# IS PLAGIARISM AN ISSUE IN GRADUATE EDUCATION?

# AN EXAMINATION OF TWO GRADUATE PROGRAMS

By

Brandy L. Usick

A thesis submitted to the Faculty of Graduate Studies

In Partial Fulfillment of the Requirements

For the Degree of

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Post-Secondary Studies Division

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THE UNIVERSITY OF MANITOBA

FACULTY OF GRADUATE STUDIES

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A Thesis/Practicum submitted to the Faculty of Graduate Studies of The University of Manitoba in partial fulfillment of the requirements of the degree of

MASTER OF EDUCATION

Dedicated

to my parents, Arlette and Brian Usick,

and to my grandparents, Anne and William Johnson.

I deeply appreciate their love and encouragement.

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## Abstract

Although plagiarism is a growing concern within higher education, this issue is rarely examined in the area of graduate education, where students are expected to already know how to avoid plagiarism. Given the severe consequences for plagiarism at the graduate level, graduate students face some unique challenges with respect to assumptions made about their writing, research and referencing skills. The purpose of this study was to examine how knowledge about plagiarism is understood, communicated and implemented at the graduate level.

Twenty-two participants (6 graduate students, 3 faculty members and 1 administrator from each of two departments, and a representative from both the Faculty of Graduate Studies and a Student Affairs office) took part in 60-90 minute one-on-one interviews that included the analysis of a case study. In addition, documents identified as relevant by participants were analyzed for information relevant to plagiarism.

Participants were asked about their own conceptualizations of plagiarism and how they operationalize that understanding in their day-to-day academic work. Participant's understandings and descriptions of plagiarism revealed ambiguity about the application of rules (e. g. group work, common knowledge and use of unpublished work). Intellectual property issues, particularly the ownership over collaborative research and when to share or safeguard work were raised. Graduate students faced these challenges, in part, because there is limited discourse about plagiarism in their respective departments. Consequently, the role of feedback on written work played a crucial role in communicating disciplinary writing and referencing conventions. Both departments revealed a preference for

handling cases at informal level. Perceptions about a plagiarizing student's intentions, personality and academic performance may influence how a case is handled within the department.

Suggestions for graduate-level plagiarism education include initiating conversations about plagiarism and related matters in both formal (department orientations and workshops) and informal (conversations in class and within advising relationships) ways. Suggestions for policies include articulating the department's practice for handling cases of plagiarism consistent with formal policy and to create a departmental document pertaining to authorship and intellectual property issues.

...graduate and professional students do not passively respond to specific situations; rather, they actively extract clues to their behavior and continually evaluate themselves in the context of peers, faculty mentors, program expectations, and personal goals.

(Weidman, Twale & Stein, 2001, p. 18)

# Chapter One

## Introduction

Academic Integrity is at the core of the scholarly enterprise and as such, it is a principle strongly adhered to by members of the academic community. Unfortunately, there is limited discourse on campuses and in classrooms about this issue (Taylor, Usick, & Paterson, in press) and behaviour incongruent with academic integrity has been flourishing within universities (Groark, Oblinger, & Choa, 2001; McCabe & Drinan, 1999; Mullens, 2000). The prevalence of plagiarism and cheating among undergraduate students has been confirmed across disciplines (e.g. Diekhoff et al., 1996; Haines, Diekhoff, LaBeff, & Clark, 1986; McCabe, 1992; McCabe & Trevino, 1996; McCabe, Trevino, & Butterfield, 1999). Professional schools have also been the subject of investigation producing evidence of academic dishonesty in fields including business (McCabe & Trevino, 1995); medicine (Rennie & Crosby, 2001); and nursing (Gaberson, 1997). Sadly, even faculty members are not immune from incidents of academic dishonesty (e.g. Mawdsley, 1994; E. J. Saunders, 1993; Smallwood, 2002).

Within the last decade, the university community has shown a growing concern about academic misconduct (Lytton, 1996), and in particular, plagiarism. A search on the Chronicle of Higher Education electronic database from 1990 to June 2004 yields 272 matches for 'plagiarism' and 292 for 'cheating'. The general media has also been attracted to this matter, particularly the scandals (e.g. Kleiss, 2004) and issues related to the Internet (e.g., Hickman, 1998; Lunney, 2000). In addition to plagiarism and academic

integrity being topics for editorials and newspaper articles, they have also been a focus for research (e.g., Diekhoff, et al., 1996; Haines, et al., 1986; McCabe, 1992; McCabe & Trevino, 1996; McCabe, Trevino, & Butterfield, 1999).

Why is plagiarism receiving all of this attention? Donald McCabe, a prolific researcher in the area of academic integrity, has conducted a number of surveyed-based studies in order to ascertain the prevalence of dishonest behaviour within university and colleges in the United States and more recently in Canada.

In 2002 and 2003 Donald McCabe and Julia Christensen-Hughes led a large online survey study involving eleven Canadian universities (Hughes & McCabe, 2003). In total there were 18,816 respondents (first year, undergraduate and graduate students, faculty, and teaching assistants). The graduate student participants (n=1,318) self-reported engaging in the following behaviours at least once during the past year: "copying a few sentences from a print source without footnoting (24%) and "copying a few sentences from an Internet source without footnoting" (22%). 47% of the participating graduate students reported that they perceived the frequency of plagiarism in written assignments to be "often" or "very often". These statistics provide evidence that plagiarism is not only an undergraduate student issue.

The issue of plagiarism within higher education is exacerbated by the fact that the responses of faculty to incidents of dishonesty have been reported as inconsistent (Taylor, et al., in press), in part because some faculty are reluctant to deal with a case because they fear they will not be supported by the administration (Bailey, 2001; Schneider, 1999).

The high incidences of plagiarism together with inconsistencies in institutional responses constitute a serious issue for the contemporary university.

Many aspects of academic work rely on building on the work of others, and appropriately acknowledging this work is at the core of academic integrity. For educators within universities, plagiarism is of interest not only because it erodes the integrity of academic work and credentials, but also because it has a high remedial potential. Students can be shown how to avoid plagiarism through developing sound research, referencing and paper writing strategies.

When considering academic integrity within the university context, one must appreciate the complicated web of definitions, policies and expectations that characterize the discourse. In this study, academic integrity refers to those values and policies that guide behaviours with regard to academic work. Often times, academic integrity is defined by what it is *not*, that is, simply the explanation of its antonym, academic misconduct or dishonesty. Included in these definitions is the explication of the typified behaviours of academic dishonesty: cheating, plagiarism and fraud. The following section will provide an overview of the important concepts, starting first with the intellectual property and the various forms of protection it affords. The issue of plagiarism will then be introduced and it will be explained with respect to how it ties into intellectual property, specifically its relationship to copyright. Based on an understanding of intellectual property, academic integrity will be defined in broad idealistic terms, and the emergence of modern day university policies on academic integrity will be reviewed.

Finally, and within this broader conceptual context, the particular challenge faced by graduate students with respect to plagiarism will be identified.

*Intellectual Property*

In Canada, the governing body for intellectual property (IP) issues is the Canadian Intellectual Property Office (CIPO), which is affiliated with Industry Canada. CIPO defines IP as "a form of creative endeavour that can be protected through a trade-mark, patent, copyright, industrial design or integrated circuit topography" (Canadian Intellectual Property Office, 2001a, Glossary of Intellectual Property Terms, ¶ 7). The CIPO (2001b) provides the following definitions for each of these five forms of IP:

- Patents cover new inventions (process, machine, manufacture, composition of matter), or any new and useful improvement of an existing invention;
- Trade-marks are words, symbols or designs (or a combination of these), used to distinguish the wares or services of one person or organization from those of others in the marketplace;
- Copyrights provide protection for artistic, dramatic, musical or literary works (including computer programs), and three other subject-matter [types] known as: performance, sound recording and communication signal;
- Industrial designs are the visual features of shape, configuration, pattern or ornament (or any combination of these features), applied to a finished article of manufacture;
- Integrated circuit topographies refer to the three-dimensional configurations of electronic circuits embodied in integrated circuit products or layout designs. (What is CIPO? ¶ 2)

A trade secret, another form of IP (Erler & Phillips, 1995) is knowledge unique to an organization or business that is safeguarded, or revealed in a limited manner to external companies.

Erler and Phillips (1995) in their paper on intellectual property issues in graduate education, referred to Ryerson University's policy on IP because it clearly used an example to demonstrate how these different forms of IP fit together:

> "FANTASTIK" spray cleaner. The written material on the label is protected by copyright, the shape of the bottle by industrial design, the name by a trademark, and the sprayer by a patent. The cleaning formula would be a trade secret. (Ryerson University, 1989, 2.3.1 Forms of Intellectual Property. ¶ 6).

The need to introduce the topic of intellectual property within a study examining plagiarism is important because the two share a common characteristic, the taking of someone's ideas without giving due credit. McSherry (2001) explains how a violation of a form of intellectual property, copyright, differs from plagiarism in terms of the nature of the infraction. A violator of copyright may not have intentionally stolen an idea, but that does not mediate his or her responsibility because, ultimately, the consequence of copyright is an economic one (McSherry, 2001). In contrast, cases of plagiarism are normally assessed on the intentionality of the behaviour.

*Plagiarism*

Plagiarism is a particular form of violation of intellectual property rights. The 'Academic Integrity" policy at the University of Manitoba, provides the following definition of plagiarism:

> To plagiarize is to take ideas or words of another person and pass them off as one's own. In short, it is stealing something intangible rather than an object. Plagiarism applies to any written work, in traditional or electronic format, as well as orally or verbally presented work. Obviously it is not necessary to state the source of well known or easily verifiable facts, but students are expected to appropriately acknowledge the sources of ideas and expressions they use in their

> written work, whether quoted directly or paraphrased. This applies to diagrams, statistical tables and the like, as well as to written material, and materials or information from Internet sources.
> To provide adequate and correct documentation is not only an indication of academic honesty but is also a courtesy which enables the reader to consult these sources with ease. Failure to provide appropriate citations constitutes plagiarism. It will also be considered plagiarism and/or cheating if a student submits a term paper written in whole or in part by someone other than him/herself, or copies the answer or answers of another student in any test, examination, or take-home assignment. (U of M, 2003, ¶ 2-5)

This above policy uses the phrase "intangible rather than object" when defining plagiarism. It is this notion that explains why some acts of plagiarism cannot also be considered copyright violations. It is an idea-expression dichotomy (personal communication, Al Formosa, November 5, 1999). Copyright concerns only the expression or the material output of an individual's idea (i.e. the text, musical score or computer program). Plagiarism, however, encompasses both ideas and the expression of ideas. An example to illustrate this transplants plagiarism out of a legal context and into the "moral law of scholarship and academe" (Kennedy, 1997, p. 214).

D. Saunders (1993) made a similar observation: plagiarism "is not necessarily a legal matter, it is an ethical matter of honour (or shame) and professional standing" (p. 28). Thus, a broad conceptualization of plagiarism contributes to the complexity of the phenomenon in practice.

Another complicating factor is how the Internet has changed the way individuals knowingly and unknowingly violate copyright law (Mann, 1998). The digitizing of information has resulted in a clash of perspectives and perceived rights of all those involved: "authors want to be paid for their work, users want it for free; authors insist

their work remain exactly as they created it, users want to use it however they please" (Fujita, 1996, ¶ 49). One issue within higher education is how the Internet has altered students' understandings and practices with respect to plagiarism. This is especially true for those who began to interact with the web at an earlier age (McCarroll, 2001). Based on this premise, Connolly (1997) wonders if it is the responsibility of universities to educate students on what it means to be a good "net citizen". Given this shift in our understanding of plagiarism as an ethical issue it is essential that plagiarism be situated in the larger context of academic integrity.

*Academic Integrity Policies*

A significant criticism of academic integrity policies with respect to faculty and students is not what is in the policies, but what is missing. Frequently these policies fail to explicate a list of guiding principles (Steneck, 1994) or to highlight desired behaviours and values (Center for Academic Integrity, 1999).

One body that is working to identify such a set of guiding principles is the Center for Academic Integrity (CAI), founded in 1992. The CAI is a consortium of 405 colleges and universities (20 of which are Canadian post secondary institutions) brought together because of their shared concern about academic dishonesty. The Centre's mandate is to provide guidance and support to educational institutions that are interested in creating a climate which fosters academic integrity. In 1999, the Centre undertook the task to "define a set of fundamental values of academic integrity; identify and describe policies and practices that support and sustain these values; and distribute the project's

conclusions and recommendations" (p. 11). The subsequent document, "The Fundamental Values of Academic Integrity" highlights honesty, trust, fairness, respect and responsibility as values and standards that the entire university community strives to uphold. The CIA feels it is imperative that academic institutions continuously communicate these values within conversations held amongst members and that this dialogue be supported by the institution's network of policies and procedures with regard to academic integrity.

*University Policies*

Despite academic integrity's significance to academia, it was only during the 1990's that most Canadian universities formalized policies on academic integrity (Lytton, 1996). Canadian universities were first introduced to formal academic fraud policies—falsification, fabrication and plagiarism—by the US research granting agency, the National Institutes of Health [NIH] (Lytton, 1996). If Canadian universities were to continue to receive funds from NIH funds, they were obligated to follow NIH's regulations and guidelines for investigating academic fraud (Lytton, 1996).

Canada's three federal funding agencies the Medical Research Council (now the Canadian Institutes of Health Research [CIHR], the Natural Sciences and Engineering Research Council [NSERC] and the Social Sciences and Humanities Research Council [SSHRC]—collectively referred to as the Tri-Council—issued the "Tri-Council Policy on Integrity in Research and Scholarship" in January 1994 (Lytton, 1996; CIHR, NSERC, & SSHRC, 1999, 2000). This document was sent to all Canadian universities with the

expectation that institutions were "to put in place procedures and policies in these matters by July 1995, with a warning that institutions that did not comply may not be eligible for future funding by the Councils" (Lytton, 1996, p. 229-230).

Similarly to Canada, the United States' government granting agencies had a direct hand in ensuring academic integrity policies were created (Steneck, 1994). The main contributing factor for the reluctance of universities to create such policies themselves was "the widespread belief that error and fraud could be detected and corrected by the scientific community ...[and therefore]... continued to feel no pressing need to institute policies and procedures for dealing with scientific fraud" (Steneck, 1994, p. 311).

Unfortunately, the policies that have been produced are not being applied consistently and effectively (see for example, Kennedy, 1997). Perhaps this is not surprising, given that the incentive for universities to create these policies was to ensure continued financial support from the national granting offices. They were not generated because the university research community felt it prudent to do so. Undoubtedly, these policies are necessary, but the real dilemma is how to implement the policies such that cases are dealt with fairly and consistently (Kennedy, 1997).

### *Plagiarism in the Graduate Student Context*

Perhaps because they are situated at the student-researcher nexus, graduate students are in a particularly vulnerable position when it comes to academic integrity matters. Graduate students are often expected to know how to avoid plagiarism prior to entering their graduate programs. However, if a graduate student is not knowledgeable in

this area, the personal nature of the graduate learning experience may make it difficult to ask for assistance about appropriately referencing the ideas and written work of others. At the same time, the stakes are high for graduate students who plagiarize inadvertently or purposefully; graduate students are likely to be disciplined more harshly than undergraduate students if they are found to have plagiarized.

In addition to using the intellectual work of others, graduate students are creators of intellectual property (Erler & Phillips, 1995). One particularly sensitive area is when a graduate student's own intellectual property is exploited by a supervisor. Erler and Phillips (1995), in their report on behalf of the Canadian Graduate Council (now called National Graduate Council), explain the power imbalance differential in the advisor-student relationship and raise a host of issues that graduate students face should they wish to protest. Erler and Duncan highlight the following elements of a graduate student's education that a supervisor could have (negative) influence over, should he/she wish to retaliate against a complaint: funding, program and thesis evaluation, networking and conference opportunities, and letters of recommendation.

Thus, the issue of "whistleblowing" within institutions of higher learning is a complex topic and one that is especially troublesome for graduate students who are in the lower echelons of a department. Cases that have been reported in the media (e.g. Smallwood, 2002) demonstrate that universities do not necessarily take allegations seriously. Failure to do so often leaves the whistleblower in a worse position than prior to making the decision to come forward.

These issues point to some of the challenges in creating academic fraud policies governing research activities carried out by academic staff, and by graduate students in particular. In fact, academic fraud policies normally do not pertain to undergraduate or graduate students. Instead, there is usually a student policy on academic integrity or the issue of academic integrity is considered as part of a student code of conduct. However, like the academic fraud policies, those academic integrity policies governing graduate students are not without their own share of own difficulties when it comes to fair and consistent application. For example, a significant issue is the number of faculty members who choose to deal with student cases outside university or faculty polices, creating a policy versus practice tension (McCabe, 1991; Schneider, 1999; Taylor et al., in press). Taken together, these issues point to the complex context in which plagiarism education and discipline take place, and the particular challenge faced in the graduate level teaching and learning experience.

The preceding chapter outlined the larger policies and issues that form the context for an investigation of the phenomenon of plagiarism in a contemporary university. It is this context which mediates to some degree the actions of institutions and individual members in the university community with regard to intellectual property and plagiarism. One constituency within this community that faces some unique challenges with respect to plagiarism is graduate students. For this reason, the present study focused on understanding how graduate students understand and apply the concept of plagiarism in their academic work. The next chapter will focus on a review of the literature on plagiarism with the goal of elucidating the graduate student situation.

# Chapter Two

## Literature Review

The literature related to plagiarism focuses on three distinct groupings within the university community: undergraduate students, students in professional schools and faculty members. Each of these groups face unique plagiarism issues. With respect to undergraduate students, one concern is the deficiency in referencing skills (Roig, 1999), for example, not knowing how to incorporate outside sources and appropriately cite them within essays or research papers. Another issue typically studied at length only within the undergraduate population, are the reasons why students are academically dishonest (Diekhoff, et. al, 1996). The second group, professional schools, tend to see academic dishonesty as a professional unsuitability concern and subsequently, the consequences might be more severe because of the concern that unethical behaviour in one area could lead to transgressions in another (Gaberson, 1997; Vogelsang, 1997). And thirdly, faculty academic dishonesty tends to involve intellectual property issues (Mawdsley, 1994), for example taking sole credit for research when it was collaborative effort.

Classifying these types of issues as belonging to undergraduates, professional school students or faculty might be seen as over generalization. However, this delineation does provide an opportunity to point out the complicated situation graduate students face with regard to plagiarism. Graduate student issues are not typical to any one of these three groups, but involve aspects of all three, which often blend to create difficult dilemmas. For example, a graduate student might be deficient in proper referencing

skills, but the expectation is that all graduate students should be and are proficient in this area. Graduate programs (outside of those found within actual professional faculties/schools) typically are not considered 'professional' degrees. Yet, the expectation is that graduate students are colleagues in training or junior researchers, in other words academic professionals and thus, any academic misconduct charge will be dealt with severely.

Given the limited empirical research on graduate students and plagiarism—only a few studies were found (for example Love & Simmons, 1998; Fly, van Bark, Weinman, Kitchener, & Lang, 1997)—the literature review that follows will examine those issues that contribute to the conceptualization of plagiarism at the graduate level. First, consideration will be given to understanding plagiarism and, specifically, the types of plagiarism and factors that contribute to the decision to plagiarize. Second, the implications of plagiarism within professional programs are explored from a professionalism perspective. Third, faculty plagiarism and issues that arise out of research at the graduate level are discussed. Finally, the context of graduate education, the academic or institutional culture, is considered with regard to plagiarism. The chapter concludes by highlighting the research objectives.

*Understanding Plagiarism*

Plagiarism is considered one of the most severe of academic offences as it involves taking the product of someone else's scholarly work. Although plagiarism is but one type of academic dishonesty, it is one that presents the most problems in terms of its

identification, increasing incidence and consensus on how to treat a case once it arises (Taylor et al., in press).

Within the literature, it has been identified that faculty disagree about what constitutes plagiarism when it comes to their own colleagues who have been accused (Mooney, 1992). This uncertainty carries over to understanding plagiarism when dealing with student cases (Howard, 2000). Administrators, faculty and students within the university community are likely able to provide a textbook definition for plagiarism when asked (Taylor et al., in press), which normally includes a phrase like "taking someone else's work and passing it off as one's own". However, when asked for elaboration, understandings vary across individuals and situations and clarification is required.

*Types of Plagiarism*

Wilhoit (1994) contends that because plagiarism "encompasses a wide variety of errors in academic writing" (p. 161) it remains a pervasive issue. These behaviours range from inadvertent to deliberate forms of dishonesty. These "errors" are presented below, from the least to the most serious acts.

*Improper referencing.*

This form of plagiarism normally entails a student who has made an effort to cite the original author but elements of a proper reference are missing. For example, plagiarism can involve an attempt at paraphrasing that runs too close to a direct quotation or paraphrasing a number of ideas from a source and placing the in-text citation only at the end of the paragraph rather than after each idea that has been restated. A more serious

case involves a student directly quoting material without the use of quotation marks, but including the in-text citation (thus, taking the expression of the idea but not the idea).

Such cases might be due to a deficiency in the students' understandings of the rules of referencing and/or poor instruction (Wilhoit, 1994). In fact, the criteria for paraphrasing are unclear to most students (Kennedy & Smith, 1994). Roig (1997), in his study of undergraduates, found that most students improperly assessed whether a passage was correctly paraphrased.

*Inappropriate collaboration.*

Sometimes students collaborate too closely on an assignment and end up submitting identical or near identical work; this transgression is usually termed "inappropriate collaboration" (Student Advocacy, 2001). Students report they receive mixed messages from faculty, which adds to the confusion about what is and what is not appropriate (Taylor et al., in press). To assist students to avoid unintentional dishonesty, instructors' expectations and boundaries need to be communicated clearly (McCabe & Cole, 1995). Otherwise students might "choose the path of least resistance and elect to work together: it is easier, less time-consuming, and students feel they learn more by working together" (McCabe & Trevino, 1996, p. 32). An added element for students, especially in professional schools like management, is that part of the program's curriculum is to teach students how to successfully collaborate; because this is a skill that potential employers will look for (McCabe & Trevino, 1996).

*Weaving and chunking.*

Sometimes there is a fine line between claims of poor referencing and deliberate attempts to "weave" or "chunk" sections of the original source amongst the student's own work. The terms weaving and chunking reflect how and how much of the original source is being incorporated into the student's work. In both cases, there is usually deliberate attempt to appropriate another's work. It is within this domain that plagiarism is most likely to go undetected because students embed the material within their own work.

