience at the case university. She has worked in traditional, in-person, environmental studies courses. She identifies as Latinx, bisexual, female, and working-class. Nancy has broad political/ideological commitments to anti-colonialism. Nancy last worked as a TA during the Winter 2017 academic term.

Nels, 28, a PhD student, has 20 months of TA work experience at the case university. He has worked in traditional, in-person, online, and blended natural science and engineering courses. He identifies as White, heterosexual, male, and middle-class. Nels's broad political/ideological commitments relate to issues concerning race and racism, Indigenous sovereignty, feminism, environmental racism, and eco-justice. Nels last worked as a TA during the Winter 2017 academic term.

Harriet, 34, a PhD student, has a little over 32 months of TA work experience at the case university. She has worked in traditional, in-person, environmental studies courses. She identifies as Iranian, heterosexual, female, and working-class. Harriet's broad political/ideological commitments include anti-capitalist, anti-neoliberalist, anti-imperialist, and anti-colonialist beliefs/ideas. Harriet last worked as a TA during the Winter 2017 academic term.

Ruthie, 48, a Master's student, has about 4 months of TA work experience at the case university. She has worked in a traditional, in-person, environmental studies course. She identifies as Persian, heterosexual, female, and middle-class. Ruthie's broad political/ideological commitments are to political activism. Ruthie last worked as a TA during the Winter 2017 academic term.

Hiram, 29, a PhD student, has 32 months of TA work experience at the case university. He has worked in traditional, in-person, environmental studies courses. He identifies as White, heterosexual, male, and working-class. Hiram's broad political/ideological commitments are to anti-authoritarian, anti-oppressive, anti-capitalist, anti-colonial, anti-racist, feminist politics, and environmental intersections. Hiram last worked as a TA during the Winter 2017 academic term.

Lars, 28, a PhD student, has 16 months of TA work experience at the case university. He has worked in traditional, in-person, liberal arts courses. He identifies as White, heterosexual, male, and middle-class. Lars' broad political/ideological commitments are to eco-socialism. Lars last worked as a TA during the Winter 2017 academic term.

Almanzo, 29, a PhD student, has 24 months of TA work experience at the case university. He has worked in traditional, in-person, and blended education and liberal arts courses. He identifies as White, bisexual, male, and working-class. Almanzo has broad political/ideological commitments to veganism, multi-species education, animal care/care-based ethics, and learning with farmed animals. Almanzo last worked as a TA during the Winter 2017 academic term.

Laura, 35, a PhD student, has 24 months of TA work experience at the case university. She has worked in traditional, in-person, environmental studies courses. She identifies as White, heterosexual, female, and working-class. Laura's has broad political/ideological commitments to challenging human exceptionalism and to recognizing the ethical dimensions of environmental conservation. Laura last worked as a TA during the Winter 2017 academic term.

Alice is a PhD student with 40 months of TA work experience at the case university. They have worked in traditional, in-person, and blended education courses. Alice does not disclose gender, age, race, economic status, sexuality or whether they identify as having a dis/ability. However, they do identify having broad political/ideological commitments to feminism, anti-racism, anti-homophobia, anti-transphobia, and social environmentalism. Alice last worked as a TA during the Winter 2017 academic term.

Isaiah, 27, a PhD student, has 8 months of TA work experience at the case university. He has worked in traditional, in-person, environmental studies courses. He identifies as White, heterosexual, male, and working-class. Isaiah has broad political/ideological commitments to environmental education. Isaiah last worked as a TA in the Fall 2016 academic term.

Grace, 32, a Master's student, has 4 months of TA work experience at the case university. She has worked in an online environmental studies course. She identifies as mixed race, bicurious, female, and working-class. Grace has broad political/ideological commitments to critical pedagogies that are anti-oppressive (e.g., anti-racist, feminist) and foster awareness and connectedness of social and ecological systems. Grace last worked as a TA in the Summer 2016 academic term.

Rose, 31, a PhD student, has 16 months of TA work experience at the case university. She has worked in traditional, in-person, and online environmental studies and liberal arts courses. She identifies as Punjabi/Tamil, heterosexual, female, and working-class. Rose has broad political/ideological commitments to environmental justice, environmental health, reproductive justice, racial justice, and Indigenous sovereignty. Rose last worked as a TA during the Winter 2017 academic term.