*Cutting and pasting.*

The use of computers and the Internet have made it easier for students to plagiarize. Cut and paste commands allow for quick and easy importing and modifying of digital work (Fujita, 1996). Again, it is likely the intent is to steal another's ideas and expression of those ideas. Although it is very easy for students to find and copy information from the Internet, faculty are just as capable of tracing the original source through the use of search engines and plagiarism detection software programs.

*Submission of entire documents.*

The most serious form of plagiarism is the submission of an entire paper that was authored by another. Within this type are shades of severity. Sometimes the plagiarism was "permitted" whereby another has facilitated the dishonesty by providing the paper to copy. Traditionally, this meant students sharing or selling hard copies of papers, but this arrangement has gone "high tech" with Internet paper mills. These cyber services have garnered the attention of the media and the university community. Although there has been an explosion of online paper mills (Groark et al., 2001) students' use of these sites

has not grown exponentially (Campbell, Swift, & Denton, 2000). McCabe and Trevino (1996) contend that the increase of plagiarism as a result of the cyber paper mills has been minimal. However, McCabe (as cited in Kellogg, 2002) contends Internet plagiarism will likely increase with the next generation of students.

Outright stealing of another's work, an entire document is considered the most severe case of plagiarism. Examples include taking work from a printer tray at a university computer lab (Taylor, et al., in press), removing an assignment from a drop box outside a professor's door, or downloading an assignment directly from someone's computer hard drive or diskette/CD. These insidious behaviours put the original author at risk because if the two versions of the assignment are submitted and subsequently detected, both students will likely be investigated for academic dishonesty. Other examples of blatant plagiarism include taking work from a published source, for example, from journal articles, books or web pages.

*Factors Contributing to Plagiarism*

Reasons why students plagiarize vary as much as the forms it can take. In the literature, many factors have been identified which explain why students plagiarize. These may include a lack of preparation during secondary school on correct paper writing techniques (Wilhoit, 1994), internal or external pressures to do well (McCabe & Trevino, 1996), and cultural differences (Brilliant, 1996; Thompson & Williams, 1995). Faculty members may contribute to the problem if they are unclear about what constitutes plagiarism (Howard, 2000). Other ways faculty inadvertently influence behavior is through failing to

deal with instances, which negatively reinforces dishonesty (Love & Simmons, 1998), or having an apathetic approach to instructing students how to avoid plagiarism (Haines et. al., 1986).

When examining today's current academic and social climate, one can identify a number of factors that might contribute to the decision to plagiarize: multiple demands, pressure, Internet technology and ignorance of the rules. These factors are elaborated on in the following paragraphs.

*Multiple demands.*

The pursuit of post-secondary education is challenging, as there are many potential obstacles for students to overcome, including a limited time to devote to academics due to demands from personal and employment obligations. A glance at the bulletin boards on university campuses demonstrates the proliferation of workshops that focus on time and stress management. Students may find themselves in compromising situations because they have to balance the competing responsibilities arising from their school, work and personal lives. If the opportunity to plagiarize arises, a student may make a poor judgment if s/he is feeling trapped by time constraints or is in jeopardy of failing the course. In this context, heavy course schedules and difficulties in keeping on top of assignments also contribute to the incidence of plagiarism and other dishonest transgressions (McCabe, 1992).

*Pressure.*

For many students, not obtaining the highest grades can be a problem especially if they are applying to competitive professional programs, graduate programs or prestigious

scholarships (Gaberson, 1997; McCabe, 1992; McCabe & Trevino, 1996). McCabe and Trevino (1996) have found that many of today's students are feeling pressure to obtain high grade point averages. The pressures are not only internal but also from parents, competitive graduate school admission process, and potential employers. McCabe (1992) conducted a study to examine the situational ethics that influence students' decisions to cheat or plagiarize. Within McCabe's study, approximately half of the students who self reported incidences of academic dishonesty identified grade pressures, which include parental pressure and competitive professional faculty admission as a high risk factor. Other influencing factors included heavy workloads and the inability to stay on top of their academic responsibilities (McCabe, 1992). Love and Simmons (1998) found that academic dishonesty of graduate students was also influenced by pressure, specifically with regard to grades, time and academic workload.

*Internet technology.*

As mentioned earlier in this chapter, the Internet has opened up a world of opportunities for those wanting an easy way out and who turn to the web for assistance with their academic work (Anderson, 1997; Smith, 1998). Ever increasing digital technology, coupled with the philosophy that information on the Internet is public knowledge (Kellogg, 2002), leads to situations ripe for dishonesty.

One such situation is the proliferation of Internet paper mills. The number of web sites offering pre-written term papers is multiplying. Fain (2002a) reports that as of July 2002 there were 230 such Internet sites. A current search (June 2004) on the "Google" search engine using the keywords "free essay" and "custom essay" yielded 266,000 and

145,000 results respectively. In addition to these general Internet paper mills, there are now subject-specific web sites devoted to one topic (Fain, 2002b), for example, <All Shakespeare and Education Majors.com>. However, most of these subject-specific sites fall under the banner of one company that has been in existence since 1994, the Paper Store Enterprises. In addition to selling existing papers, these Internet sites offer services to "custom" write a paper if the topic is not covered in their vast collection of term papers.

Another problem related to the Internet is that many students do not know how to appropriately reference material that they have obtained on-line and that techniques for citing web sources are usually not covered in class (Smith, 1998). Referring back to the belief that information on the Internet is public knowledge, some students simply include online information in their papers without considering the need to give credit.

*Ignorance of the rules.*

Roig (1997, 1999) examined undergraduates' abilities to recognize plagiarized work and appropriately paraphrase material. He found that undergraduate students had a looser understanding of an appropriate paraphrase. The students Roig (1997) surveyed felt it was sufficient to cite the source, even if there is little to no modification of the original author's expression of the idea. In a subsequent study, Roig (1999) found that when students were asked to apply their knowledge about appropriate referencing, their results were paraphrase attempts that were incidents of plagiarism, especially when the material to be paraphrased was rather technical. Roig was not comfortable concluding students knew the rules but chose to ignore them because students demonstrated sound

ability to paraphrase when the material was easier to understand. He felt it was more of an artifact of the growing trend of poor writing skills found in undergraduate students.

A particularly vulnerable group with regard to different understandings of appropriate referencing is international students. It is recognized that students from different cultures might have a different understanding of what it means to plagiarize (Deckert, 1992, McDonnell, 2004). However, students are expected to know and abide by the local university's policies upon entry, and this includes new incoming undergraduate and graduate students. What might further contribute to the difficulty is the fact that international students might be reluctant to admit that they do not understand what is expected of them. When it comes to understanding plagiarism, students may have an idea of what is meant by this concept, but it may differ from the institution's definition.

Deckert (1992) examined the phenomenon of "learned plagiarism" of Chinese English as Student Language (ESL) students. He explains that plagiarism within this population is an outcome of their cultural and educational experiences. Deckert outlines three factors that influence "learned plagiarism". The first pertains to the method of learning in traditional Chinese culture. The concept of individualism is not valued as students are to conform to the "official wisdom" (p. 95), which has ramifications for students' understanding the value placed on "ownership" within North American universities.

Second, students are not instructed how to appropriately cite sources in their papers. One practice that exacerbates this issue is the reliance on examinations as the primary form of assessment. Students rarely complete assignments or essays and this

contributes to their limited experience with academic writing. Students, Deckert argues, focus on being successful in reiterating what the instructor felt important, rather than thinking about how they personally understand the material (Deckert, 1992).

And finally, the influence of the societal values, especially with regard to technology is a factor. Deckert suggests that the plethora of technological equipment and software normalizes copying others work either "knowingly or unknowingly" (p. 98), which makes violations of international copyright laws commonplace. This last factor contributing to "learned plagiarism" is also operating more broadly within North American universities.

*Plagiarism Issues in Graduate Education*

There is evidence that deficiencies in writing and referencing skills are not problems reserved for undergraduate or international students, but that they are observed in students completing professional degrees (e.g. medical students, Rennie & Crosby, 2001) and graduate students (Love & Simmons, 1998), as well. There is an expectation by the universities that graduate students understand the rules of plagiarism and are equipped with the tools to know how to avoid plagiarism and appropriately reference their work. However, students struggle with these issues even after entering graduate school (Fly, et. al., 1997; Taylor et al., in press). A study of education graduate students revealed that students are generally aware of what constitutes plagiarism and cheating, but that there are certain types of plagiarism, such as inappropriate collaboration and

submitting the same work for two different classes, where students are less clear (Love & Simmons, 1998).

With entry into graduate school, graduate students face higher expectations with regard to academic work, including plagiarism-free writing, than were expected in their undergraduate programs. Reflecting on graduate education, Damrosch (1995) explains that academe considers its graduate students to be "more advanced undergraduates" but at the same time expect them to have already developed the skills that distinguish them from the undergraduates' "naïve preconceptions" and "adolescent modes of thought and of study" (p. 149). The outcomes for graduate students, then, who do not meet these expectations and who violate plagiarism policies are treated more severely. Although it is not always articulated as such, graduate education is synonymous with professional education (Folse, 1991; personal communication, A. Gregor, November 2000). Thus, the issue of academic dishonesty of a graduate student might become an issue of professional unsuitability and a student might be deemed unsuitable for a profession within academia. This mixture of implicit expectations, assumptions of a graduate student's writing, research and referencing skills upon entry into the program, and the severe consequences if violations constitutes a very serious concern for graduate education in universities. The missing ingredient in this mixture, which might result in a more positive outcome, is education. Unfortunately, some graduate students enter this next phase of their academic journey without the "instruction manual" and rely on implicit, less reliable, forms of learning.

Not only do graduate students grapple with being users of intellectual property, but also being producers of intellectual property (Erler & Phillips, 1995). Some of these issues involving intellectual property creation include concerns about generating original ideas. For instance, some graduate students are unclear about their intellectual property rights when they follow though with an idea after speaking informally to academic staff (Taylor et al., in press). As mentioned in the previous chapter, graduate students are also concerned with the theft of their intellectual property by their advisors and/or members of their committee.

The previous discussion provides a summary of the literature with regard to understanding plagiarism, the forms it takes, and the factors that contribute to incidents of plagiarism. Collectively, these findings suggest that the current definitions of plagiarism are too narrow (Taylor et al., in press). Howard (2000) identified when the Chronicle of Higher Education asked its readers for definitions of plagiarism "no consensus was reached..." (p. 473). She wondered "if the term is inherently indefinable, how is that the academy still manages to use it as the basis for serious legislation and adjudication?" (p. 473). Howard raises an interesting point. However a clearer conceptualization of plagiarism can be developed. The evidence from the literature suggests that in order to obtain a clearer picture of plagiarism, including its definition and how incidents are handled, one needs to hear from those within the university community- students, graduate students, faculty and administrators (Paterson, Taylor & Usick, 2003; Taylor, et al., in press). Searching for an understanding of plagiarism's conceptualization among graduate students in the university will assist in making improvements in academic

integrity policies, disciplinary procedures and educational initiatives. To begin this process of investigation, one must be aware of university context, or academic culture, in which the meaning of plagiarism is understood and experienced.

*Academic Culture*

Crucial to understanding plagiarism as a phenomenon within a higher education context, is understanding the culture wherein it exists. Becher and Trowler (2001) provide a definition of culture which seems appropriate when looking at academic communities: culture is the "taken-for-granted values, attitudes and ways of behaving, which are articulated through and reinforced by recurrent practices among a group of people in a given context" (p. 23). This definition of culture is an apt description of how students are socialized to adhere to the conventions of appropriate writing and citing. For example, a student must value an author's original contribution to the literature whether it is an idea or an expression of an idea and understand the importance of giving credit. The student's attitude must be sincere appreciation of academic integrity, and not simply a fear of getting caught, to avoid the temptation of plagiarizing.

Austin (1996) examined how academic culture impacts faculty in their approach to teaching and research responsibilities. Within this larger concept of academic culture, Austin identifies a number of cultures that shape this faculty experience:

> The disciplinary culture links faculty in similar fields across institutions; the institutional culture links faculty across disciplines within a single institution; and the departmental culture results from the interaction of disciplinary and institutional norms and values at a particular location (p. 58).

This distinction further complicates efforts to understand plagiarism. Although there may be institutional policies regarding academic integrity, disciplines might have their own interpretation of what constitutes academic dishonesty. D. Saunders (1993) observes "where charges of plagiarism arise we can thus anticipate significant variation in conceptualization, policy, and disciplinary practice between the functionally differentiated research cultures—"subcultures" better indicates the plurality of norms and traditions of conduct" (p. 29). Mawdsley (1994) explains that this variability poses a problem because "as a practical matter from the standpoints of faculty/student understanding as well as enforcement, universities may be reluctant to permit a number of definitions of plagiarism among various academic disciplines within the same institution" (p. 566).

*Disciplinary Cultures*

Biglan investigated how the disciplines' ways of knowing and their operational styles can be mapped across three dimensions where each discipline forms a different combination of these characteristics: "hard versus soft, pure versus applied, and life systems versus non-life systems" (Becher & Trowler, 2001).

A typical classification based on Biglan's model yields four discipline groupings (for more information see Becher's table in Becher & Trowler, 2001, p. 36). The first classification is "hard-pure" or what is known as the pure sciences. Physics would fall under this category. Sharing the second classification are the humanities (e.g. History) and the pure social sciences (e.g. Anthropology), which are both considered "soft and

pure". The third grouping, technological fields, are best characterized as "hard and applied", for example, engineering and clinical medicine. The last grouping is the applied social sciences, which are seen as "soft and applied". Fields of law and education are examples of this classification. Although Biglan's model is well known and used, there is movement away from such generalized classifications of the disciplines because the language used, for example "hard-soft", can "imply a superior subordinate relationship" (Krueger & Casey, 2000, p. 201).

Braxton and Hargens (as cited in Austin, 1996) considered the degree to which consensus is found within the different discipline groupings, specifically on aspects that shape the research enterprise: the methodology, research questions and the underlying theoretical orientations. Those disciplines that share a high degree of consensus are described as having "paradigms [which] are clearly defined" and as tending to "demonstrate more orientation to research, higher publication rates, and proportionately more time on research" (p. 59). On the other hand, low consensus disciplines are more concerned with teaching and have a more student and learner focused approach to teaching (p. 59). These relationships have an impact on the tacit knowledge of the discipline, which poses problems for graduate students if these expectations are not communicated or inferred from experience.

*Discipline Cultures and the Graduate Learning Experience.*

Differences between disciplines might exist due to the very nature of the research conducted. For example, the humanities are typified by "library discovery", whereas the laboratory is the "primary venue of discovery" for the sciences (Kennedy, 1997, p. 107).

In the former case, the students are likely more isolated and independent in their research, and are likely to be the first or sole authors on any ensuing publications, even if they are provided with close supervision. In the sciences, students may appreciate a closer, albeit potentially more competitive environment in a lab setting. In this arrangement, the advisor's name might be on the paper of every student who is a member of his/her laboratory (Kennedy, 1997). These differences in the graduate education experience might have implications for how students learn about the research enterprise and about practices with regard to citing the work of others. These lessons—or lack thereof—will likely be carried by the student into their own lives as professionals, researchers, instructors and/or administrators. As a consequence, bad habits and practices are passed along. Gaberson (1997) recognizes the need for more explicit instruction and calls for strong role models with respect to issues surrounding plagiarism.

The importance of role modeling should not be understated. In terms of how discipline culture is maintained, Austin (1996) explains that graduate students are "socialized to the practices, norms, and values embedded in the culture of their respective disciplines. Then, as careers as faculty members develop, the disciplinary societies—invisible colleges that link those in similar subfield—the disciplinary publications maintain the strength and power of the discipline's values" (p. 59). Kennedy (1997) explains that within academia, unlike other places of employment, faculty come to understand their responsibilities, not from written documents such as contracts, but through "transmission" of an "inherited culture" (p. 97). Given the increasing concerns

that ethics within academia are being compromised, the call for more explicit instruction of ethics within graduate training (e.g. Folse, 1991) should be stronger than ever.

*Institutional Culture*

In addition to discipline culture, Austin (1996) also considers institutional influences on the graduate learning experience. Austin explains that one of the strongest influences in an institution with respect to teaching and research is its "mission" (p. 59). She explains that one can generalize about three major kinds of institutional types: research, comprehensive, and liberal arts colleges. All three types value research and teaching, however the emphasis, the level of support, and the reward system differ in each. The research university, of course, values research and the promotional system for faculty is set up as such. However, this comes at a cost of placing less emphasis on students and teaching, an issue, which, according to Austin, research universities are attempting to address. The second type is the comprehensive university where the expectations include performing like a research university, while at the same time equally emphasizing teaching. Austin explains the faculty face a conflicting message, and often, inadequate supports to do both well. The last of the university types examined, are the liberal arts colleges, which strike a more defined balance between teaching and research.

*Departmental culture.*

The third culture, which shapes the activity within post-secondary institutions is departmental culture. Austin (1996) explains that a "department is a site of intersection

for the discipline and institution" (p. 61). In addition to discipline and institutional forces, Austin states the leadership within a department influences the culture experienced by individual professors and students. Within these larger cultures of the discipline and the institution, it is the department culture that establishes a set of normative values regarding the research and teaching tensions (Austin, 1996), and with respect to issues such as plagiarism.

The department culture influences how the faculty members educate students about plagiarism and deal with cases of plagiarism when they arise. In addition, the literature (e.g. Bailey, 2001) underscores the reluctance instructors have in pursuing plagiarism cases if they feel they will not be supported by the administration. This support for good practice in education and discipline with respect to plagiarism begins with the department head.

With regard to influencing students' behaviour, the department is the immediate environment from which students glean knowledge with regard to academic work and conduct. The department can facilitate this learning through explicitly making their commitment to academic integrity known and educating students about the expectations of the department and the discipline.

*The Larger Social Context*

The fourth cultural influence is that of society. Academic culture exists in a larger social context and changes in this context influence the ways academic integrity is understood and valued. Academic integrity, or rather the lack of it, is increasingly being

communicated to the larger society. Kibler (1998) explains that the public is now questioning the "trust and subsequent support" given to institutions of higher learning, and that reports of academic dishonesty "contribute to this erosion of confidence" (p. 26).

Academic dishonesty cases involving universities featured in the media have become another item to add in an already skeptical larger society's growing complaint list about its long standing institutions (Kibler, 1998). This, in effect, can place the issue of academic integrity on the outside of the institution to become a larger issue. Academic integrity has become a concern for the stakeholders of higher education institutions: parents, potential students, government and funding agencies.

Another concern is the so-called decrease in society's moral fiber and how this translates into students' own attitudes towards their academic work (Fass, 1990). The public's attitude towards long-standing institutions, including those of higher learning, is not as positive as it once was. "Today's college students have been raised in an era of decline of public morality, involving scandal and corruption by public servants, major corporations and private citizens. These events have most certainly affected their attitudes about ethical behavior" (Fass, 1990, p. 171). Fass goes on to say this same generation is aware of the unethical behavior being revealed behind the ivy walls, and suggests the "general public's confusion about the appropriate attitude towards these revelations is mirrored in student ambivalence about the academic rules of conduct which we present to them" (Fass, 1990, p. 171).

Similarly, Diekhoff et al. (1996) explain that "from a broader perspective, many scholars see the prevalence of academic dishonesty as symptomatic of a general social

and cultural malaise evident in the lack of ethical behavior in educational, political, and business arenas". (p. 501). McCabe and Trevino (1996) explain that campuses are larger than in the past, with less residential students and that post-secondary institutions are having to think and operate as though a business. McCabe and Trevino (1996) feel this has contributed to the de-personalizing of the higher learning experience thus, "has made students more cynical about cheating" (p. 33).

This decreasing trust towards institutions affects the attitudes of students attending universities, and the cynicism of students is something that has been studied and discussed by those researching academic dishonesty (e.g. McCabe & Trevino, 1995). This presents a barrier for universities in communicating the importance of integrity in academic work before students even enter the doors of the institution. This distrust feeds the attitude of "everyone is doing it". Mullens (2000) concludes that "cheating is so prevalent, say some students, that they'd be penalized if they didn't cheat, too" (p. 22). Similarly, McCabe and Trevino (1996) observe, "if students believe unfair competition is taking place, this acts as a justification for their own cheating" (p.32).

Do changing societal values create a difficult barrier to overcome in terms of communicating one of higher education's and scientific research's oldest principles? If so, does that mean attempts at education are futile in the face of this widespread cynicism? What about those who want to do the right thing but may not realize they are doing things improperly? Or those who are aware they are taking inappropriate short cuts, but may not know why it is so important to be honest and therefore the message is meaningless and not relevant? The literature seems to be saying that on one hand, the

opportunity for dishonesty and on the other, that the need to more effectively educate students about academic integrity is tremendous.

*Educating Students about Plagiarism*

Universities need to look at how the message of the importance of academic integrity is being conveyed to its members. One might argue this is a matter of teaching, or even imposing, a set of ethical and moral behaviours on students. For instance, is it really the university's responsibility to teach ethical behaviour? Should there be an expectation that students entering higher education do so with a strong sense of academic integrity already established? If students are educated about academic integrity, can one expect a decrease in academic dishonesty? Unequivocally, the literature examining academic integrity says "yes" (e.g., Cole & Conklin, 1996; Jones, 1993; Malouff & Sims, 1996). Not one article was found that presented education on academic integrity as a futile exercise. If plagiarism education is an important aspect of the education program, then it should be made explicit at both the undergraduate and graduate levels.

*Plagiarism at the Graduate Level*

Graduate education is said to follow an apprenticeship model (Kennedy, 1997). However, how does the concept of apprenticeship translate within the structure of formal graduate studies policies, departmental practices, and guidance from the advisor? How can we effectively communicate the meaning of academic integrity, the behaviours that are considered dishonest, and the ways in which to approach those grey areas of co-

authorship, research collaboration, and idea conception within a conversation? Such complex learning tasks require explicit teaching and learning within the apprenticeship experience.

*Educational issues for Graduate Students.*

LaPidus and Mishkin (1990) identify issues that arise for graduate students as they continue through their research:

> ...consideration of taste in the choice of research projects; the realization that some people seem to choose more significant or interesting areas of research than others; whose names should appear, and in what order, on papers representing collaborative research studies; and which journals are the best ones in which to publish (p. 288).

The possible answers or options to these issues are often discipline specific and should be explicitly taught at this level.

More broadly, LaPidus and Mishkin (1990) state that in order to believe science is a self correcting enterprise, one must also "assume correctly that experiments described in a research article were actually carried out, that the results reported were actually obtained, and that the individuals whose names appear as authors actually did the work and are responsible for it" (p. 289). The authors feel these are the basic assumptions of research and, "at least until recently they rarely have been articulated. It is unlikely that anyone, faculty or student, will actually tell a new graduate student that it is wrong to falsify data, to plagiarize someone else's work." (p. 289). Brown and Krager (1985) concluded that

> Graduate and professional school students cannot become ethical and moral practitioners unless they are confronted with their ethical responsibilities as students and work with advisors and professors who exhibit ethical behaviour.

> Unfortunately, education on professional ethics is often like sex education: it is expected to occur naturally without explicit discussion (p. 417).

Reliance on this indirect transmission of information about plagiarism is an unsuccessful strategy given the increasing reports of plagiarism within universities.

*Overview of the Literature Review*

The literature reviewed is summarized in Figure 1. The most obvious element within this schematic representation is the prominence of academic culture; it shapes all activity within higher education. Arising out of academic culture is institutional culture. The common thread tying universities together is academic culture and what makes them unique is the institutional culture. The phenomenon of plagiarism illustrates this relationship. Within academia, plagiarism is considered a very serious form of academic misconduct. However, each institution has its own set of policies with regard to defining the behaviour and how to deal with plagiarists. The departmental culture provides another layer of conceptualizing and responding to cases. Departments tend to balance their institution's policies with their own disciplinary practices. For example, a professional school may be more inclined to assign a more punitive outcome to a plagiarism case.

Within Figure 1, policies and practices are placed between institutional culture and departmental culture. The selection of colour for the two terms was deliberate: the "black and white" reflects the nature of policies while the "grey", in contrast, represents

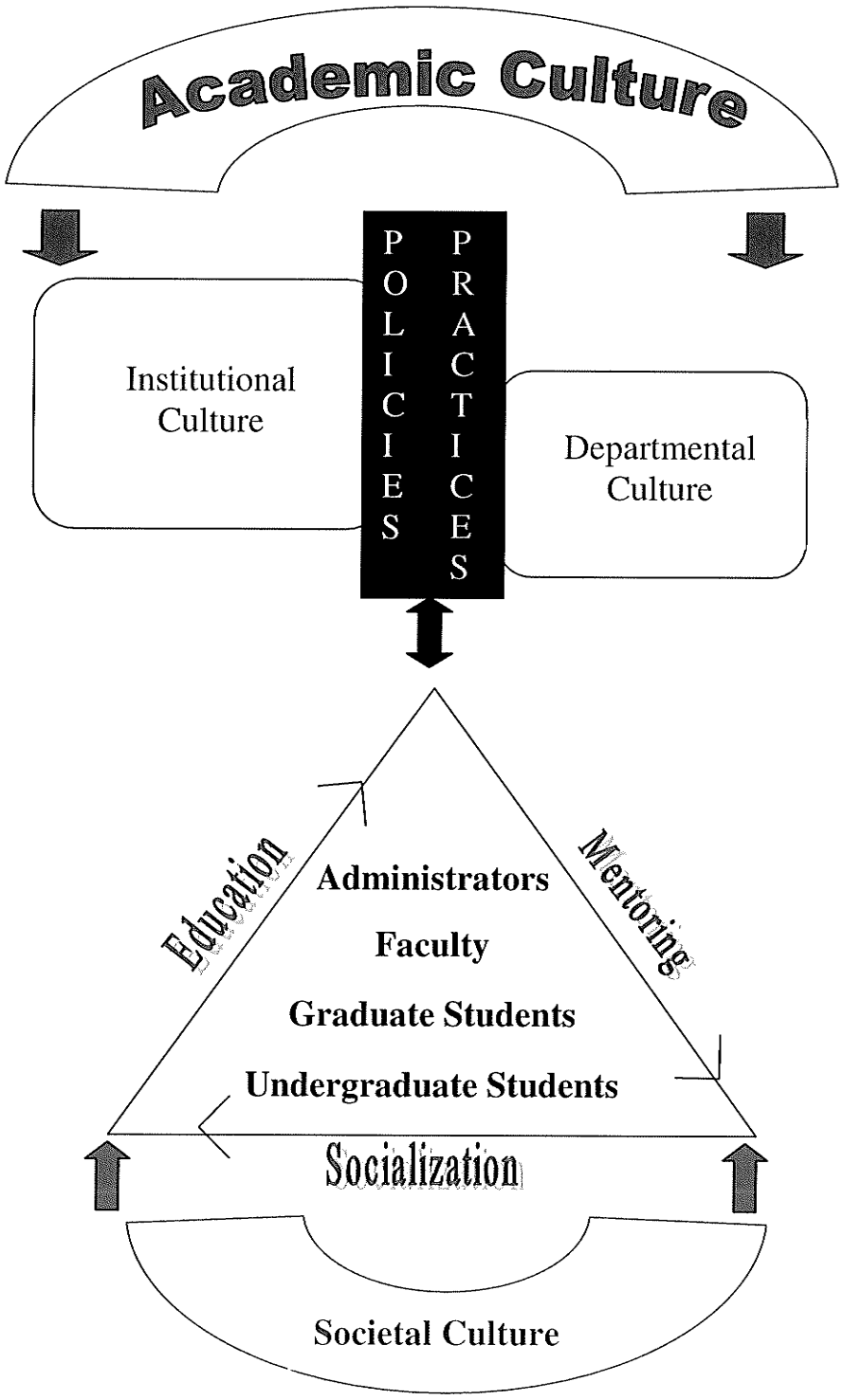


Figure 1: How knowledge about plagiarism is understood, communicated, and influenced within higher education.

practices more informal and more idiosyncratic character. The policy–practice tension is a concern, given the need for consistency when dealing with plagiarism. Both the published literature and the local studies reveal that the existence of policies, which define and provide steps for handling cases, is not enough to ensure consistency. There are social and education components which need to be recognized when critically assessing the effectiveness of policies. A policy is helpful only so far as it is understood and applied. Thus, paramount in discussions about plagiarism and the elements that should be included within a schematic representation are the constituents. The members of the university community create, interpret and put into practice the rules regarding plagiarism. For example, all members must learn the conventions of referencing and come to an understanding about policies related to plagiarism and why this is important to academic work.

The students, faculty and administrators are depicted in a hierarchical fashion, which represents the way in which they relate to each other both politically and socially with regard to the application of plagiarism policies. Circling around the constituents are the three processes of education, mentoring and socialization. In practice, the relationships between the constituents in these three processes are reciprocal in nature. It is interactions between undergraduate students, graduate students, faculty and administrators that shape their decisions about how to respond to plagiarism.

Societal culture, like academic culture, has a far-reaching impact. However, unlike academic culture, societal culture is not as universally recognized or anticipated, simply because the term "societal" encompasses so many different areas of life. Within

the literature, the major influence identified was negative: the increased reports of dishonesty and unethical behaviour of leaders in the fields of business, politics and education, and how this feeds into the already growing cynicism of large institutions, including ones of higher education. The placement of academic culture at the top of the figure and societal culture at the bottom is intentional. It is the hypothesized that as individuals become inculcated into academia, the prominent culture of influence would be academic culture and the societal culture, although still prominent, less influential in decisions with regard to academic work.

This schema provides a conceptual foundation upon which an investigation of how knowledge about plagiarism is understood, communicated and influenced at the graduate level can be framed.

*Research Objectives*

Based on a review of the literature, the research goals for the present study of how knowledge about plagiarism is understood, communicated and influenced at the graduate level include to:

1) *Examine how graduate students and faculty conceptualize plagiarism and how they operationalize these concepts of plagiarism in their academic work.*

The goal of the research is to critically examine the underlying understanding of plagiarism in the applied sense. The pilot studies indicate that members of the university community hold different views on what plagiarism means. For example, graduate respondents were able to provide a generally recognized definition of plagiarism, but challenges arise when contemplating issues of ownership.

2) *Explore, from the perspectives of faculty and graduate students, expectations with respect to plagiarism at the graduate level, and how these expectations are communicated.*

Although the literature supports academic integrity educational initiatives (e.g. Centre for Academic Integrity), the university community needs to be aware that there is a necessity for instruction in this area and to be committed to participation if educational interventions were created. The need for instruction of plagiarism at the graduate level is not readily discussed (LaPidus & Mishkin, 1990) and appears to involve some unique issues. One way to clarify the educational issues is to articulate the expectations of

faculty for the kinds of knowledge and skills graduate students should possess in order to prevent plagiarism.

3) *Investigate if there are discrepancies within and between disciplines with respect to formal policies and informal practices: (a) in terms of how students are educated about plagiarism and (b) in terms of handling incidents of graduate student plagiarism.*

The literature review and the pilot studies revealed discrepancies between the formal policy of the institution and the individual practices of faculty in terms of how students are educated and how plagiarism cases are dealt with. Within the pilot study, for example, faculty relied on informal sources of information from their colleagues, rather than the formal policy, when deciding how to respond to a case of plagiarism (Taylor et. al., in press). Also, education initiatives were sometimes inadvertently thwarted. For example, a one-page document explicitly outlining the academic integrity policy and behaviours to be avoided was rarely reviewed in class by the instructors, which in turn led the students to disregard its importance and to not consult the document on their own time outside class (Taylor et al., in press). If there are discrepancies, what are the issues that have faculty deviating from the policies? Is it a lack of awareness or misunderstanding around the policies? Or is there disagreement with what the policy instructs faculty to do when facing a potential case of plagiarism. From whom are faculty learning about these policies and practices?

4) *Identify some of the factors that contribute to incidents of plagiarism at the graduate level.*

Considering the severe consequences at the graduate level, why does plagiarism still take place? What are some of the factors that contribute to incidents of plagiarism at the graduate level?

5) *Determine how practices and policies may be changed to respond more effectively to plagiarism at the graduate level.*

An important question to explore is whether the participants feel the current policies are adequate, in other words, do they serve the populations for whom they were designed? Would those involved in graduate education see the value in changing the policies and practices regarding education and disciplinary procedures with respect to plagiarism?

6) *Conduct a gap analysis between knowledge and practice to identify educational opportunities with regard to plagiarism and related issues (e.g. intellectual property) that are or should be available for graduate students and for faculty.*

The literature and the pilot studies revealed there is limited education on ethical issues such as plagiarism within the graduate education curriculum. In order to best determine what the educational needs are, it is important to understand first what is already available. If there are educational opportunities available, are they perceived they being used by faculty and students? Are they perceived as helpful?

# Chapter Three

## Methodology

Imperative to understanding how to respond to plagiarism is an understanding of what different constituencies mean by the term plagiarism. This necessitates moving beyond the generally held definitions of plagiarism and looking at individuals' conceptualizations of and experiences with this phenomenon (Taylor et al., in press). What are some of the underlying assumptions and beliefs about this phenomenon? For example, how do graduate students understand plagiarism? Does this understanding expand with each subsequent year spent within higher education and is the understanding developmental in nature? Does it alter upon entering graduate school? How and when does the notion of ownership fit with these understandings? How do academic staff conceptualize plagiarism? What are the obligations and responsibilities of academic staff to police or to educate with regard plagiarism? By nature of their associated responsibilities, what are administrators' understandings of plagiarism? What are their responsibilities with respect to plagiarism? These complex interactions among understandings, concerns, practices and experiences generally have not been brought together to generate a comprehensive understanding of plagiarism within higher education. Plagiarism, as a phenomenon, needs further investigation that not only captures the act, but also the personal, interpersonal, institutional and social contexts that contribute to the decision making processes of students, faculty and administrators.

*Why a Qualitative Research Project?*

To reach these comprehensive understandings, the research undertaken must be qualitative in nature. In general terms, qualitative research is a "study of things in their natural settings, attempting to make sense of, or to interpret, phenomenon in terms of the meanings people bring to them" (Denzin & Lincoln, 2000, p. 3). Although one can speak of qualitative research within these broad terms, the reality is that qualitative research is a spectrum of different ideologies, methodological approaches and interpretive techniques. Thus, crucial to understanding one's research project, is to appreciate where an individual project is situated along this continuum. Depending on the particular question to be explored, many decisions need to be made about how to structure the research. This chapter will outline the methodology, as well as the justification for the approach taken, given the goals of this particular research project.

Based on the literature on qualitative research, this investigation is one that lends itself well to the types of investigative techniques available through qualitative inquiry. When determining a qualitative research focus over a quantitative one, McCracken (1988) suggests looking at the data you want to collect as a clue: "When the questions for which data are sought are likely to cause the respondent greater difficulty and imprecision, the broader, more flexible net provided by qualitative research is appropriate" (p. 17). McCracken further explains qualitative outcomes differ from those gathered from quantitative research: "The quantitative researcher uses a lens that brings a narrow strip of the field of vision into very precise focus. The qualitative researcher uses a lens that permits a much less precise vision of a much broader strip" (pg. 16). The

desired "outcome" of the present study was not to bring a narrow focus to the issue of plagiarism within graduate education, but rather to look at the context and examine the experiences and perceptions of those involved—graduate students, advisors/professors and administrators—with respect to plagiarism in order to come to a better and broader understanding of the phenomenon.

Although the literature on plagiarism and academic integrity issues is growing, it is mostly characterized by editorials or articles that highlight educational strategies to curb dishonesty in the classroom (e.g. Alschuler & Blimling, 1995; Malouff & Sims, 1996). The empirical research that has been conducted has been mostly quantitative and focuses on undergraduate education (e.g. McCabe, 1992, McCabe & Trevino, 1995). There is a paucity of literature looking at graduate education. For especially this last reason, conducting a qualitative approached study is appropriate. The landscape of graduate education needs to be scanned in order to map out the areas of tensions and to identify the issues. Thus, the project requires a broader examination, which can be provided by a qualitative approach (Ashworth, Bannister, & Thorne, 1997).

As discussed in the preceding chapter, most of the empirical studies that are available provide information with regard to the prevalence and quantifiable behavior of plagiarists. As informative as these studies are, there remain a number of unanswered questions. For example, given that these studies focus primarily on American schools, do these statistics represent what it going on in Canadian institutions? Also, many of these studies have added to our understanding of academic dishonesty within the undergraduate student population (Love & Simmons, 1998), but what about graduate students? Only a

few articles were found that examined academic integrity issues from the perspective of graduate students (for example, Fly et. al., 1997; Folse, 1991; Love & Simmons, 1998).

Given that the literature is characterized by limited research findings, the argument can be made that what is missing is a deeper analysis of the phenomenon that might only be gained through a qualitative approach. Seidman (1991) suggests that "the primary way a researcher can investigate an educational organization, institution, or process is through the experience of the individual people, the 'others' who make up the organization or carry out the process" (p. 4). The goal for the present study was not to gather numerical data on, for example, the number of plagiarism incidents, but rather to gather information about people's experiences with the phenomenon of plagiarism within an institution and across academic cultures. This, in turn, assisted to design more effective and appropriate education initiatives and disciplinary policies.

*Qualitative Interviews*

Based on the results of the literature review and on a pilot study conducted to test the methodology and the coding grid. The research design included individual interviews with the inclusion of a case study in the interview protocol, and document analysis. The following section introduces each of these three data collection strategies and provides reasons why they were appropriate for the research design. The "Data Collection" section outlines how these strategies were applied.

The first data source, interviews, is a well-established technique for gathering data within qualitative research. The literature provides ample guidance on how to carry out a

project using interviews as the primary data collection tool (McCracken, 1988; Patton, 1990; Rubin & Rubin, 1995; Seidman, 1991).

The strength of data collecting techniques within qualitative research is the effectiveness of the researcher as "instrument". Miles and Huberman (1994) suggest four characteristics with which to measure a good qualitative researcher as instrument. First, the phenomenon and the studied setting should be familiar to the researcher. This was the case with the present study. The issue of plagiarism within the university environment is well known to the researcher, who as a Student Advocate represents students who are accused of plagiarism. Having "strong conceptual interests" (p. 38) is the second suggested characteristic. This research built upon a conceptual framework that proved effective in another study on plagiarism (Taylor et al., in press). The third marking of good researcher as instrument is having an interdisciplinary approach. Education is itself a multidisciplinary profession and the present research draws upon knowledge and literature found in the areas of student affairs, higher education studies, organizational behaviour and culture. The fourth characteristic is good investigative skills. The study was supervised by experienced researchers as an opportunity to further hone those research skills.

It is also crucial to select a data collection strategy that has the potential to elicit data that will inform the research questions. Walford (2001) provides three justifications for using interviews over other data collection tools. First, interviews collect data more quickly than observational methods, which rely on the chance the information will occur naturally in the setting. Second, interviews allow "all people to express their views about

a wide range of issues" (p. 92) when they are well constructed to do so. Depending on the particular interview framework, this approach can also provide individuals with an opportunity to reflect deeply on one particular issue. Third, "the interview gives the chance for particular questions to be asked that cannot be asked in any other situation" (p. 92). The present study required a mode of data collection that met these three criteria. It would not have been possible to "observe" plagiarism in action nor would it have been appropriate to sit in on an investigative process due to confidentiality reasons. An interview strategy allowed participants to not only contemplate the different facets of the issue, but also to provide an opportunity to speak fully about the issue.

When deciding to use interviews as a means of data collection, one must decide on the type of interview strategy to employ. Qualitative interviews fall onto a continuum with structured interviews on one end and unstructured on the other. Structured interviews, or a "standardized open-ended approach" (Patton, 1990), have a detailed protocol for data collection which the interviewer follows for all interviewees: the same questions are asked and in the same order. Furthermore, the interviewer plays a neutral role and is careful not to interpret questions or reveal personal perspectives (Fontana & Frey, 2000). In contrast, in unstructured interviews (also called "informal conversational interviews"), researchers do not predetermine the questions to be asked because they will not know what to ask until the conversation is occurring, and rely instead on their skills of conversation to keep the discussion moving along (Patton, 1990). One disadvantage of this extreme open-ended strategy is the low probability that the same questions will be

asked of all of the participants, due in part to the natural dynamics of a conversation. The researcher explores the different paths presented by the interviewee.

A third interview strategy, found more centrally on the spectrum, is what Patton (1990) terms the "guided interview approach". "The interviewer remains free to build conversation within a particular subject area, toward questions spontaneously, and to establish a conversational style—but with the focus on a particular subject that has been predetermined" (p. 283). Because a conceptual framework guided rather than prescribed the investigation, the interview approach straddled both the "guided interview guide" and the "standardized open-ended" interview formats.

The development of an interview process is captured well by McCracken (1988) who developed the four-step method of inquiry for "the long interview". The first step within this process is to review the literature, a strategy that helps in the defining of the research problem and identifying of potential interview questions. Within the present study, the interview protocol for the pilot studies was also reviewed when developing the interview questions.

The second step is a "review of cultural categories" (p. 32), which encourages the researcher to reflect on her own understanding of the culture to be examined. In essence, McCracken (1988) recommends that researchers use "the self as an instrument" (p. 32), which is a defining characteristic of all qualitative research. McCracken explains that this second step has three purposes. First, this awareness of culture is intended to assist in the development of the interview questionnaire given the focus on categories and relationships within the culture. The second purpose is to prepare for the data collection

and analysis stage wherein the researcher needs to have familiarity with the culture and phenomenon under study to be order to make sense of the information gathered through the interviews. The third purpose is to "manufacture distance". McCracken explains that this assists researchers who are studying cultures (and phenomena) with which they are familiar. Such familiarity may lead to a narrower investigation because researchers collect and interpret data based on their assumptions. However, undertaking a thorough literature review provides an opportunity to assess and question these assumptions, which aids to minimize this risk prior to embarking on a study.

The third step within McCracken's (1988) long interview process is the formalization of the interview questionnaire or protocol. McCracken provides a series of questioning techniques that can be employed to facilitate the interview process. He suggests beginning with biographical or "grand tour" (p. 35) questions, for example "how long have you been with the department?" before leading into the substantive questions. The use of "floating prompts" (p. 35) can also be used to clarify or probe the meaning of a response. Different prompting techniques include the use of both verbal and nonverbal prompts, for example, repeating the confusing phrase in the form of a question or raising an eyebrow to encourage further elaboration (McCracken, 1988).

In terms of length and number of sessions, McCracken (1988) suggests an exploratory 'long interview' may take up to six hours over two or three sessions. Seidman (1991), who also supports a long interview, contends that a researcher should conduct a three 90 minute interview sessions with clearly defined goals for each session. The first session is a "focused life history" (p. 11), which is similar to McCracken's

(1988) biographical section but the focus of the open-ended questions pertains to the participant's life just up to present time. An example of a life history question might be "What led you to become a graduate student?" Seidman's (1991) second session deals with the participant's current life, the "details of experience" (p. 11) and the participant is asked for stories or to recreate a typical day. And finally, the third session asks the participants to provide "reflection on the meaning" (p. 12) of those things they revealed in the first two sessions.

Based on the pilot study (Taylor et al., in press), a full "long interview" process as proposed by either McCracken (1988) or Seidman (1991) was not necessary for the study. Perhaps because of the specific focus of the interview topic, the pilot study demonstrated that one 60-90 minute interview session was sufficient. However, Seidman's recommended interviewing principles were followed in the design of the interview protocol.

McCracken's (1988) fourth step in the interview process is the "discovery of analytical categories" (p. 41). The data analysis phase of the present study is explained in detail later in this chapter. However, it is important to note that McCracken's words of advice were heeded both when proposing and carrying out the research project. He advises researchers to be cognizant of the knowledge and insight gained through the literature review, and owns experiences and the interview process and "to use all of this material as a guide to what exists there, but [researchers] must also be prepared to ignore all of this material to see what none of it anticipates" (p. 42). During analysis, McCracken

emphasizes the "full powers of discovery" (p. 42) and the importance of the researcher to look beyond what is presented in the literature and in one's own construct of the world.

*Case studies*

The second data source was the participants' responses to a case study. McCracken (1988) suggests the use of a planned prompt strategy that is referred to as "auto-driving" (p. 36) wherein the researcher introduces a stimulus during the interview for the interviewee's response. He explains that using auto-driving is effective "because it helps to both foreground and objectify aspects of the respondents' experience that are otherwise difficult to bring into the interview" (p. 37). Arguably, a case study is one method of auto-driving; the interviewees respond to stimulus in the form of a brief description of a realistic but fictional situation involving plagiarism within the graduate education context.

For the present study, a case study was part of the interview protocol because it allowed the researcher to investigate how the participants put into practice the knowledge they have articulated about plagiarism and the disciplinary policies during the first portion of the interview. The advantage of using a case study was that the researcher was able to compare the data collected in response to the interview questions against the data collected from the case study. This comparison was designed to determine if reports of participants' knowledge about plagiarism was consistent with or elaborated by knowledge represented in an applied situation and to capture how knowledge of plagiarism is both conceptualized and operationalized.

*Document analysis*

The third data source was collected through the analysis of documents referred to by participants. Lincoln and Guba (1985) provide five reasons for including documents as a source of data within qualitative research. First, and quite simply, most documents are publicly accessible, and thus, "available" (p. 276). Second, documents are a "stable source of information" (p. 276). Third, documents enhance the "richness" (p. 277) of the data because they are artifacts of the culture wherein they were produced. Fourth, the documents provide the researcher with data that is "legally unassailable" (p. 277) which can corroborate or contradict data gathered through other sources. The fifth and final reason is that documents are "non reactive" (p. 277). However Lincoln and Guba caution that although there is not an interpersonal interaction between document and researcher, as it exists between participant and researcher, the investigator does interact on some level with the document by way of interpretation of the text

The collection of three different, but complementary types of data sources (interview, case study and institutional documents) allowed the researcher to triangulate the data and thus, strengthen the study's findings (Denzin, 1978).

*Sample*

Lincoln and Guba (1985) explain that regardless of the nature of the research, sampling decisions are driven by a purpose. Within qualitative research, "purposive sampling" strives to reflect the context (i.e. goal is variability not generalizability) and to

provide sufficient amount of information (i.e. reach point of redundancy) (Lincoln & Guba, 1985).

The focus of the present research was to examine the conceptualizations of plagiarism within a graduate education context, and thus, the major players within such programs, graduate students, faculty, and administrators, were interviewed. The value in having this type of interview situation was the strengthening of the data by having, from a shared disciplinary context, three different perspectives reflect on the same phenomenon.

The decision to select two different disciplines was shaped by the literature. As explained in the previous chapter, Biglan's classification of academic knowledge is a well-known model that illustrates how the disciplines differ from each other (Becher & Trowler, 2001; Stark & Lattuca, 1997). Included in those differences are the graduate education programs are shaped by the discipline within which they fall, and normally the literature distinguishes between those experiences found in the humanities/pure and applied social sciences or what is sometimes called "library research" and those in the pure sciences/technologies or "bench science" (Deem & Brehony, 2000; Kennedy, 1997). Based on the literature, Deem and Brehony (2000) concluded that the main distinguishing characteristics between these two larger groupings are "how research topics are chosen, the nature of supervisory practices and the environment in which postgraduate research is conducted" (p. 2). It was predicted that because of the differences in approach to the research enterprise, there would be issues related to plagiarism that would be unique to each discipline. For example, does collaborative research, which tends to characterize the pure sciences and technologies, lead to issues about ownership?

The chosen academic institution was a large research university in Canada. The nature of the chosen university has an interesting dynamic as there are two campuses, a main campus and a health science campus and the selected two disciplines are housed on different campuses.

The departments were from two different disciplines to provide contrasting views of the knowledge, experiences, and practices with regard to plagiarism at the graduate level. Both of these departments have large graduate programs and within their disciplines and have a broad base in terms of research interests, theoretical perspectives and methodologies.

In total, 22 interviews were conducted. Six graduate students, three professors and one administrator were recruited from each department. The researcher recruited both masters and doctoral level graduate students. The recruitment and gathering of data took place from March to October 2003, with last interview taking place in December of that same year. Table 1 summarizes the demographic information of science discipline participants. During the 2002-2003 regular session, this department had a total of 40 registered students: 14 doctoral and 26 master's. The female to male graduate student ratio in the department was 1.5:1.

Table 1

*Summary of Science Participant Demographics*

| | | Level | Gender |
|---|---|---|---|
| Graduate Student | | | |
| | SC gs1 | Master's | Male |
| | SC gs2 | Doctoral | Male |
| | SC gs3 | Master's | Female |
| | SC gs4 | Master's | Female |
| | SC gs5 | Master's | Male |
| | SC gs6 | Doctoral | Female |
| Faculty | | | |
| | SC fac1 | Assoc Prof | Male |
| | SC fac2 | Professor | Male |
| | SC fac3 | Asst Prof | Male |
| Administrator | | | |
| | SC admin1 | Dept Head | Male |

Table 2 summarizes demographic information of the applied health science participants. The department had a total of 68 graduate students: 22 doctoral and 46 master's. The female to male graduate student ratio in the department was 3.25:1.

Table 2

*Summary of Applied Health Science Participant Demographics*

| | | Level | Gender |
|---|---|---|---|
| Graduate Student | | | |
| | AH gs1 | Doctoral | Female |
| | AH gs2 | Doctoral | Male |
| | AH gs3 | Master's | Female |
| | AH gs4 | Doctoral | Female |
| | AH gs5 | Master's | Female |
| | AH gs6 | Master's | Female |
| Faculty | | | |
| | AH fac1 | Professor | Female |
| | AH fac2 | Professor | Male |
| | AH fac3 | Assoc Prof | Male |
| Administrator | | | |
| | AH admin1 | Dept Head | Male |

All graduate programs in this institution fall under the umbrella of the Faculty of Graduate Studies and the studied university's policy on academic integrity refers investigations/recommendations from each graduate department to this Faculty. Therefore, it was appropriate to interview a representative from the Graduate Studies office who deals with cases of plagiarism. As discussed under the "Role of the Researcher" section, the researcher is employed by a Student Affairs office at the selected university, in a centralized unit that assists students with their plagiarism concerns and

appeals. A colleague who plays a similar role was formally interviewed. Because this office assists students who are being investigated for academic dishonesty an individual who works closely with students and the academic departments was a valuable source of information and added a different perspective to the investigation.

*Entry Procedures*

A critical step in carrying out the data collection process is to receive permission to recruit individuals within the chosen departments. How permission is received and recruitment carried out has an impact on the relationship with the participants and the interview process (Seidman, 1991). Thus, the entry procedures were carefully thought out to ensure elements of respect and fairness were observed (Seidman, 1991).

Sometimes access to participants is dependent upon support from a formal or informal gatekeeper (Seidman, 1991). Within the context of the present study, a formal gatekeeper was the individual responsible for the department the researcher wished to gain access. Seidman (1991) explains that if the researcher is interested in studying the "experience" of participants within a particular setting, permission must be granted by the individual who oversees the unit. Conversely, if the research focus is on the "experience" or "process", which is not site-specific, this permission may not be required. However, within a university setting, it was prudent to receive support from the department head, not only for the explicit authorization, but also to provide credibility for the research.

The initial contact between the researcher and the selected departments was through a written letter addressed to the department head (see Appendix A). This letter

outlined the purpose of the study, the reasons why their particular department was selected, how the interviews will be carried out and the measures that will be taken to ensure that the participant's information will be kept confidential. Included in this letter were the names of the researcher and the research supervisor.

Both department heads responded positively to the request and granted permission for the researcher to recruit in the department. Additionally, both administrators agreed to participate in the study. The science department head also provided advice on how to best recruit graduate students in his department.

The first step in the recruitment for faculty in both department was to send out information letters (see Appendix B). This letter contained the same information provided in the initial letter to the department head. In addition, it also contained instructions how to volunteer for the study. A copy of the consent form was included as an attachment, for information purposes (see Appendix C). Recruitment of faculty in the applied health science discipline went smoothly as all three interviews were completed in the first two months of data collection. One of the faculty members provided valuable advice for recruiting students in the department. Recruiting faculty in the science discipline was more difficult and these three interviews were not completed until seventh month of data collection.

Recruitment of graduate students started off well in both departments, particularly in the science discipline as 6 out the 12 graduate student interviews were completed in the first three months of data collection. The recruitment strategy for each department took different paths. The science department head suggested contacting the president of

the department's graduate students association. Subsequent to making contact with this individual, an email was sent to each graduate student and attached were electronic versions of the information letter (Appendix B) and consent letter (see Appendix C). This strategy successfully recruited four graduate students.

Graduate student recruitment in the applied health science department also began on the advice of an administrator. In this case, the graduate chair mentioned the study to the department's graduate student president and asked how the council might help. This contact led to two strategies suggested by the department's graduate students council: placing a call for participants in the department's graduate student online newsletter and placing posters in the graduate student lounge and other high traffic areas. These strategies yielded four volunteers. The remaining four students for both departments were recruited through a variety of strategies including other participants providing names or mentioning the study to student colleagues.

Two other offices approached for recruitment were the Faculty of Graduate Studies and a Student Affairs office. A representative of the Faculty of Graduate Studies, an individual who assists with the resolution of graduate student matters including plagiarism cases, was approached via a recruitment letter (see Appendix D) and consent form (see Appendix C). The researcher followed up by contacting her by telephone during which time a commitment was offered and an interview was scheduled.

The recruitment strategy for the Student Affairs representative, a colleague of the researcher, began by securing verbal support from the Director of the office, which was granted. The researcher then informally approached the colleague to be interviewed. This

individual was provided with a copy of the recruitment letter (see Appendix D and the consent form (see Appendix D). Seidman (1991) cautions interviewing those with whom the research has a relationship, especially those whom the researcher supervises or teachers, acquaintances and friends. Although Seidman does not specifically comment on the colleague relationship, it can be argued that a very positive colleague relationship could be considered a friendship. Seidman's concern with interviewing friends, is the tendency for the individuals to assume the other understands what the other is saying which may lead the researcher to not clarify what is being said or to make assumptions about the meaning. Despite Seidman's caution, the benefit to formally interviewing a colleague outweighed the risk. However, careful attention was paid to minimize the risks when processing the data collection from the participant. The interview protocol was followed and the interpretation of the data was checked through peer debriefing with s knowledge third party (the advisor).

*Data Collection*

The data collection for the present study included two phases: individual interviews with recruited participants and gathering of pertinent institutional documents. The interview phase followed an interview protocol, which was comprised of two parts: (a) direct questions and (b) a brief case study.

Miles and Huberman (1994) suggest that "conceptual framework [and], research questions are best defense against [data] overload" (p. 55), a daunting aspect of carrying out a qualitative study. The interview process was guided both a conceptual framework

and by a set of predetermined questions that focused on the topic of plagiarism, specifically within the context of graduate education.

*Cultural Knowledge Framework.*

Referring again to the idea of a qualitative research continuum, another tension is the use of a conceptual framework. Qualitative researchers like Lincoln and Guba (1985), for example, support "emergent" designs in the tradition of Glaser and Strauss' grounded theory approach. On the other end of the continuum are those researchers (e.g. Miles & Huberman, 1994) who support making decisions about an appropriate *a priori* framework. Miles and Huberman (1994) "believe that better research happens when you make your framework—and associated choices of research questions, cases, sampling, and instrumentation—explicit, rather than claiming inductive "purity" (p. 23). In the present study, the framework facilitated the research design and data analysis. Sackmann's (1991) concept of cultural knowledge in organizations was adapted as a broad conceptual framework to guide the collecting and analysis of data, but which still allowed the emergence of new patterns.

Sackmann's (1991) conceptualization of culture within the organizations is concerned with the "sense-making mechanisms" (p. 33) that help individuals interpret events within organizations. She explains that culture is socially constructed within this system of "sense-making mechanisms", and this leads to the generation and sharing of knowledge:

> Based on the underlying commonalties of these sense-making mechanisms, the essence of culture can be conceptualized as the collective construction of social reality. Sense making is a complicated, holistic process in which perception,

> existing knowledge, and judgments interact with each other. These, in turn, influence actions, perceptions, judgments, and thinking (p. 33).

Building on the concept of sense-making mechanisms Sackmann (1991) developed a cultural knowledge map, which explains how individuals navigate within an organization, relying on the structure and relationship between four types of cultural knowledge (see Sackmann, 1991, Chapter 3). Sackmann's four categories of cultural knowledge were adapted to provide the conceptual framework for the research design (Taylor et al., in press). The following are the definitions of each in relation to the study:

1) Dictionary knowledge- definitions and descriptions of a plagiarism
2) Directory knowledge- how processes pertaining to plagiarism are implemented
3) Recipe knowledge- how processes pertaining to plagiarism should be implemented or improved
4) Axiomatic knowledge- reasons why plagiarism occurs or reasons why processes pertaining to plagiarism are implemented

This framework was selected for the pilot studies and the choice was validated, given the rich data set obtained. Sackmann's concept of cultural knowledge inspired the questions formed for the interview protocol and provided the foundation for the global categories during the data analysis.

The conceptual framework adapted from Sackmann's (1991) work on cultural knowledge within organizations provided the foundation for the interview questions (Appendix E), The origin for these questions that are grouped under the dictionary, directory, recipe and axiomatic knowledge categories were adapted from a pilot study

(Taylor et al., in press) that also used Sackmann's cultural knowledge framework. These questions were revised to fit the focus of the study. See Appendix F for a list of the interview questions grouped according to the cultural knowledge categories.

The interview protocol included asking the interviewees to explain how they would respond to a hypothetical scenario and to answer questions in relation to their reasoning. The case study is found in Appendix G. The resulting data provided insight into whether an interviewee's theoretical knowledge and experience of plagiarism—elicited out by the interview questions—translated into practice—his/her problem solving process when faced with an incident of plagiarism. The interviewer asked questions to understand the participants' reactions to the case study and to explore how they worked through this case. See Appendix H for a list of the case study questions. All interviews, including the case processing, were audio taped.

The researcher made brief notes during the interview to capture those thoughts or ideas that came up during the process of the interview. More detailed notes were made at the conclusion of each interview or after reviewing the tape, and general perceptions about the interview and any other thoughts that were considered relevant for the analysis stage were recorded.

Collecting data from more than one source is a form of triangulation (see "Trustworthiness" section) that strengthens the data and adds to its validity. In addition to comparing the responses to the interview questions and case study, the researcher examined documents and other written records. Institutional documents provided another data source for the study. Document analysis is necessary for an effective institutional/

organizational inquiry, which is particularly important given the study's focus on how the university as an institution impacts the experiences and understandings of plagiarism of individuals' who are part of its community. An important element in an institutional analysis is to understand how texts mediate cultural knowledge (Campbell & Gregor, 2002).

Participants were asked if they could refer the interviewer to the relevant policies and other documents during the course of the interview. Normally, it is these documents that provide members with institutional knowledge in terms of formalized definition and processes. The analysis of identified documents also provided an opportunity to examine aspects of formal policy mentioned by the participants during the individual interviews and compare formal polices to the transcript data as a form of data triangulation.

*Triangulation.*

Triangulation is an important tool within the qualitative researcher's toolbox. It increases the credibility of the data (see "Quality Assurance" section). There are four distinguishable strategies of triangulation: (a) data, (b) method, (c) theory, and (d) investigator (Denzin, 1978). The first three of listed strategies were employed within the present study. The fourth, investigator triangulation, was not appropriate given the project was an educational requirement for the researcher.

Data triangulation, the most common strategy used (Lincoln & Guba, 1985), can be carried out in two ways. The first is to collect the same kind of information from a number of different perspectives (Lincoln & Guba, 1985), for example, interviewing participants in different roles. A second way to triangulate sources is to collect the same

information from different sources (Lincoln & Guba, 1985), for example asking about a policy at in an interview and then seeking out a copy of that policy. The present study employed both kinds of data triangulation. The primary data sources were interviews with those who are involved with graduate education: graduate students, faculty members and those who have roles in administration. In addition to interviews secondary sources of data were documents identified during the course of the interview, either referred to or provided by the participants.

Triangulating methods is a second type of triangulation. Essentially this means employing more than one type of data collection, for example using interviews, observations and questionnaires (Lincoln & Guba, 1985). The methods triangulated in this study were the use of semi-structured interviews, a case study and document analysis.

The third type of triangulation is a theoretical triangulation. Allowing a theory to emerge or determining it *a priori* is a significant tension found within qualitative research. Having an understanding of a continuum upon which the different forms of qualitative research rests useful in resolving these tensions. Lincoln and Guba (1985) strongly feel that a conceptual framework should not be used as a means to increase credibility within the naturalistic paradigm. They explain that data can be meaningful independent of pre-determined theories. In contrast, Denzin (1978) explained that his support of theoretical triangulation is to ensure that "no study will be conducted in the absence of some theoretical perspective" (p. 307). Lincoln and Guba (1985) are committed to allowing the theory to emerge from the data, whereas Denzin (1978) and

Miles and Huberman (1994) stress that it is important to determine one's theoretical perspective *a priori*. The decision to use Sackmann's (1991) cultural knowledge as the framework for the study demonstrated a commitment to a theoretical approach grounded in organizational research. A pilot study provided strong support for continued use of this framework in the examination of plagiarism. Although decisions were made *a priori* with regard to the interview protocol and aspects of the data collection, such as participant selection, the design allowed for some flexibility. For example, the interview protocol, although predetermined, did not prevent the researcher from following up on unexpected information provided by the interviewees. Additional questions were added when necessary and questions were modified or deleted if they seemed to be cumbersome or repetitive. Another example is how the theoretical framework shaped the data analysis. Additionally, although the cultural framework shaped the data analysis, the researcher did not force these cultural knowledge categories upon the data and allowed for an "Other" category to emerge.

*Data Preparation and Analysis*

Like other elements of qualitative research, data analysis can be carried out in different ways, depending, again, on where the researcher situates him/herself on the qualitative research spectrum. Some authors support a very prescribed system of steps (e.g. Glaser & Strauss, 1967; McCracken. 1988; Strauss & Corbin, 1998) and others encourage a looser approach that relies on the researcher's intuition (Seidman, 1991). The present study adapted the constant comparative method suggested by Lincoln and Guba

(1985) tempered by the analytical process used in the pilot study (Taylor et al., in press). The following section outlines the steps in the data analysis process.

*Data Preparation.*

One of the first steps was the preparation of the interview transcripts for analysis. The audiotapes were transcribed verbatim using word processing software and saved onto a diskette. The literature on whether the researcher should transcribe the interviews is mixed. An argument for self-transcribing is that it allows one to "come to know their interviews better" (Seidman, 1991, p. 88), however at potentially the cost to "lose enthusiasm for interviewing as a research process" (Seidman, 1991, p. 88). McCracken (1988) agrees with this point and goes one step further by stating that self-transcribing could compromise the data analysis phase either as a result of the researcher becoming frustrated, or becoming too close to the data. Consequently, the potential for becoming presumptuous when analyzing the data is increased. For the present study, the transcriber was someone other than the researcher. These individuals were trained and paid for their assistance.

All transcription documents were uniformly formatted which included leaving ample space on the left-hand side of the page for analysis notes. Numbered lines facilitated the coding process and provide for ease in referencing. The transcripts were identified only by the date of the interview and pseudonym for the interviewee. For example, an interview with a master's student from science discipline was coded as "SC gs1, March 22, 2003". Tables 1 and 2 provide the codes for the 20 interviews conducted

across the two departments. The representatives from graduate studies and student affairs were coded as FGS and SA, respectively.

After the tapes were transcribed, the researcher reviewed each interview by reading over the written transcript. For those interviews with poor recorded sound quality, the tape was reviewed and attempts were made to fill the missing information. To assist the researcher in re-creating the interview for this review step, the transcriber was asked to include all of the non-verbal signs, for example, interruptions and pauses (Seidman, 1991).

*Data Analysis.*

The data analysis phase followed the steps prescribed by the "constant comparative method" developed by Glaser and Strauss (1967). The first step was "comparing incidents applicable to each category" (Lincoln & Guba, 1985, p. 340). Although the constant comparative method is an inductive process, the present study had a deductive flavour because some of the global categories are anticipated given the connectedness of the direct interview questions to the cultural knowledge categories (dictionary, directory, recipe and axiomatic). However, the process allowed for emergent global themes and sub-themes because the researcher did not "force" the cultural knowledge categories if it seemed counter-intuitive or simply inappropriate, given the data.

To begin the analysis, an initial coding grid was developed in a similar process to the one used by the pilot study (Taylor et al., in press). Interview transcripts, one from each student, faculty, and administrator from the applied health science discipline and

from the science discipline, were carefully reviewed and potential themes, together with key phrases and quotes, were noted. Notes were taken (and kept in a journal), and referred to when the coding grid, based on the review of these six transcripts, were developed. This coding grid outlined the global themes (a priori and emergent) and the beginning sub-themes. Examples or prototypes were included with each sub-theme.

The second step within the constant comparative method is "integrating categories and their properties" (Lincoln & Guba, 1985, p. 342). Potentially a coding session might provide encouragement for the current coding grid and conversely another might suggest reconsideration of the classifying and/or arrangement of the global themes and their related sub-themes. Therefore, although the analysis began with anticipated global categories (dictionary, directory, recipe and axiomatic), it was be the data that lead to the creation and integration of categories.

The third step is "delimiting theory" or what Lincoln and Guba (1985) modified to "delimiting the construction" (p. 343). It is during this phase that the researcher becomes close to finalizing the coding grid. Lincoln and Guba (1985) explain that "the inquirer begins to realize both *parsimony* and *scope* in his or her formulation...and the categories become saturated" (p. 343).

The purpose of creating a coding grid is to optimize the information provided from the perspectives of the graduate student, faculty and administrator. The coding grid was considered a work in progress and was continuously added to and revised as new transcripts were analyzed. The result was a table that presents a code for each theme and sub-theme, a brief description of the theme, and a prototype example. The description and

examples enhanced consistency of the coding process. Once no new categories were observed, the coding grid was considered to be fully created and was reviewed with each transcript and amendments made to the original coded transcript, if necessary. The interviews with representatives from Faculty of Graduate Studies and the Student Affairs office were analyzed separately from the two disciplines and then later compared. The final version of the coding grid is presented in Appendix 1.

The fourth step is "writing the theory". According to Glaser and Strauss (1967) during this phase, "the discussions in [the] memos provide the content behind the categories, which become the major themes of the theory later presented in papers or books" (p. 113). For the present study, once the interviews were reviewed and the coding grid modified to the point

> ...where one is no longer talking about the world as the respondent sees it. One is now talking about the world as it appears to the analyst from the special analytic perspective of the social sciences. Fully possessed of the general and abstract properties, the investigator's observation are now "conclusions" and ready for academic presentation (McCracken, 1988, p. 47)

This final phase of the analytic process is explained and presented in the Results Chapter.

*Role of the Researcher*

The description of the development of the coding grid illustrates the impact of the researcher as "instrument" in qualitative research. Seidman (1991) suggests that Marshall provides an excellent explanation of the data analysis phase and how it is truly a personal

process. Marshall (1981) explains anxiety inherent in the analysis process however she positively embraces the issue of research bias. She explains "My bias is something I appreciate, it's part of me as a researcher. And while it is important for me and for others to recognize my bias, it really is what I can give as a researcher, it is my contribution..." (p. 399). This is an important aspect to appreciate when conducting research. The analysis process and all decisions that were made through out the research process were documented in a journal.

In addition to making the decisions made about collecting and interpreting data transparent, Seidman (1991) feels that it is important for researchers to make their interests and biases known. "It is crucial for interviewers to identify the autobiographical roots of their interest in their topic" (p. 24). He explains that it is important for researchers to include an autobiographical section in their research reports. Given the importance of explicitly stating the researcher's bias and assumptions, the following section highlights the background of the researcher.

One of the most significant points to be addressed was that the researcher works and studies at the institution under investigation. The place of employment is mandated to provide students with information regarding their rights and responsibilities and to assist students with any concerns they might have. The office can be considered a "fair play" office concerned with procedural fairness when decisions are made affecting students. Thus, the researcher is very knowledgeable of the policies and practices pertaining to student issues, including academic dishonesty. The researcher provides service mainly to

students, however assistance is provided to faculty and administrators in the form of consultations over students issues.

The other contributing factor is the researcher herself is a graduate student and is thus aware of some issues facing this population. Therefore, it was likely the researcher may have "taken sides" and was more sympathetic to the student perspective. Smith (1987) addressed this notion of a researcher "taking sides" and supports its conscious occurrence when conducting research (p. 177).

An argument can be made that the researcher was an appropriate individual to carry out this study for the same reasons that may have posed difficulties. Specifically, familiarity with students' experiences with plagiarism assisted with the goal of achieving a more comprehensive understanding, both in terms of what it means and how the research outcomes might potentially improve the current situation (e.g. educational interventions).

Given the above statement, it is obvious that one of the researcher's assumptions was the necessity to change the current practices. However, this research, and most research in general, is conducted precisely because there are problems to understand and solve. The following section outlines the measures that were taken to acknowledge and deal with the researcher's perspective in conducting the present research.

*Quality Assurance*

An important consideration for researchers is the quality of the their empirical investigation. For the present study two tests of quality assurance were applied: (a)

"trustworthiness" of the methodology and (b) "authenticity" of the research design. These tests are described below, including the assessment strategies that were employed.

*Trustworthiness*

Lincoln and Guba (1985) were concerned about the appropriateness of applying tests of quality from the positivistic paradigm (internal and external validity, reliability and objectivity) to the naturalistic paradigm. Guba (as cited in Lincoln & Guba, 1985) developed counterparts to the four positivistic criteria: credibility (internal validity), transferability (external validity), dependability (reliability), and confirmability (objectivity).

*Credibility.*

Credibility is the first test of trustworthiness presented by Lincoln and Guba (1985) which is how believable and convincing the data and the analysis are to the participants (Trochim, 2002) and consumers of research (personal communication, S. Straw, November 21, 2002). Lincoln and Guba (1985) prescribe three techniques to increase the credibility of the findings. These are prolonged engagement, persistent observation, and triangulation. Lincoln and Guba explain prolonged engagement provides the "scope" and persistent observation provides the "depth" (p. 304). The purpose of prolonged engagement is twofold: to learn the culture and to gain the trust of the respondents. Persistent engagement helps to ensure that what is being learnt about the culture is relevant, and represents an accurate representation of a phenomenon. It seems that these two strategies are more appropriate for a study in which the culture under

examination is "new". However, both can be applied, to a certain degree, to the context of the present study. For this project, the goal was not to study a culture. Rather, the focus was to illuminate the phenomenon of plagiarism in graduate education, within the larger institutional and academic culture. The nature of the researcher's employment at the university allowed for the prolonged engagement and persistent observation as suggested by Lincoln and Guba.

The third technique to increase the credibility of the data suggested by Lincoln and Guba is triangulation. As described in the Data Collection section, this important strategy was optimized by seeking opportunities to triangulate data, method, and theory in the research design (Denzin, 1978).

The remaining credibility techniques suggested by Lincoln and Guba (1985) are peer debriefing, negative case analysis, referential adequacy, and member checking. Peer debriefing is the formalizing of a relationship between the researcher and a "peer" who can provide constructive criticism with aspects of the research and lend a sympathetic ear to the inherent stresses (Lincoln & Guba, 1985). For the present study, the individual who fulfilled this role was the advisor, who provided opportunities to consult and debrief throughout the research process. Conversations that lead to new ideas or insights into the data analysis were recorded in a journal that was been kept since the beginning of the research process.

Negative case analysis ensures that during the data analysis stage, the themes and conclusions accurately reflects the data set. For the present study, once the global categories were identified (see Data Analysis section) each interview transcript was

analyzed and coded separately. Then the transcripts will be compared against the coding grid. The case study information provided another source of data with which to check the categories against to determine if there were any discrepancies between the reported knowledge (interview) and application of the knowledge (case study). Negative cases were also searched for in the data.

Referential Adequacy is the archiving of a data collected in the field (Lincoln & Guba, 1985). The interviews were audio taped and then transcribed and saved on computer diskettes for purposes of analysis. By electronically archiving the data, the researcher is able to present the evidence on which the research outcomes were based should anyone inquire.

Finally, Member checking is a process to check the credibility of the data analysis to also review the interview outcomes. For the present study, a copy of the results will be given to the participants; each participant expressed interest in being provided a summary. However, this will be for their information only, not as a means to "check" the analysis. The pilot study provided direction with a number of the methodological decisions, including the decision not to employ member checking. The interview protocol had built in opportunities for the participant to provide, verify, expand on, and clarify their responses.

*Transferability.*

The second trustworthiness test is transferability, which is the degree to which the research outcomes can be generalized to other settings and contexts (Trochim, 2002). It is the research consumer's responsibility to determine the transferability of a given

qualitative study (Lincoln & Guba, 1985). However, this does imply that investigators do not have to concern themselves with the potential for transferability. Rather, it is the researcher's responsibility to provide "thick descriptions" (Lincoln & Guba, 1985, p. 316) of their study. In the present study, the context will be explained such that one who wishes to transfer the outcomes to other areas in higher education can determine if the "sending and receiving contexts are sufficiently similar" (Lincoln & Guba, 1985, p. 298) to support transfer to either practice or further research.

*Dependability.*

An axiom of the positivistic paradigm is that one cannot have validity without reliability. This also applies to the naturalistic paradigm wherein credibility cannot exist without dependability; and credibility is sufficient to establish the dependability (Guba as cited in Lincoln & Guba, 1985). This third trustworthiness test concerns how the researcher addresses the dynamics of their research setting and the impact it has on their study (Trochim, 2002).

One way to strengthen dependability is though an "inquiry audit" (Guba as cited in Lincoln & Guba, 1985). The use of an audit is an important aspect of qualitative research to support the trustworthiness of the research (Lincoln & Guba, 1985, Miles and Huberman, 1994). Miles and Huberman (1994) also explain dependability to be a question of "have things been done with reasonable care?" (p. 278). An inquiry audit is one way a researcher can demonstrate care was given to all aspects of their research design and implementation.

Lincoln and Guba (1985) explain that what comes to mind when one hears of a preparing for a financial audit is what is meant by an inquiry audit- that is the keeping of a paper trail and having an organized system for the accumulated paper work. They rely on Halpern's six-category audit trail (see Lincoln & Guba, 1985 p. 319). The authors observe that collecting and organizing the data as though preparing for an audit has benefits for the researcher when it comes to the analysis and write-up stage of the research process. Halpern's audit trail and audit process are quite involved. For purposes of the present study, elements of the audit trail were employed to ensure an appropriate record of the development of the project, data collection, and subsequent analysis, were kept. The following is a list of Halprin's audit trail categories (as cited in Lincoln & Guba, 1985, p. 321) and a description of the information collected under each category:

1) *Raw data*- interview tapes, interview transcripts (hard copies and electronic copies saved on computer diskettes), interview notes, and documents (e. g. policies).
2) *Data reduction and analysis products*- preliminary data analysis notes, drafts of the global category scheme and drafts of subcategories.
3) *Data reconstruction and synthesis products*- finalized coding grid, drafts of results and conclusion chapters.
4) *Process notes*- drafts of the methodology chapter and reflexive journal.
5) *Material relating to intentions and dispositions*- drafts of the research proposal and reflexive journal.

6) *Instrument development*- drafts of interview protocol, pilot study proposals, notes and articles.

*Confirmability.*

The fourth trustworthiness test, confirmability, concerns whether the research outcomes can be supported or confirmed by others (Trochim, 2002). Confirmability strategies include triangulation and inquiry audits, both of which have been explained above, as well as reflexive journals.

Lincoln and Guba (1985) suggest there are two purposes for keeping a reflexive journal. One is to provide information about the human instrument--the researcher--similarly to how information is provided about "the paper-pencil or brass instruments used in conventional studies" (p. 327). The second is for keeping track of decisions made about the methodology (Lincoln & Guba, 1985). For the present research, a reflexive journal has been kept since the beginning of the research process. These writings included decisions regarding the research focus and design, summaries and quotes from the literature, notes advisor meetings, and any ideas, thoughts or concerns about any element of the research.

*Authenticity*

When considering the quality of the research, it is important to look beyond the research methodology and consider other aspects of the design. Lincoln and Guba (1986) suggest "authenticity" as another form of quality assessment. The authors introduce five authenticity tests: (a) fairness, (b) ontological authentication, (c) educative authenticity,

(d) catalytic authenticity, and (e) tactical authenticity. Each of these tests are briefly explained and related to the present study.

*Fairness.*

As a consideration for authenticity, fairness is "a balanced view that presents all constructions and the values that undergird them" (Lincoln & Guba, 1986, p. 79). For the present study, one research goal is to develop a comprehensive understanding of plagiarism. In order to come closer to this understanding, those groups of individuals who have a role in graduate education were identified and through purposeful sampling were interviewed (graduate students, faculty, and administrators). Individuals from each of these groups had a slightly different perspective, based on their respective experiences, roles, cultures and values (Taylor et al., in press; Paterson, Taylor & Usick, 2003).

*Ontological authentication.*

When developing a research project regard should be given to the "improvement in the individual's (and group's) conscious experiencing of the world" (Lincoln & Guba, 1986, p. 81). By way of the interview process, the interviewer and the respondents (potentially) "achieve[d] a more sophisticated and enriched construction" of the phenomenon plagiarism. In the pilot studies, some of the respondents commented after their interview that this was the first time they had thought and talked about plagiarism and that they were surprised at how much they had to say on the topic. It was anticipated that a similar effect would result from the present study, which indeed happened. Most participants, particularly the graduate students and the administrators, expressed they

were happy to have participated and felt they personally and/or the department have or will benefit from the findings.

*Educative authentication.*

The following three authenticity criteria underscore the importance of ensuring there is a reciprocal relationship between the researcher and the respondents. In other words, the researchers simply do not "take" the data and not provide something in return which will benefit the individual respondent or their community. Lincoln and Guba (1986) explain there should be an "increased understanding of (including possible a sharing, or sympathy with) the what's and why's of various expressed constructions" (p. 81) of a phenomenon. The outcome of the present research provided valuable information that will be utilized not only by larger study on plagiarism but assist the planning of workshops that are already provided to the university community by different offices.

*Catalytic authentication.*

This consideration is what Lincoln and Guba (1986) refer to as the "feed-back-action validity" (p. 82). The research was conducted to identify problems within graduate education that can be examined more closely through inquiry. The outcomes of the study highlight ways to improve the situation, for example, through educational interventions. Perhaps, in the context of ontological authentication, the respondents, who have the potential to find themselves in situations where plagiarism might be an issue, will have had the opportunity to contemplate what action to take and proceed in a more enlightened manner. For example, a graduate student may give more care when making notes from sources, or a faculty member might decide to broach the subject of plagiarism in their

next class. At an institutional level, the results will directly inform educational program action.

*Tactical authenticity.*

This final criterion proposed by Lincoln and Guba (1986) nicely summarizes the underlying value of authenticity of research. Researchers observing tactical authenticity recognize and appreciate participants beyond their data provider role. Within the present study participants, who represented graduate students, faculty and administrators, were each seen as providing meaningful information that will help create a better understanding of plagiarism within graduate education.

The next section outlines the steps that were taken to ensure participants were treated respectfully and the information they share was kept confidential.

## *Ethical Considerations*

Many researchers have explained the importance of giving critical consideration to ethical issues when using an obtrusive method such as interviews, where the participant is likely to divulge personal information, feelings and opinions. There needs to be protection for that individual in assuring the anonymity of their "raw" information. Consequently, access to the interview transcripts was safe guarded and their personal information kept confidential. Steps were taken to ensure participants were aware of their rights and were informed of the steps taken to protect their private information (see McCracken, 1988, p. 69 for his standard ethics protocol and the Tri-Council guidelines CIHR, NSERC & SSHRC, 2000). Participants were assured of the confidentiality and

anonymity. Interview tapes and transcripts were identified only by a code that maintained confidentiality of each participant's name and significant identifying characteristics. Only the researcher had access to the code key and only the transcriptionists and the researcher had access to the original tapes. Similarly, in the presentation of the results the participants were identified by their gender, role (student, faculty or administrator), and/or discipline. In cases where gender designation may inadvertently identify a participant this information was not provided. Other information provided in the context of an interview that could potentially identify an informant or another individual was masked when the transcripts were prepared. The hard copies of entire interview transcripts were stored in a locked filing cabinet and accessed only by the researcher, and when necessary, the thesis committee members. The electronic versions were stored on a diskette and accessed only by the researcher. Upon successful completion of the thesis defense, the audiotapes and the code key will be destroyed following thesis defense. In presenting the data, only short quotes were used to minimize the likelihood that an informant would be inadvertently identified from an incident or pattern of speech.

Some authors feel that researchers should strive to give something back to those who gave their time. Seidman (1991) explains he reciprocates through his interest of the participants' experience and his "honoring their words when [he] present[s] their experience to the larger public" (p. 83). This should naturally occur when a researcher is conducting research in which participants have a genuine interest and who realize receiving permission to conduct an interview with an individual is a privilege.

Reciprocation can come in the form of offering something in the way of making a situation "better". It was hypothesized that participants would point out deficiencies in their own educational experience as it applied to ethical considerations in research and the results of the project could assist in creating educational interventions that will assist all graduate students at the research site. In addition, each participant will receive a document summarizing the research findings. As a small token of appreciation, thank you cards will be sent with each summary.

*Summary*

The researcher consulted the literature in qualitative research, interviews and the pilot study to propose and carry out a research methodology to examine the issue of plagiarism in graduate education. The elements of the design, research objectives and related interview questions, were shaped by the Cultural Knowledge map (Sackmann, 1991). Three sources of data were collected: interview data, case study data, and institutional documents. These three sources of data were triangulated to investigate the congruency of the participants' responses, described actions and guiding policies for the purpose of improving plagiarism education and policy at the graduate level. The findings of the study are presented in the Results chapter.

# Chapter 5

## Results

The study was designed to explore six research questions. First, how do graduate students and faculty conceptualize plagiarism and how do they operationalize these concepts of plagiarism in their academic work? Second, from the perspectives of faculty and graduate students, what are the expectations with respect to avoiding plagiarism at the graduate level, and how are these expectations communicated? Third, are there discrepancies within and between disciplines with respect to formal policies and informal practices in terms of how students are educated about plagiarism and in terms of handling incidents of graduate student plagiarism? Fourth, what are some of the factors that contribute to incidents of plagiarism at the graduate level? Fifth, how should practices and policies be changed to respond more effectively to plagiarism at the graduate level? Finally, these data were used to conduct a gap analysis between knowledge and practice to identify educational opportunities with regard to plagiarism and related issues, which are or should be available for graduate students and for faculty.

The data sources included twenty-two individual interviews. Each data file included a transcription of the participant's responses to a semi-structured interview protocol, which incorporated questions based on the research objectives and a hypothetical case scenario and accompanying questions. The data collected from the interview questions and the case scenario provided points of comparison between theory (the interview questions) and practice (case response to the scenario). The responses from

participants consistently touched on all six-research objectives, thereby allowing for comparison between participants, both within and across the two departments.

In addition, the interviews held with representatives from the Faculty of Graduate Studies and a Student Affairs office allowed for a comparison between these two administrative units and the two academic departments and also allowed for a second theory- to- practice analysis. Where pertinent, documents that were mentioned by the interviewees became part of the data set.

The findings of the study are presented and organized by the six major themes that were identified during the analysis of the data. These major themes are (1) understandings and descriptions of plagiarism, (2) learning and teaching about plagiarism, (3) writing and research process, (4) keeping within the family: handling cases of plagiarism, (5) theory to practice: responding to hypothetical case of plagiarism, and (6) educational and policy recommendations. Findings of the document analysis comprise the final section of the chapter.

*Understandings and descriptions of plagiarism*

Participants' conceptualizations about plagiarism illuminated the concept as an educational issue that becomes seemingly more complicated and sophisticated as one advances through the educational system. These conceptualizations are reflected in the six sub-themes, which are definitions, common knowledge, grey areas, group work, intellectual property and ownership over ideas, and lastly, a new appreciation about plagiarism rules. Each of these sub-themes is introduced and explained below.

*Definitions.*

All participants were able to provide a similarly worded definition of plagiarism that included a variation of the phrase "using the work of others without proper citation". One administrator explained, "I guess in a broad sense plagiarism is presenting either written material or some other form of, whatever the medium is someone is working on, something is presented as though it were your own intellectual work when in actual fact it is somebody else's" (SCadmin 6-10).

However there was also variation in how these definitions were described in practice. The graduate studies representative explained that she had observed differences in definitions amongst faculty that she had been in contact with: "Some faculty have one definition and some have a different idea of what it is" (FGS 26-27). She went on to express her concerns how these differing definitions impact students, "one way by one professor and another by another, and students are getting mixed up" (FGS 34-35).

Participants elaborated their definitions by providing descriptions of the different ways plagiarism may be exhibited in work. These descriptions covered a spectrum of behaviors from "where you insert some material in an essay, not deliberately with the objective of impressing the Prof with the brilliance or your ideas, but just because you didn't discipline yourself" (AHfac2 140-143), to "this becomes another issue, are they doing the 'cited but not seen approach'…trying to pad the bibliography" (SCfac2 441-442), and to "presented a huge chunk of a published paper as their…own work"(AHfac2 144-146).

Just as plagiarism can be described as a spectrum of behaviors, the seriousness of the action can range based on the intentionality of the plagiarist. When explaining hypothetical or real examples, participants stressed that the intention behind the act and the context of the behavior was important when determining the severity. They believed that defining an act of plagiarism goes beyond simply identifying the behaviour but also includes ascertaining the motivation behind the behavior. One faculty member illustrated the evaluative process once plagiarism has been identified: "Once you have found it, the challenge, I think, is assessing the degree to which you think it's clearly intentional and...the seriousness of it" (AHfac2 320-322).

*Cultural differences.*

Some participants considered the challenges international ESL students might or do encounter with plagiarism. One graduate student mused

> ...where English is not their first language and sometimes that can be a real challenge, I think. They are reading things and they are using that information and trying to express it and maybe not being able to do it that well in their new English so they kind of just laid it out the way they read it to make sure it was correct (AHgs3 460-465).

She went on to identify two possible factors that might make avoiding plagiarism difficult for ESL students: "they may not know the rules, and may be struggling so much with the language..." (AHgs3 474-475), and "it could be a difference too in the background, what they have been taught, as opposed to what they're taught here" (AHgs3 477-480).

One of the participants, an international student, provided her thoughts on why some international students may have a more difficult time understanding plagiarism,

> It is probably different in different countries because research is not such an important issue in my country. Plagiarism is not that important there because there are not so many people in doing research; nobody cares about those who do research. It depends on the campus, for example in _____, has lots of articles so they do lots of research. Though they are near my country they may have more stringent rules for this (AHgs6 305-312).

For international students the issue of plagiarism can be confounding. Even for those who went through the Canadian or similar education system, plagiarism may still present some confusion. The remaining sub-themes addressed in this section illustrate the complexity of plagiarism as a concept to be defined and understood.

*Common knowledge.*

Although participants could articulate concise definitions, many expressed difficulty in applying these definitions in practice. When applying the rules about plagiarism, determining if information is common knowledge posed a challenge for five out of the twelve graduate students. A graduate student illustrated this point by stating

> I guess there is a grey area there because it seems to me that once a finding is considered established, it is considered common information and so, one of the biggest problems I have…is when to use a reference and when not to use a reference. When is something considered general knowledge versus when does it need a reference to a specific person? (SCgs1 40-46).

One graduate student flip-flopped when discussing her perspective on common knowledge; she began by saying, "In science there's never really common knowledge, you always cite something" (SCgs3 887-888), but then qualified her statement by explaining that larger concepts that have been accepted as basic theoretical knowledge do not have to be attributed to someone. Another graduate student wondered, "What is common? Like, who made it common knowledge?" (AHgs5 84-85). Most graduate

students responded to the issue of common knowledge by erring on the side of caution by choosing to over-cite rather than under-cite in their academic papers.

Faculty also mentioned the issue of common knowledge but some individuals explained they decide when a citation is appropriate based on their familiarity with the literature in their field. For example, one professor suggested, "I think that general ideas that are in your field are fine without citations. Because other wise we could be citing hundreds of different people that have all said this same thing" (AHfac3 68-71).

*Grey areas.*

For three participants in the applied health science discipline, technology and different mediums of communicating and sharing knowledge led to questions about when it is necessary and appropriate to cite, especially when the material in question is unpublished. These questions normally came up in a work related context such as in this instance:

> Plagiarism can also be involved with unpublished work but it gets a bit grey with things like power point presentations and …notes or sticky notes from meetings and…the way in which stuff is exchanged in this environment that we work in; we work very much in public policy context (AHadmin 34-37).

Another grey area that was mentioned was the reliance on another writer's interpretation of the literature rather than seeking out the primary sources. One science graduate student explained that the

> grey area of plagiarism in science is using someone's literature paper and using their literature sources, without having or really doing your own searching. I think [that] is the most plagiarism that can happen [in science]…it's strange, about that, because it's their ideas, it's the original sources ideas or their original papers and then this secondary person has put all of them together and a third person has come along and taken that too (SCgs6 834-842).

In a community of ideas, whether it is within collaborative research or when reviewing the literature, avoiding plagiarism is a concern. However, in context, sometimes the appropriate thing to do is not so clear. The next sub-theme looks at the issue of group work and issues surrounding appropriate and inappropriate collaboration on academic work.

*Group work.*

For applied health science graduate students, the issue of group work versus individual work posed a concern when applying the rules of plagiarism. One graduate student suggests that

> I think that when people come into this program they expect to work very individually so sometimes when you are actually put into situation where it is indicated that you can consult with each other it's a new thing and after a while it becomes difficult to understand when you can do that and when can you not work together (AHgs3 197-203).

This same graduate student explained that students in her program occasionally share each other's work: "...we try to share a lot of our work, to help each other and our courses are very small we often make our papers available on line to each other..." (AHgs3271-274). In her own experience, this practice has been helpful for her own learning: "what I really like is the quality of the work that is really out there because I don't really know you often really operate very very much in your own world" (289-291) and "...you rarely get to see the writing of your peers, and it give you some idea of where you are at" (293-295). She did, however, underscore the importance of personal integrity when sharing work freely with classmates: "there is a certain amount of trust. If [plagiarism] happened, that would be really unfortunate" (276-277).

No graduate students in the science discipline mentioned that they encounter difficulties ascertaining when it was appropriate to work independently or within a group. The issue of group work did come up but within the context of their teaching assistant experiences. Three out of the six science graduate students mentioned situations that they had encountered as teaching assistants, which involved students working together when they were instructed to work individually. One graduate student provided an example that involved two undergraduate students who were in a relationship and who had turned in papers that "were identical and they claimed they hadn't done them together and it seemed a little sketchy" (SCgs3 188-190).

When completing assignments, students face the challenge of both ascertaining the expectations of faculty with regard to group work and striking a balance between safeguarding and sharing their own individual work. The next section reveals that the ambiguity about whether or not to share ideas continues and, in fact, becomes increasingly complex, as one begins to do original research and is exposed to the larger research community.

*Intellectual property and ownership over ideas.*

A few graduate students from both disciplines admitted that sometimes there is an issue when distinguishing between their own ideas and those of another. As one graduate student stated, "... this is an issue: someone said it but you had also thought about it..." (AHgs2 32-33). Another student took a philosophical perspective and posited that new ideas are really old ideas made new by technological advances:

> [Representing] the idea, like where the idea came from. The [ideas] pop up and the way you analyze it...the way you look at it...with certain technology [we]

> might be able to do it more efficiently these days than we used to... ...but the ideas have been around for a long time (SCgs2 160-162; 166).

There are a number of ways in which ambiguity about the ownership of ideas emerged as an issue at the graduate level. When discussing plagiarism, a couple of participants connected plagiarism to the broader concepts of intellectual property. One graduate student, in light of the collaborative community based research with which he was involved, opposed considering ideas as a commodity to be owned. "Well, the thing is there is no real private property in terms of ideas, I don't agree with the individualistic notions" (AHgs2 11-12). When contributing to the literature or conducting research, the same student explained, "ideas are community things and no one comes out of the blue with an idea, they rehash everything you say" (AHgs2 15-17).

Sometimes the product of one's own research becomes the property of another, according to the administrator and one graduate student from the applied health science discipline. The administrator described that is not uncommon for researchers in his department to be commissioned to do research or background papers for outside agencies. In most of these instances the researcher does not expect to be given credit for the text the agency uses in subsequent documents or publications. As this administrator illustrated, "I wrote all kinds of background papers for the _____ that showed up in the final report...without attribution, without reference of where it came from" (AHadmin 66-70). The graduate student disclosed, sometimes not taking credit for ideas is intentional:

> Well it's interesting, my research happens to be quite political. I have been in situations where I have been asked to write things that other people's names have

> been put on my documentation. I've, perhaps, had a choice to take a position and I've chosen not to, for political reasons (AHgs3 232-237).

Collaborative research, such as the work done within a research lab, sometimes leads to questions about who should get credit for what and in what order in the author list. One professor offered this perspective: "Probably the biggest issue of grad students where intellectual contribution might be discussed is in terms of order of authorship and stuff like that, and that's never really become an issue [for me], and that's not really considered plagiarism as much as a family feud…" (SCfac3 240-244).

Other incidents involving using the ideas of other people were seen as more serious. One faculty member and two graduate students in the science discipline explained that in some instances the sharing of ideas between individuals or between research labs is inappropriate. One professor provided an example that he encountered: "Actually one summer student who I had working for me on a theoretical project… trotted off to [another] university to develop my theoretical project into a master's thesis. Which I told him was not appropriate" (SCfac2 566-570). Such experiences will often change a participant's attitude with respect to discussing their ideas. A graduate student experienced a situation in her previous program wherein she was directed by her advisor not to share information with a particular professor in the department for fear that she would take the idea. "My professor there didn't want me to talk too much with the professor across the hall because she did on the odd occasion like seem to come up with some similar stuff"(SCgs3 375-377). Another graduate student explained the

consequence of sharing your research ideas prematurely:

> You can have a great idea, but it is very important how you carry that out. How you decide if that hypothesis is true or not.... [because] if someone in another university got into what you were doing [and thought] "Oh that's pretty neat"....[we'll be] competing to see who can be the first to get their data published (SCgs5 266-276).

Two graduate students provided instances where questions on appropriateness of sharing research ideas and work at conferences yielded contrary advice. One student was advised not to disclose any research ideas: "Like when I go to a conference or something like I will hear people say like don't tell them too much because they might, *you know* [take the idea]. It never occurred to me that anyone would care what research I was doing..." (SCgs3 363-367). Another graduate student received the opposite advice and was encouraged to discuss her ideas for research, even if the ideas were just in the developing stages: "One of my committee members...[said]...you talk about stuff that you haven't written or published or even talked to anyone else about, because it's a really good medium for getting feedback from your colleagues more than anything else" (SCgs6 363; 365-370).

The climate in which one carries out and communicates research has an impact on the value system and attitudes towards sharing ideas. For participants in the applied health discipline, collaborative research, including community-based projects, emphasizes the sharing of ideas, and in some instances, the sharing of the credit for those ideas. Participants in the science department revealed a different research environment that in some instances has an element of competitiveness. Consequently, this leads to research ideas being limited in circulation.

*A new appreciation about plagiarism rules.*

A positive aspect of some of these experiences with trying to grapple with acknowledging the ideas of others in practice was shared. Two graduate students pointed out how their perspective on the rules about plagiarism changed now that they are carrying out original research projects. One student explained that the rules are

> ...critical, I mean [referencing is] considered par for the course and now that I'm involved in my own research that puts a new twist on it too in terms, you know, I wouldn't want someone to take my findings and claim them as their own....So it's always at the forefront of the of the writing process because you just don't put something down without ...establishing who gets the credit for it. And that's the whole process in my field, is looking at what's been proven and hasn't been proven (SCgs1 77-86).

Another student admitted that involvement with research - both library and empirical - make the rules about plagiarism more important:

> I think they become more important over time, and especially, I think, now being [involved with] research, they are probably more important now. Anyway I don't think, [they] perhaps seemed that important previously and perhaps maybe when, because you have to read so much literature in grad school, you certainly learn to respect the work of others and you begin to understand you know, the time and effort that as been put into gathering that information and I think for me I have always valued original ideas (AHgs3 48-56).

These findings reveal that knowledge of plagiarism develops with experience, even at the graduate level. Application of the rules becomes increasingly complex as ambiguous situations pose additional challenges for graduate students newly navigating the research environment. Some students are better equipped than others, leading to the question of how graduate students are educated about the rules. The next theme explores this issue.

*Learning and Teaching about Plagiarism*

Participants shared experiences about how they learned the rules of plagiarism and incorporated this learning into their writing strategies. The following section presents five sub-themes that relate to the learning and teaching about plagiarism: how participants initially learned the rules, knowledge expectations, role of the syllabus, reticence to discuss plagiarism, and contributing factors of plagiarism.

*How participants initially learned the rules.*

Participants provided a number of different responses when they were asked how they had learned how to cite the work of others. Two participants explained learning about the rules was part of their moral development. One professor stated that "it was almost one of these things, like the Ten Commandments, We were supposed to know it was a bad thing" (AHfac2 22-23). One graduate student commented "it was an ethical issue directly from home" (AHgs5).

Four students were able to recall that proper attribution was discussed during their secondary education. For one student, it took place early on in her schooling.

> I would say early, like in elementary school…I think you go back to when I first started writing and using references. I would say in school and I did study, I remember doing a little project…it didn't have a formal citation style anything like that but I remember the idea of that coming in grade school (AHgs3 19-24).

Three students remember referencing being discussed in high school, usually by an English teacher, as it was for this graduate student: "Right before we all wrote our first essay, actually, he gave us a spiel how easy it was to get caught at deadlines…so it was more of a soft warning than anything" (SCgs2 23-25).

For five students, rules about plagiarism were introduced during their undergraduate studies, and in some instances the lesson was provided after a mistake had been made. One graduate student recalled the first and last time he was told that he needed to reference information in his papers. "The first time I wrote a lab report....and I got it back: 3 out of 10!....Everybody else in my lab group got 9 1/2. So I went to see [the instructor] and she said 'well you have to cite this'....that was the only time that I made that mistake" (SCgs2 261-271).

Regardless of when they first found out about plagiarism, the majority of students made comments that indicated that their initial introduction to plagiarism was insufficient to gain a real understanding. One graduate student explained, "[my] English professor...[said] 'okay, whatever literature you use, you have to cite, you can't just throw in quotes and take credit'... So it was, I would say, not very good. It was more a general definition and if you want to look into it more the onus was on you pretty much" (SCgs5 41-48).

For one international student the concept of "plagiarism" was new, although she was already aware of the importance of referencing others' work. "It was not a big concern, in [my country]. I studied ____ [there], so um, they just told us to state all the references, and didn't tell us anything about plagiarism we didn't have any workshops about that" (AHgs6 53-55).

The participants provided a range of experiences with regard to how they were introduced to the notion of plagiarism. For some, it was a personal integrity issue that was learned early, for others the exposure to the rules appeared when their first research

papers were assigned and mistakes identified. Regardless of how the concept was introduced, participants commented that learning the rules was, and for some continues to be, an ongoing educational process as their writing and the way in which they incorporate the work of the others becomes more sophisticated. However, graduate students are expected to know the rules and to demonstrate this knowledge competently in their writing, as the next section reveals.

*Knowledge expectations.*

All but three participants made a statement that graduate students are expected to know what plagiarism is and how to avoid it as illustrated by this graduate student's statement: "I think that at the graduate level it is very interesting there is almost an assumption that it will not be an issue because you are at this point where you should, perhaps there is an expectation that you understand it" (AHgs3 166-170). One participant, who did not express this perspective, explained that it is important to be mindful of the student's background when making assumptions of whether or not the student knows the rules. "Our graduate students come from a variety of backgrounds, other countries, other institutions. [For] grad students that have gone through our program we would say, 'Okay, you took this and this course, you should know this', with undergrads, well, [they are] still in the embryonic development stage" (SCadmin 433-441).

The Graduate Studies representative agreed with this perspective and explained, "They [the faculty] expect a lot better of graduate students: no mistakes. That they should know at that point that forgetting to put quotation marks around something or not quoting something is a big mistake, like you can't just say, 'I didn't know about it'" (FGS 212-

216). She went on to explain that their office is aware of the differences in educational backgrounds and experiences.

> But then you go back because a lot of international students don't know. They don't operate the same way that our undergraduate students do. So that throws in another...okay but that's not their perceptions, really, that it should not be tolerated at the graduate level. And I think that sometimes we end up reminding them, or pointing out that these students don't really have the same background as our students do (FGS 216-223).

The Student Affairs representative explained that although the assumption that graduate students know the rules is a widely held perspective, awareness that plagiarism is an educational issue is growing. "This might be changing but I do think there is an expectation that graduate students will somehow have better skills... intuitively know things better, stronger, faster than undergraduate students. There's definitely an expectation that graduate students will not engage in acts of plagiarism" (SA 413-417). She went on to explain that "[Faculty believe] they don't need to teach it at the graduate level, or articulate it at the graduate level, which I think is misplaced. I think that some of the work that we've done with Graduate Studies and different administrators across campus has underscored that that assumption is sometimes false" (SA 425-429).

*The syllabus.*

One of the strongest opportunities to raise awareness about plagiarism was illustrated by the many participants who mentioned the university's policy on plagiarism and its inclusion in course syllabi. Almost all of the students indicated that in most classes, including at the graduate level, the professor mentions the plagiarism policy

when reviewing the syllabus. A student summarized the process as the following:

> In basically every class that I have taken, that is one of the first things that they cover on the course outline. And my understanding is that they are required to do that in every class. So basically Profs in courses will make me aware of the fact that plagiarism is an issue and that it's outlined in the calendar or the registration guide, can't remember which...(SCgs1 129-134).

This same student, when asked if he had looked up the policy in the calendar, admitted that he hadn't, "I haven't actually. I haven't read it over so it seems like a technicality that the Profs have to do what they have to do" (SCgs1 138-140).

Some faculty mentioned the policy, both in terms of how they learned the rules as a new instructor: "Faculty of Graduate Studies is very clear about all of these issues...the General Calendar of our university has a section on expectations, plagiarism and cheating" (AHfac3 224-227), and their obligation to include a reference to the policy in their course outline: "It's pretty clear, very first time you do up syllabus for a course you have got to go through the section and read the little blurb and then include it or refer to it in your syllabus" (SCfac3 37-39). However some faculty wondered about the effectiveness of noting the policy in course syllabi: "I am convinced that, however, not everybody in the class reads the syllabus..." (SCfac3 40-341).

Aside from the inclusion of a statement on the course syllabus or a brief statement at the beginning of a new course, participants did not mention any other "formal" means of instruction about plagiarism within their respective departments.

*Plagiarism: Not a topic for discussion?*

Participants were asked how their department discusses plagiarism. When referring to educating about the rules concerning plagiarism, many indicated such

conversations do not take place. This graduate student shared, "It is like sex, you don't discuss it. I don't think it has been discussed: it's a sin that doesn't happen!" (AHgs2 227-228).

In many instances, participants mentioned other, more tacit ways of learning the rules. One administrator stated that "we don't talk about it in this department, I guess we assume that they'll pick this up while they're in here" (AHadmin 660-661). One graduate student reflected on her previous educational experience and revealed that some of the most valuable instructions about expectations of the discipline came from peers who were further along in the program. "Most of the information you got was from other students who were ahead of you, by anywhere from a few months to 2 years. That's the best information, the most reliable" (AHgs4 533-566).

Four out of the six students in the applied health science department mentioned attending workshops that were offered outside of the department. These workshops covered different elements of the writing and research process including appropriate referencing and plagiarism. For one international student, attending a workshop with fellow student colleagues resulted in her observation that it was not just herself who had questions about appropriate citation. She explained, "I don't know how much they know about plagiarism but from the workshop they do not know much more than me, because their questions were all the same [as mine]. So I think that it [an educational opportunity] is needed for everyone at the graduate level or at undergraduate" (AHgs6 682-686).

*Contributing factors of plagiarism.*

Participants were asked about the factors that contribute to a graduate student's decision to plagiarize. These responses covered four main areas: competitiveness for grades, time pressure, lack of confidence, and unawareness about the rules.

A number of participants cited competitiveness of graduate school as a significant contributing factor to plagiarism. Two graduate students explain how some may use dishonesty as a means to gain an advantage. One explains, "I think the research environment can be very competitive, and at times people get, feel they need that sort of advantage and see that as a really easy way, to get ahead" (AHgs3 393-396). The other graduate student contends,

> And I think perhaps, the level of competition now is, I am saying perhaps, I don't know. It's partly what may lead people to engage in plagiarism because of the highly competitive nature of academic life. You know marks are pretty important and if you have that extra half grade point or whatever it is, and there is the temptation, I suppose, for people to use whatever they can to accomplish that (AHgs4 175-181).

A faculty member also indicated pressure as an important factor to consider. He contemplates the role of larger society that encourages individuals to strive for success at the expense sometimes of being honest about one's own accomplishments,

> Well, you know, I think there is a huge amount of pressure and I know there was when I was a grad student, at least we felt there was. And I'm sure it's more intense now and you want to get the best grades you can. Of course you want to get A's rather then B+. And if you can, I mean a great deal of our society is about selling yourself, at every level, it's a job interview and in a sense an assignment paper is a marketing exercise, you sell yourself as bright and thoughtful and creative and, you know, there's on some level a lot of pressure to, if you can get somebody else's ideas and successfully market them as your own it's to your advantage at some level (AHfac 339-349).

Some participants, students and faculty mentioned time, and specifically the lack of it, as a possible key contributor to a decision to plagiarize.

> I would suspect convenience of time, being a big reason for some people, other people, a lot of people are just doing too many things and they're overwhelmed and then get trapped, um, perhaps some people might feel insecure about their own work and feel that they need to access other peoples ideas (AHgs 3388-393).

Another participant, a faculty member suggests:

> Yeah, it's institutions, that we probably put a lot of pressure, we don't mean to but we...do, on our students and sometimes you can rationalize well I probably shouldn't do this but I don't have a lot of time to do this paper, I have a million papers to do for all my courses...(AHfac2 353-358).

One graduate student provided lack of confidence as a possible contributing factor:

> In other cases where I think for example when they are writing sentences or paragraphs with a few lines from somebody else's ideas, um maybe because they do not have novel ideas themselves, or maybe they are not prepared. Sometimes it is unconsciously you read it you don't know if it is your writing or that person's (AHgs6 448-453).

"Well, I guess I would imagine it is lack of awareness or I guess some people want credit that they don't think they can get on their own or something, I'm not sure, it is kind of hard, the only way I can see it happening, with me I guess, is by accident" (AHgs1 258-262).

One participant suggested not being aware of the rules or as in the example below, inadvertently claiming credit for an idea after reading it in the literature,

> I guess the other big reason is that they are not aware. That they are in fact stealing someone else's ideas, that they really aren't aware, when you when you're reading a lot of material sometimes and sometimes you get an idea that is really well known, it's general knowledge you know, how do you make that distinction sometimes (AHgs3 396-403).

Some of the identified factors that may lead to plagiarism are issues of not knowing the rules of plagiarism or a need to improve writing and research skills.

In their responses, participants underscored that knowledge about plagiarism develops with experience. This finding is not surprising because the application of the rules about plagiarism mirrors the increasing sophistication of academic skills, such as writing and reviewing the literature, as an individual moves through a program. The next theme examines this issue.

*Writing and research process*

Another perspective on the participants' knowledge about plagiarism was revealed through writing and research processes within a graduate program. The following sub-themes are discussed in this section: personal strategies, feedback, disciplinary differences, publication expectations, and citation as a form of language.

*Personal strategies.*

Participants discussed their strategies for reviewing the literature and incorporating the work of others into their own papers. Participants reported varying strategies that ranged from traditional (highlighting pens) to contemporary (computer software, e.g. "Reference Manager"). The majority of the graduate students mentioned the use and reliance on technology when researching and organizing the literature. One student explained how a computer helps to keep him organized.

> I usually just, I usually put everything down on a computer, and then just write all my notes there and then I just expand on them later on, so I don't have all those pieces of paper all over the place, my handwriting is pretty bad as it is too, so I

> would do better on the computer, and then you don't have to go looking all over the place, so I like to read an article and then go to the computer...(SCgs5 92-98).

With the exception of two students, strategies for researching and organizing the literature were self-derived; no one mentioned adopting a strategy used by their advisor. One graduate student, who recalled an undergraduate professor's advice on making notes from articles, explained, "[if] something is particularly well said and I want to quote it exactly I'll make sure that I specify that, otherwise I'm paraphrasing as I make my notes" (AHgs1 76-78).

Another student, for whom English is a second language, has an additional step when reviewing the literature:

> Actually we, um, because our language is different and most of the articles are in English, we translate it into [my language] and then we have to write the name of that person with the example one, and then we write the name of that article that we took that idea from" (AHgs6 62-65).

For this student, translation adds another layer of complexity to the writing process as it introduces a potential risk of inadvertent plagiarism through poor paraphrasing. However this process worked well for her when she wrote papers in her own first language. "And we can change it because it is translation, so we can change it into any way we want, but we have to write the name of the article" (AHgs6 70-72).

The process of translating articles written in English to her first language to aid in comprehension and then back to English for the paper appears to be a process that she learned in her English program at her original university and not at the current institution.

> Here, [how to use the work of others] is the first thing I learned in the English program....But in my own country, for example, writing my thesis or writing the proposal in the English studies that I had there, we started reading, for example,

> articles and then translating and at the end of each translation for each article we wrote the name of that article. But we could change it while we were translating, for example we said "Dr. X, and their colleagues believe that..." [and] we wrote what we have learned from the articles (AHgs6 188-196).

The student was clear that the idea had to be cited but there was some ambiguity around the difference between quotations and paraphrasing and the difference between referencing the expression of ideas.

When referencing work, participants all strived to ensure they were citing the appropriate source. For some it was a straight-forward process, as one student explains "...when I am researching a topic the first thing you do is look at other people's papers and so if you find something out or come up with something you want to include in your own paper it's just automatic that you would put that reference in there" (SCgs1 92-96). For one professor, this system needs to go one step further as he endeavors to trace back ideas as far back as possible to ensure appropriate attribution. "There is very little in terms of general ideas it's really, and certainly in my own field, I notice if you go back long enough you can come up with the general ideas, and it's actually kind of fun to do that" (SCfac3 86-90).

One administrator includes his own students in the writing process; he invites his graduate students to review his work and to provide feedback. The advisor feels this reciprocal relationship of reading and critiquing the other's written work, benefits the student, as he explains, "I always, everything I submit, I get my graduate students to review, for a couple reasons: one, it shows them what has to be done and two, this is [their] chance to go to town on my papers" (SCadmin 165-167).

Participants shared a number of different strategies for reviewing the literature and incorporating the work of others into their own papers. The variety of these responses demonstrates both the personal nature of writing but also the diverse educational opportunities of the participants and how these experiences shape their writing and citation practices. One universal form of receiving guidance about appropriate referencing is through the feedback one receives on written work, as this next section will reveal.

*Feedback.*

It was common for participants to separate learning about plagiarism from learning how to appropriately reference, and this separation resulted in more detailed descriptions about the teaching and learning that occurs between student and advisor or professor. The instruction about appropriate referencing took the form of verbal and written comments after the submission of work. All participants, faculty and graduate students, underscored the importance of this type of feedback in the process of learning about the writing conventions of their discipline. There was reluctance on behalf of most participants to label a situation plagiarism if it pertained to them, in the case of students; or if it involved their students, in the case of faculty. Overall, using feedback to teach students how to avoid plagiarism was identified more frequently with participants from the science discipline.

One graduate student explained that on a few different occasions professors, because of their knowledge of the literature, were able to identify material that required citation.

> I've got some papers back saying "you said a lot in this paragraph and haven't used any references, where did you get this information from?" It's just some cases where I have just forgotten to put them in or whatever. So it might not be, it might not be specific information that they are looking, but just the type of information presented, saying that would require a reference, that's not your own thoughts (SCgs1 423-433).

Another graduate student revealed that throughout her program she has come to depend on the guidance provided by her advisor, and later from her committee:

> I always relied on [my advisor] for feedback. If I gave him a paper then he would say, "___ this sounds like you just got it out of a journal". He would tell me, so I really relied on him to edit my work but then I had like for the thesis, you know, four professors [who] read your work and right away it would send up a red light to them if they thought I was sort of verbatim taking words out of another journal, so I think I have the hang of it now but it is a skill that is developed over several years (SCgs4 201-207).

One administrator explained how he provided one of his graduate students, an international student, who had plagiarized information in one his papers, with feedback:

> [he] turned in a term paper, which was quite good but missing...a lot of things said but not properly cited. So I sat down, gave it back to him, wrote a lot of critical comments, you need to reference this, this and this. And I must say that the student was incredibly appreciative. He felt that he had never been told. It wasn't that he was trying to misrepresent anything, said gee nobody ever told me that I had to be this thorough (SCadmin 398-405).

One international student explained that back home at her previous institution, there was little to no attention given to referencing as she has experienced in her current program. "I was not concerned about it. But here, when I was writing articles or writing papers, all the professors say, 'Make sure that you write where that sentence comes from.' So I found it a very important idea here" (AHgs6 84-87).

Appropriate use of the literature was another important piece of feedback for one graduate student: [My advisor] would say 'no, just don't focus so much on that area' and gave me ideas to broaden my scope. It is something you learn, but it just takes practice you know, the more you write the better you get at it; there are no shortcuts to it, unfortunately"(SCgs4 223-227).

One administrator mused upon his graduate experience and underscored how important his advisor was in his development of becoming a researcher and a writer. He illustrated this by sharing some advice that he had received from his advisor:

> My [advisor] was a strong believer that the secret to success is to know the literature. He said you've got to go to the library every day or at least every couple days…because, he said, it gives you power…therefore you can speak with authority and people will respect you and your reputation develops from that (SCadmin 197-202).

A faculty member explained that during the thesis revision process between graduate student and the advisor, the student learns much about the research and writing process in the discipline.

> So, through that process where you're learning a lot of things, not just in terms of plagiarism, and use of information, referring to information or writing style, all of that gets done pretty much at the same time. Um, you develop your background in preparation for your research, but it's really how you present your own results to others that define whether or not you are plagiarizing. And you get lots of practice; a good supervisor won't let you get away with anything (SCfac3 126-134).

Many graduate students assumed advisors and instructors have a vast knowledge of the literature and are well equipped to identify missed references or inappropriately cited sections. Two graduate students expected that plagiarism would be detected because faculty members know the literature quite well. One graduate explained, "I guess I

always go under the assumption that they are intimately familiar with the literature that I'm looking at (SCgs1 412-413). He went on to illustrate how one professor applies his knowledge of the literature by carefully checking his students' papers: "I have heard of one Prof who actually checks every reference in a list to see if it has been appropriately used" (SCgs1 417-419).

Another student explained:

> I think through the instructor's experience usually in your field [they] do tons of research in the library, the new journal articles… it comes with experience when you read all the research in your area of specialty, you know right away that that sounds like so and so's ideas. You know there is people just from their articles have certain characteristics and if the student comes and start spouting all of so and so research and claims it as their own, the professor knows (SCgs4 4472-480).

However, faculty indicated that it is unrealistic to expect that they are able to detect all the plagiarism that may appear in the papers they are reviewing. One faculty member explains "Yeah, [detection] is a big challenge in itself, because before you *worry* about what to do about it you have to find it. And that in a way presupposed that you either know the literature reasonably well and can say "what a minute that's…"(AHfac2 306-309). One of the administrators shared the same concern and indicated the nature of his discipline added another complication, "I think it would be impossible in *this* field, because it's interdisciplinary, maybe in other fields it would still be possible...but in a field like this where its very multi-disciplinary, huge number of publications…unless I had just read the paper the previous month I cannot imagine…" (AHadmin 304-308).

In the absence of formal educational opportunities about plagiarism, feedback between advisor/instructors and graduate student plays a crucial role in communicating

the writing and referencing conventions of the discipline. The next section examines these disciplinary differences.

*Disciplinary differences.*

Participants from the science department frequently illustrated their points of view about the writing process in their field by comparing their discipline with another, and invariably this was English. Most of the comments compared the styles of writing and the use of sources, as this graduate student illustrates:

> Before I was in [this department] actually I was in English....they just didn't want us to use any references at all. We were supposed to come up with our own ideas. And I guess that was the first time they just wanted us to think and not read other things before we [wrote]. And I guess it was in science that I really started to reference (SCgs3 11-16).

Another graduate student provided further evidence of this difference by explaining the expectations in the use of citations:

> I think maybe in English or some of the others, literature may be a little more creative...it's more of like I was saying like an original idea that you may have to come up with. In science it's more along, you have to, you have to do your homework, you have to know all the literature, and you have to really be able to be aware of all the work that has been done in your area (SCgs6 118-125).

One administrator mentioned how different it is to receive a paper that is not written in the scientific style that he expects, "I found quite a difference between cultures, between science and the arts. In my first year course, I occasionally had students from arts....[I'm] very sensitized to the fact that there is a cultural [difference]...a lot more footnotes, and different ways, which I wasn't used to seeing; a little more flowery"

(SCadmin 127-133). One graduate student expressed how she learned to conform to the scientific style:

> I was an undergrad and I used to get good marks in literature and English... and then I didn't do very well on my first science paper because, well it wasn't so much that they took off marks, but they took off every sort of creative thing that I had in there. You get to where you have to write very... ... It's just a matter of listing facts (SCgs6 682-689; 693).

One graduate student pointed out what she thought was the main difference between English and science papers: the purpose behind inquiry. She explained,

> I think more of it in terms of the discipline of science. I think it's more the building of ideas on top of other ideas. And so to even do anything you have to properly know a knowledge base before you go on, and I think that differs a lot from other, I think, research area (SCgs6 36-41).

Participants in the applied health sciences did not draw these comparisons between disciplines. Instead, they were likely to highlight the multidisciplinary nature of their program: "We have arts, science, economics, you name it, everybody is from different backgrounds" (AHgs1 10-11), which may explain why there is more variability in the writing styles found within this department, unlike in the science department.

*Publication: expectations from journals.*

Another influence on the writing process is the expectations from the publishing community, specifically the research journals. This influence informs the referencing style and the use of citations. Faculty from the science discipline explained that journals are limiting the number of references. One faculty member explained the rationale behind this decision:

> Actually I am an editor for one journal, and we do in fact try to keep the number of citations down. And if you take a look at the "Instructions for Authors" for

> many journals one of the key instructions is to cite only the literature necessary, because there is a tendency amongst many scientific writers to cite too much (SCfac2 454-459).

An administrator identified the challenge of meeting this expectation:

> Occasionally you get into a bind where you're forced by journals, or whatever the medium is, they don't give you the opportunity to cite everything that you have to cite because they have a limitation on number of references. Then it becomes challenging. You try to hit references that are the broader all encompassing references that might then, in turn, reference the more minor papers. Even though you realize when you're writing that you probably should be citing ten papers, but at this point can only cite one (SCadmin 149-158).

Another faculty member agreed that limiting citations in journal articles is a challenge: "It's, it becomes often a challenge, and you know, and nowadays, a lot of journals they don't want you to over-reference.... so it's a balancing act, you know often what one ends up doing is citing reviews, you know and there is danger in that" (SCfac1 57-63).

The changing referencing standards for journal publication were an issue identified by only faculty and administrators. However, there is arguably a potential for this issue to be confounding to students as they read the research literature and hold the academic journals in their discipline as models of scholarship. The following section further illuminates how citations and reference lists in academic papers within a particular discipline create a shared understanding of the literature among the community of readers.

*Citation as its own form of language.*

One graduate student likened the use of citations to a form of language, a vernacular of the discipline. She explained that

> where you go look in journals and like actual sources, where you learn to cite things properly after that and it's a way of communicating ethic, among scientists too, is that is almost like a different language the way that you have to cite things and you have to know all those things (SCgs6 114-118).

She went on to explain how this citation "language" is spoken between individuals in the same discipline:

> and when you are talking to somebody…that's knowledgeable in that area, you pretty much speak in that language like "so and so, 1985" or whatever and you don't even like talk about what the paper is about, you can just mention who it is or who the authors were and you can have a conversation without actually mentioning anything pretty much, it's kind of strange that way (SCgs6 137-143).

This finding underscores that it is important to inculcate in students the standards of writing and referencing within their respective disciplines.

*Keeping it within the family: Handling cases of plagiarism*

Participants' responses about how plagiarism is handled within their respective programs revealed that informal practices, rather than formal processes, guide decision-making. The following section begins with exploring the reasons why participants perceive plagiarism not to be an issue within their department. The remainder of the chapter examines firstly, the department's process for handling incidents of plagiarism; secondly, the participants' own strategies for responding to cases; thirdly, outcomes for plagiarism; and fourthly, discrepancies in plagiarism responses, specifically a comparison

of policy and practice. To illustrate these sub-themes, examples of plagiarism incidents shared by the participants are provided.

*Plagiarism in grad school?*

Participants in both departments claimed that plagiarism does not seem to be an issue in their respective departments. Possible contributing factors to this low incident rate are explored below.

Graduate students and faculty in the science department explained that the requirements of a science paper do not lend themselves to opportunities for plagiarism and the evaluation of papers, in fact, reward appropriate referencing. One graduate student explains:

> In science you can't really do that because...the way the essays are worded like you're supposed to know the literature and you are supposed to say who did something and you will lose marks for not saying who did it so, yeah you're rewarded by knowing the literature...so like there are not that many original thoughts sometimes. You might have a different way of looking at it or analyzing it but it is obvious that, that that is the case, that how you have looked at it and analyzed it, yes, I don't think it opens itself [to plagiarism] (SCgs3 343-352).

One professor indicated that "no I haven't encountered any plagiarism and I think all our graduate students pretty much understand what the rules are by the time they reach graduate school, and would not knowingly, now I say in their writing, they may require a little guidance to achieve that goal" (SCfac3 244-248). He differentiated between the referencing mistakes inherent in the writing process and plagiarism. Another faculty member offered this argument:

> The other thing, as well, I always tell my students this: "What would be the point?" If you were to go to a thesis defense, having claimed somebody else's work as your own, there would be no way you would get through a thesis defense.

> Unless you are intimately familiar with that work, and you are going to be asked pretty detailed questions, it doesn't get you anywhere. It would become apparent very quickly that you have not done the work (SCfac2 157-165).

A faculty member from the applied health science field expressed the point of view that having an extensive list of references gives a certain cachet, which may contribute to decreased plagiarism: "It is almost embarrassing to say it, but as a student sometimes you should almost work at building up your reference literature cited so it's in fact it is almost to your advantage to make sure you quote and reference all the material" (AHfac2 60-64).

Participants from the applied health science department expressed doubt that plagiarism would be an issue given the demographics of the students and the type of program. Many graduate students indicated that they would not think any one of their peers would take such risks. Participants pointed out the maturity of the students, both in age and experience, as this graduate student did: "...the average age is more than 30. So that in itself, that almost, I'm not saying younger people necessarily per se will, but you know especially people have had some professional [experience], they don't want to be risking their...credibility" (AHgs2509-513).

Faculty expressed similar perspectives:

> When you only have a graduate program, program full of students who are likely working with us, not training people that are going to disappear, most of them either have academic careers employed by government or other organizations... The understanding, I mean you'll be talking to the students, but if I was a student in a program like this, the potentially disastrous impact of plagiarism on someone's career would so outweigh the quick "A" out of the course (AHadmin 389-398).

The majority of the participants contended plagiarism was not a significant issue within their respective graduate programs. However, the research findings suggest an interesting dichotomy: plagiarism is not an issue, yet participants acknowledged the importance of feedback to catch instances of inappropriate citations. Furthermore, many participants were able to provide examples of plagiarism, which occurred in their current department or in another program, which they were either involved with or had heard about. Across both departments, two administrators and three faculty and six graduate students provided such examples.

*Departmental processes.*

Participants in both departments indicated that they were not familiar with their department's process for handling cases of plagiarism. On a light note, one graduate student emphatically stated that he has "no idea and don't want to find out!" (SCgs2 193). Some faculty explained they couldn't readily recall the department's policy, as this faculty member illustrates: "Well I would assume, I think it is written down somewhere in our graduate student regulations. Which I could dig up…" (SCfac1 135-137).

The administrators from each department were also not able to provide their policies. The applied health science administrator indicated that, "We don't have an explicit policy in the department about plagiarism" (AHadmin 380-381). The science administrator explained that, "We haven't had many, so it's not something that's right at the tip of my tongue" (SCadmin 300-301).

*Own process.*

However, not being to recall the department's policy did not mean participants were unable to explain what they think happens or what they themselves would do or have done. When facing a situation of potential plagiarism, the majority of the participants indicated that the first step would be to "certainly meet with the student..." (AHfac2 211). All but one graduate student expected that the alleged plagiarist would be given the benefit of the doubt and believed that their professors would share this same perspective. With one exception, faculty shared this preference to deal with the matter on their own first. Most indicated that they would be reluctant to label an incident plagiarism and carry it through to a formal process. Instead, an informal approach was preferred, such as the one offered by this administrator: "I would just say, 'boy this looks better than what I normally would see, are you sure it's all properly referenced?' And if they say absolutely...then I would just leave it" (AHadmin 301-303). This initial conversation with the student under suspicion informed faculty how to proceed, whether to educate the student through providing feedback or determining the behaviour requires a more serious response.

Three graduate students, who had teaching assistance experience, articulated what steps they would take if faced with a case. One graduate student who had discovered dishonesty in undergraduate assignments weighed the situation first before deciding how to proceed. She explained, "it is different almost when you can tell that they have made efforts to like sort off, switch it around, so you know then that they know that they are doing something wrong but even then like it has to be pretty serious before I would take

it to a Prof" (SCgs3 260-264). She expanded on her decision making process and added "If you got like a longer form like an essay most of the time if there is a screw up it is somebody that has miss-cited. If I had two essays that were identical I would take them in" (SCgs3 268-274).

One graduate student shared how she and her student colleagues dealt with a plagiarist within their program:

> When I was doing my masters, a girl [sic] that was in the department - because we didn't have any high standards, like we didn't have a lot of grad students, they would let too many people in who weren't really cut out for being a grad student - and she was in a class with me and she sort of went around between - there were only like 7 students - and she'd go around and try to copy off of everyone else. We all sort of sat down and said like you can't do this, it's not right, it's cheating the rest of us. And eventually the professor was told (SCgs6 513-522).

It was common for faculty and administrators to indicate that if they do encounter a case, the situation is dealt with on a case-by-case basis: "We try and handle individual cases to some degree individually" (AHfac2 285-286) and on the degree of seriousness:

> If it were to come up in my own students, it would be in process of writing their thesis...and in that case I would just handle it myself...if it was someone else's student that say they submitted a thesis, I guess [I would] probably talk to a supervisor and probably have to notify the head (SCfac1 137-143).

This graduate student also highlighted the importance of looking at intent, given the level of sophistication required, when writing a research paper: "I would have to put it in context. There is degradation between paraphrasing and handing in an essay. When I think when students are first learning how to write....as far as citation or whatever...it's actually hard to learn how to integrate other people's ideas" (SCgs2 232-236).

Another faculty member mentioned that he might consult another faculty member for advice:

> I think it's a case-by-case thing, if someone comes across a case of plagiarism and they are not really sure where it fits in the overall scheme of transgressions that have occurred, they'll discuss it with other faculty members, to get a feel for what's gone on before. That's sort of an informal I guess you'd say a common-law perspective on plagiarism (SCfac3 280-286).

Three graduate students suggested that personal factors would play a role in how a case might be handled. One student identified how, given the cohesiveness between faculty and students in her department, it would be challenging for a professor to deal with an incident of plagiarism: "We get to know our profs very well, their friends, their peers…sometimes they're a lot younger than we are so it definitely would make it difficult" (AHgs5 338-341). She went on to explain that, "if I had done, had I plagiarized something, they'd seen it, it would've been such tremendous disappointment…so the challenge would be a personal challenge" (AHgs5 349, 353-354).

Another student provided an example of how making it personal could negatively affect the handling of a plagiarism case: "I think it would depend on the supervisor. Like, there are some supervisors who would, I'm sure, just be waiting to get certain people. And I'm sure they would go straight to the head, because that would be their excuse, right? (SCgs3 231-234)

When the incidents were deemed serious and intentional, participants shared examples that demonstrated when faculty did not hesitate to take a serious stance against plagiarism. One faculty member shared the following case: "We've had…in the last while…certainly one that immediately springs to mind….Now this was a different case, this was a situation where somebody in fact presented a huge chunk of a published paper

as their…own work" (AHfac2 137-138; 144-146). This same faculty member was involved with the decision making process of that case:

> ….what happened was the instructor came to see me and told me what had happened and we both agreed that it was clearly totally unacceptable and he told me what he proposed to do, which was to meet with the student. He would tell him about this, in fact he produced a copy of the original paper so he could sit down, put them side by side. And he was going to tell the student [that he] would be failed in the course. The student was also intending to apply to our graduate program; the instructor also said that he was going to say to the student that he would expect that the student would *not* apply to our program (AHfac2 155-167).

An administrator shared the details of a case that had happened in his department:

> I am aware of one case in the dept…plagiarism in the dissertation and the student failed as a result and withdrew from university. I'm aware of the consequences there… I still can't believe that the student didn't know not to do it and the student plagiarized from his supervisor (AHadmin 329-334).

One common theme across all examples was that the incidents were dealt with by the involved faculty and in some instances another member of the department would be involved but in the capacity as advice provider. Only two participants mentioned the potential involvement of any other offices. One graduate student mentioned that a student might seek assistance from a student services office "Well I'm sure the first thing that would happen, would be the student would come to the [Student Advocacy] office and see what their options are" (SCgs2 204-206). An administrator explained that in the past he had called the Faculty of Graduate Studies as a resource. "So, that's part of their job, to provide expert guidance and advice. So I have called _____ and _____ [of the Faculty of Graduate Studies] and said 'Okay how do I deal with this?' " (SCadmin 692-

694). However, most participants felt it was necessary to keep it in within the department, as this faculty member explains:

> I'm not saying that this is necessarily the right thing to do but I think that a lot, my gut tells me a lot of departments would do it similarly, in other words, this is a bad thing you did and you must pay the price for it but we will keep it in the family, if you will (AHfac2 296-300).

One graduate student shared an incident of faculty plagiarism that he was aware about that had involved a PhD student and her advisor.

> One of my cohorts, who I think is in a different department than me but similar area of work, went through several years of PhD research and right at the end, I guess just a few months before she is to defend, her advisor essentially took her information and published it (SCgs1 264-268).

In this case, it was believed the graduate student did not pursue formal action. She did, however, finish under a new advisor. One student offered a possible reason why this graduate student did not pursue the matter: "because a student taking on a faculty member [there is an] imbalance of power there" (AHgs1 410-411).

The participants shared experiences that illustrated how they have dealt with incidents of plagiarism in the past. Common across these responses were to (1) speak to the alleged plagiarist (2) deal with the matter at the lowest possible level, i.e. involve only those who are closest to situation such as student and instructor/advisor, and (3) involve outside individuals (e.g. other faculty, department head, Faculty of Graduate Studies) only when necessary, and mostly for advice. The next section looks at the possible consequences for plagiarism at the graduate level.

*Outcomes.*

Generally, the graduate students were not able to indicate specific outcomes that graduate students would face for plagiarism, other than "they would be in a lot of trouble" (SCgs3 200) or that they would be withdrawn from the program. Two graduate students were quite firm as to what they deemed appropriate: "For a graduate student if they plagiarize their thesis that is your one course that you would fail then so, you would be out" (SCgs3 501-503) and "Oh, I would hope that there would be an expulsion, I would hope; I'm a mean one when it comes to plagiarism" (AHgs5253-254).

Faculty and administrators provided a wider spectrum of possible outcomes from an opportunity to fix the plagiarism- "Yeah, because then you're not actually, you're still under teaching, you're really training and mentoring your graduate students on how to do things rather than addressing somebody that's trying to pull a fast one" (SCadmin 417-420) - to a reduced grade "...fail the course but that nothing would appear on their official university transcript other then the F" (AHfac2 288-292). Faculty and administrators were not reluctant to admit that the quality of the student would play a role when encountering an incident and determining an appropriate outcome. One administrator revealed that "I have a feeling that, this is the unfortunate part, I feel that the variable of the matter would be quality of the student, quality of the work, which is not fair" (AHadmin 582-584).

Both the Graduate Studies and Student Affairs representatives provided insight into the academic consequences for graduate students who are found to have plagiarized.

The faculty representative explained how the same penalty would affect undergraduate and graduate students differently,

> And as a bigger gamble like, usually at the graduate level, they want to be more severe which would mean that, if you get an 'F' on the paper and a 'C' in the course, then you could be out of the program. Whereas, at the undergraduate level a 'C' in the course just means a 'C' in the course. You're not necessarily going to be thrown out of the program (FGS 302-308).

The Student Affairs representative underscored the seriousness of the outcomes:

> For a graduate student, if there's an allegation of plagiarism it can have very serious consequences in terms of their ability to continue on in the program, their credibility, they may be asked to withdraw from their programs, there's a huge number of things that could fall out of that (SA 521-526).

Even suspected cases of plagiarism had consequences. Most faculty indicated that in the absence of clear evidence to clear an suspected case of plagiarism, a consequence, albeit covert, would still ensue, as explained by this administrator: "because if I thought that I had a student who wasn't representing work properly but I had no intention of tracking him down and proving, it might affect the way I would write letters of reference about that student" (AHadmin 275-278). Two other faculty members expressed similar comments. One faculty member explained that, "Of course once the flag is up the committee is going to be very aware of it for the rest of the thesis. And that's not necessarily a bad thing, that's part of the corrective action" (SCfac3 514-517).

The Student Affairs representative suggested that the consequences of plagiarism might not only impact the graduate student, but the advisor as well.

> ...but then also for the advisor, if they have a concern and they don't address it and it later turns out to be plagiarism, I think that their reputation as an advisor could be on the line, in terms of not acting, appropriately questioning the merit of the thesis of the data, of the findings of that particular research which may have

> unintended consequences for their own research. I think there is a lot of offshoots for graduate work because of the compelling nature and the gravity of the work that's done for there to be a careful scrutiny of graduate work by the advisor (SA 526-535).

*Discrepancies: policy versus practice.*

The individual interviews with representatives from the Faculty of Graduate Studies and a Student Affairs office provided information about the formal policies and procedures for handling cases of plagiarism. Their responses provide an opportunity to compare and evaluate the differences between the information shared by participants from both the science and the applied health science departments.

Both the Faculty and Student Affairs representatives indicated that the process for handling cases of plagiarism is defined in a university document. Of note, only one participant, a faculty member, mentioned this document and he explained that he sought out information about formal policy and procedures on the University's web page after he had encountered a case of graduate student plagiarism.

The Student Affairs and Faculty of Graduate Studies representatives were the only two participants who articulated what this document contains, its purpose, and the formal process as it is written in the document:

> We use what is called the student discipline by-law as a guideline for the process that should be viewed. If a professor feels that an issue of plagiarism is meritorious so they reviewed the document, they have a concern hopefully met with the student to hopefully tease out whether or not this is really plagiarism or something different. If they feel that it is a meritorious allegation, then they should be communicating their concerns to the department head who would communicate their concerns to the Faculty of Graduate Studies (SA 229-237).

The Faculty of Graduate Studies representative explained that a case could be turned back to the department for resolution if it wasn't originally considered at that stage:

> ...that was the way it used to be, it always used to be that you had to report it to the dean. And now we've broken it down a bit more, in that if it's a professor phoning we'll say, "we would like for you to bring it to the attention of your head first and for your head and you to make the report to us". Because we found this one case where the head disagreed with the instructor about whether it should have been reported or not or bother with it because it was really minor and the student should have been given a chance to complain formally (FGS 47-66).

The Student Affairs representative corroborated that element of the process is changing:

> If we use a strict definition of the student discipline by-law, that particular process is under review, and possibly changing in that the Faculty of Graduate Studies is probably going to defer to department heads, at this point and conduct an interim investigation and relay the findings of that investigation on to the faculty of graduate studies before it formalizes any action (SA 238-243).

The Student Affairs representative went on to explain that a student under suspicion is given an opportunity to tell her/his perspective:

> If there, if the allegation has gone forward to either the department head or the Faculty of Graduate Studies then there should be a meeting that takes place for a preliminary local disciplinary committee which is a fact finding opportunity for the administrator to have the relevant information that um, contains the allegation so that the information that the professor is using to make the allegation and meet with the student as well to hear their version of events and determine whether there are any mitigating factors any information that the instructor may not have been aware of to make their case. So it's really a process of letting the student know that the allegation has been made and for the student to speak to any evidence and to speak to the allegation, before a final decision is made at that level (SA 244-257).

The Graduate Studies representative explained that once a case is brought forward to the dean's office, the faculty may be dissatisfied with the ensuing decision.

> I just encountered some faculty that were very discouraged that, it was clear cases of plagiarism, so they report it and [expecting] there would there will be a penalty. But the dean has to hear both sides of the story and having dealt with plagiarism all across campus and knowing how severe it can be, and how minor it can be...This professor might not really understand the whole gamut of the cases that we see. They are a little discouraged...(FGS 284-291).

She went to explain that in addition to the possible difference of opinion regarding the seriousness of the behaviour, the intentionality of the student may also be a matter of disagreement. She revealed that these disagreements about the best way to handle a case could result in a polarized environment:

> I think more so in the amount, it's the amount of time and energy and frustration it takes from their part if it is not a smooth, "it's clearly plagiarism, there are no quotes here, um, and it's clear evidence." And well it's more like, when it comes to the intentional unintentional part and the professor thinks it's intention and the dean's not so sure. Then it becomes really frustrating for them because they're disheartened. Sometimes they get into arguments with their own faculty members, cause now at a graduate level you have a supervisor with a student and they might get involved, so there are all these other dimensions (FGS 284-302).

One faculty member expressed that a recent plagiarism incident that he encountered which was blatant - "it's true there was plagiarism, quite extensive and it was very easy to document, clear cut case" (AHfac3 484-486)- was handled by the administration differently than he had expected: "I learned a lot; I'm not sure if the student learned a lot. The outcome was not what I recommended" (AHfac3 480-481).

Some faculty expressed concerns about the level of support they would receive from the administration. Another faculty member indicated that students might receive more support than faculty:

> But there have been some frustrations that like it's almost not worth pursuing, cause there is so much hassle involved and people want almost want to just not

> go…The atmosphere…right now seems to favor the student more than anything and it's such a, [I] guess a large job to prove that plagiarism or cheating has taken place, and people kind of shy away from that. I've heard one person express frustration (SCfac1 297-305).

Participants in the two departments tended to provide descriptions of the practices they follow when encountering a case of plagiarism. Most of these responses were in keeping with the policy that was detailed by both the Faculty of Graduate Studies and the Student Affairs representatives, that is, participants' preference and the Faculty's encouragement of an informal resolution. The discrepancy seems to arise when cases are forwarded to the dean's office for consideration. At that stage differences of opinion – partially due to disciplinary and departmental differences – can sometimes result in dissatisfaction with the process and subsequent decision.

In the next section, participants' responses to a hypothetical case scenario are presented, which further examines the discrepancies in the response to plagiarism.

*Theory to practice: responding to a hypothetical case of plagiarism*

Participants were asked how they would respond to a hypothetical scenario (see Appendix G) and to answer questions in relation to their reasoning (see Appendix H). The collected data offered an opportunity to contrast responses from the perspective of theory (interview questions) and practice (case study). The following section provides an analysis of the responses to the scenario.

Participants were asked for their thoughts on the case study. The responses varied but all participants provided comments about their assessment of the hypothetical

situation. One administrator disclosed, "I know one quite similar case here at [this university] in another faculty, very similar to it" (SCadmin 500-501). Two other participants indicated that they had seen this situation before and three other participants commented that the incident was either "a very realistic one" (SCgs1 604) or that they "can see how this can happen easily" (AHadmin 515).

One of the questions asked of the participants was to explain whether or not Matthew was guilty of plagiarism. All six faculty and both administrators replied that Matthew was guilty of plagiarism, however, the majority of these responses were couched in tentative language such as "in a legal sense" (SCadmin 513), or "strictly speaking yes" (SCfac1 450) and "didn't know better kind of situation" (AHfac3 387-388). Ten out of twelve graduate students assessed Matthew's behaviour as plagiarism. However, like the faculty and administrators, they were careful to qualify their statements with rationales as to why the behaviour might have occurred. One graduate student explained that Matthew may have "thought everyone was on the same page as he was and that people know that he was going to be building on this research" (AHgs1 345-347). Another graduate student mused on the developmental phases students go through and the level of confidence in one's own writing:

> Well I think he was impressed by [Erin's writing] – I'm reading between the lines – and I think that is a sign of, you know, when you are just starting out you want to follow the correct way of doing things and you are sort of frightened to do anything differently. I guess he read a well-written piece of work and he thought that was the best way to present it (SCgs4 598-603).

One faculty member also saw the issue as developmental and empathized with Matthew's situation: "I think we've all been there as students…if something is very technical, you

think 'oh God'...you always think other people write things better than you do, and so I can understand" (AHfac2 489-493).

The Faculty of Graduate Studies and Student Affairs representatives shared common views as to the reasons why Matthew may have used Erin's work without citing her. However, the Faculty of Graduate Studies representative stated the behavior was not plagiarism but a result of "inattention to detail, rushing..." and best labeled "unintentional plagiarism" (FGS 507-508). Out of all of the participants, the Student Affairs representative provided the most tentative response to the question:

> It's a difficult question and one that I cannot really answer unless I speak to Matthew and get a sense of what his understanding of things was, and what his decision making process was... ...I would not want to pass judgment whether he did or did not (SA 706-708, 712-713).

All participants expressed views that the advisor should share in the responsibility for the situation. Participants provided reasons why they determined the advisor was partially culpable. The underlying theme of these responses was that because the advisor was familiar with both students' work, she should have detected the plagiarism. One graduate student explained, "it says she read it over a number of time, so I don't really understand why she wouldn't have picked that up" (SCgs5 463-465). One faculty member explained that he never sends anything to a committee that he hasn't reviewed himself, thus he felt in this instance the advisor "would be as guilty as the student" (SCfac2 471-471). This same faculty member felt the advisor's actions may have resulted in Matthew's decision to use the information without citing: "[Matthew] may have felt

Dr. Anderson had given him permission to use Erin's material by offering it to him: 'Do what Erin did'. So that's what he did; he did what Erin did" (AHfac3 438-441).

Two graduate students rationalized why Dr. Anderson may not have detected the unreferenced sections in Matthew's proposal. One offered this perspective: "My idea is she sounded too busy or because she dealt with the material so much she overlooked the obvious. You know, sometimes you get so saturated in your area of specialty, you know, you forget to be objective" (SCgs4 622-625). Another student wondered if the advisor missed the section because "whatever Erin [the author] had originally written was so standard that it wouldn't have occurred to her to notice" (SCgs3 566-568). She went on to explain that perhaps because of the nature of the information, it was a section that was often overlooked during the revision phase:

> Also for myself, I have noticed that my supervisor...always skips the results section, they go through it once and they will never read it again....I change things and they wonder what I am doing in the discussion but they never seem to go back to the result. And I can see the same thing happening with the method. It is kind of a boring section; they have corrected it once and are not really worried about it (SCgs3 568-575).

Most participants from the two academic departments attached significance to the fact that the un-cited material was from the methodology chapter versus another section of the thesis proposal. One graduate student asserted

> I think methods isn't that harmful. I think Mathew would have been in much more trouble if he would have used results or the discussion because in the discussion that is where the ideas of things come into play and the results are what Erin found, but the method I wouldn't get too upset about it (SCgs4 575-580).

Other participants offered some different reasons why the information from the method chapter might be offered different treatment than other sections of the thesis. Five participants minimized the severity of the incident because it appeared the information pertained to standard procedures. One graduate student emphatically illustrated his point of view:

> First of all we're talking about a proposal that's based on methods; they're standard. For most people it might be accepted that's what's done and write it down. How many ways do you add 1 tsp of salt to 1 tbsp baking powder and add 2 cups of flour and 6 egg yolks and cook up some pancakes? We're talking recipes....using a standard recipe (SCgs2 532-537).

Another participant, an international student, elucidated the complexity of referencing research procedures and her own strategies for determining when it is necessary to cite this information in the methodology chapter. She provided three scenarios. First, if the procedures were used within a particular research lab: "I would have to give credit to the lab, because the method is used only in that lab [and] not in the others" (AHgs6 617-618). Second, if the procedures appear to be novel: "If it is new, and I have probably never heard about it before, I find an article where they say that they did this method to, for example, measure distance. I will cite it and say that this article used it" (AHgs6 625-628). And finally if the procedures are commonly used: "if it a global method that everybody uses in their research, why should I cite them [the last researcher to employ the method], and not the previous person [who created the method]" (AHgs6 523-525).

Sometimes the issue may not be whether or not to reference, but how to reword a commonly used procedure. One administrator explained that it is not uncommon for researchers to encounter difficulties when attempting to paraphrase information to be

included in the method section, "if you were to take my three sentences and go back to the book that I took it out of, there might only be two or three words different, but there is nothing that you can do about that. But at least I included the name of the person who wrote about this methodology" (AHadmin 521-525). Another participant, a graduate student, felt similarly but wondered if Matthew's inability to grasp the complexity of the procedures contributed to the incident:

> I mean because it depends on what project he is doing but I can see that if you are in a lab and there are like a whole bunch of very convoluted – like myself in a chemistry lab – I wouldn't understand it enough to like reword it for myself. Yes, that would be my thought, if he wasn't entirely clear and didn't necessarily need to be clear in order to start doing his work. Like a lot of times there is a set recipe and you don't necessarily need to understand… (SCgs3 549-557).

With one exception, all participants from both academic departments indicated that the matter was one that could be and should be dealt with at the advisory committee level. One faculty member expressed his reluctance to take this particular incident to a level that might involve formal policy:

> Most people would generally defer to the supervisor to deal with it. So, again, we have this general reluctance to invoke university regulations. These things can get very messy and very ugly. And again, if there's a reasonable explanation for it, then allow the supervisor and the student to deal with it (SCfac2 489-492).

One faculty member advocated for an educational approach to the situation, an approach that was supported by all participants, with one exception:

> We're not talking about a thesis, were not talking about publication. So in terms of the potential damage, it wasn't as high. In terms of the principle, it's still just as serious. So, I think it's an excellent opportunity for corrective actions to be made. That's why we have things that don't count; so we can get the bugs worked out before the real thing happens (SCfac3 447-453).

Many graduate students were concerned how Matthew would be dealt with and expressed frustration that the advisor had not noticed earlier, which would have eliminated the now possible complicating variable: that the committee member - and not the advisor - detected plagiarism. One graduate student explained: "So I think that probably since it's gone through the external or another committee member it's a bigger deal, probably. Other than just the primary advisor [who would] probably just think 'hey, you should cite it.' And then it's done and over with, but now it's little more complicated" (SCgs5 465-470).

For one faculty member the academic potential of the student would weigh heavily in the decision-making process:

> If this was, if in this case we're talking about an exceptional student and was otherwise producing an exceptional dissertation, my guess would be that the department would handle it quite differently. If it was a really marginal student, and been trying to figure out a way to him out of the dept anyways, without having to directly deal with the thesis (AHadmin 582-590).

Some of the participants indicated that the personalities of the individuals involved would play a significant role with regard to how the situation would be handled. In the presented scenario, it was the internal committee member who detected the plagiarized section. One faculty member stated simply how the matter would be dealt with "depends very much on the personalities, both the supervisor and internal [committee member]" (SCfac1 483-484).

Another faculty member pointed out the unfortunate consequence if the advisor and internal committee are at odds about how to handle the incident:

> But if you get to the point where, the committee is arguing about whether or not it's really plagiarism, and the student's caught in the middle completely confused, nothing can be gained by that. And what we really want to do is make students do things the right way and have them finish with a good thesis, as opposed to take out personal arguments about supervisory methods and such like that (SCfac3 555-562).

The representative from the Faculty of Graduate Studies highlighted that there are individuals who may have different responses to the same incident: "Well I don't know what every Dr. Anderson does out there. Some will report it immediately [to the Faculty of Graduate Studies]. Some would go, 'Oh my God I missed it!' and 'I better talk to him about this!'" (FGS 488-489).

Only one participant, a graduate student, believed that the department would take a severe position and not allow the student to continue in the department. She surmised that "[The Department would say] 'Sorry, you've really made a major blunder and I am so sorry for you, and I am so sorry that we didn't provide you with more background, however we can no longer maintain you as a student'" (AHfac5 557-562).

Some participants hypothesized how the matter would be dealt with if Matthew had submitted a final draft of his thesis rather than a thesis proposal. Out of the graduate students who responded, four felt there would be a difference—as this student speculated: "I think the repercussions would be a lot more severe, because you'd gone through the whole process a number of times by that time, a lot of revisions and everything else" (SCgs5 501-503). Three felt there wouldn't be a difference with regard to how the incident would be handled. One administrator and three faculty felt the matter would be more serious if it was a final copy versus a thesis proposal.

The inclusion of the case study in the interview protocol successfully provided participants the opportunity to respond to a hypothetical scenario and the responses from this could then be compared against earlier responses to the interview questions. In fact one faculty member revealed outright that the comments he was about to make about the scenario may contradict the responses he provided to the interview questions: "my issue, my view with this, and perhaps this is somewhat inconsistent with what we talked about for an hour..." (AH376-378).

Across both sets of responses, interview and case scenario, there were three similar findings. First participants were reluctant to label behaviour as plagiarism. Most of the participants—graduate students, when referring to their own behaviour, and faculty, when discussing written work of their students—felt more comfortable with terms such as inappropriate referencing or missed citations. When responding to the case, participants indicated the behaviour was plagiarism, but all felt the need to substantiate their responses with rationalizations as to why the plagiarism may have occurred.

Second, the issue of assessing intentionality was an important consideration for almost all of the participants. All of the participants indicated plagiarism was a serious issue, however, most felt students who unintentionally plagiarize, and especially those for whom the mechanics of citation poses a challenge, should be dealt with a fair manner and be given the benefit of the doubt. The responses to the case underscored participants' concerns with determining the student's intention prior to making a decision about how to proceed with an incident.

Third, most participants expressed desire to handle plagiarism cases at the lowest level, specifically between the student and the faculty member. Formal policy was unknown by most participants, but yet there were concerns that whatever it may entail would diminish the amount of control the faculty member would have over the process and the outcome. When responding to the case, some participants expressed concern that the committee member detected the plagiarism and not the advisor. Having someone other than the advisor detect a transgression was a problem for most of the participants. Particularly because, by having one other person involved (the committee member), the responding to case becomes more complicated as there are three rather than two personalities who have to resolve the matter. Some felt the involvement of the committee member could negatively impact the process and the outcome.

The case also provided an opportunity to explore these three themes at a deeper level. When responding to the case study, participants emphasized that the plagiarized sections were from the methodology section- a section of the thesis that normally explains standard investigative procedures. Some participants empathized with the graduate student because they too have found it difficult to express well-used procedures in a novel way.

Some participants indicated personality factors and the academic performance of the student in question would have an impact on how the case would be handled. If the student was well liked and was performing well academically, the issue would likely be dealt with at the lowest level and likely result in an educative rather than punitive outcome. If the student was not performing satisfactorily, the student may be dealt with in

a more formal way, partly to ensure the outcome would result in the student's removal from the program.

The responses to the interview questions provided rich data but the inclusion of the case in the interview protocol resulted in responses that provided depth and shading to the findings. Thinking of one's own response to a hypothetical situation also helped participants to identify concerns with teaching and learning and policy related issues pertaining to plagiarism, which are the focus of the next section.

*Educational and Policy Recommendations*

As part of the data collection protocol, participants were asked for their recommendations regarding both educational initiatives and policies with regard to plagiarism. These recommendations and suggestions are presented below.

*Recommendations for educational initiatives.*

All participants offered their perspectives on educational initiatives about plagiarism. There was some difference of opinion as to what these initiatives should look like and by whom they should be offered, although most agreed that there is a need for learning opportunities within their respective units.

Like most participants, this graduate student saw education as a preventive approach to responding to plagiarism: "I think it would be more positive than trying to address it after it happened, I mean you try and prevent it more than trying to do something about it after it has occurred" (AHgs4 537-540). Another student shared this perspective: "I would make sure that students would be aware of it, so for example, for

me there are lots of questions, I don't know exactly what is plagiarism. If I do write, for example, a very short sentence and I forget just to cite it, then what would happen? What will be the outcome? And there should be some sessions workshops to talk about it first and not just expect us not to plagiarize" (AHgs6 665-671).

Some participants argued that more could be offered at the undergraduate level. One graduate student looked at what could be offered within the undergraduate curriculum. "I think there should be a course, strict courses in professionalism and ethics in science, and how you, I don't know, just sort of put everyone on the same page, if nothing else, or the same chapter I guess" (SCgs6 1265-1268).

This same student contemplated when it would be appropriate to discuss plagiarism in the curriculum, and her response reveals the importance of having educational opportunities about plagiarism across the entire educational experience:

> In some circumstances where as an undergrad you sort of have professors or courses you go through and write different papers and you get some feedback....but it varies a little bit, but it still is maybe in the same direction of another course...it would be nice if somewhere in the middle there, and even if it wasn't until the end, I think it would be more helpful if it was second or third year (SCgs6 1269-1276).

Many participants felt more education opportunities could be made available at the graduate level, as this student shares: "I've always felt that people entering grad studies could have a bit more orientation and it could include a section on acting on plagiarism" (AHgs4 523-526). Students suggested different strategies for disseminating information such as including the information in the graduate student handbook (SCgs4),

making the information available online (AHgs3) and covering the issue at student orientation (AHgs3).

Most participants, faculty and student alike, contended that the effort must come from within the department. In fact, one faculty member suggested that workshops offered by individuals outside of the department likely wouldn't be well attended because it would be "preaching to the converted" (AHfac3 558). One student agreed and suggested a mandatory session would the best tactic to ensure the information was well received.

> If it's done well, and it's done from your own department, it probably would carry more weight. I have known that some of the programs that have been put on by grad Studies [that] were very poorly attended. No matter what they tried it didn't seem, they don't usually get a whole lot of people and they [students] always think they are too busy or other things are more important and whatever. But I think if it was coming from the department where you were working, you know, it's a smaller group and I think we'd have a better chance of, as I say we put on once, you know a seminar periods well 10 minutes was basically compulsory and you had to be there, you had, everyone was there and everybody heard the same story (AHgs4 561-573).

One student emphasized that "you have to have good interaction with the advisor" (SCgs4 490) suggesting that faculty have individual responsibilities to educate students about plagiarism. One graduate student recommended class time as an appropriate forum.

> At the beginning of each course…making sure the faculty is informed and each of their own individual committees meet with students, um, [state] what their whole policy and expectations are, and you know, it could just be a few sentences in one class, and I think that that would carry probably a lot more weight. Students are always listening to exactly what their Prof. wants, and they're more likely to pick up on that than something in a manual (AHgs3 452–460).

One graduate student emphasized the importance of providing consistent information that would necessitate the department's administration having a major role in any educational initiative.

> One thing that might be beneficial...something coming directly from the department, sort of giving students the same piece of information in a direct and immediate way. This is, sort of spelling out the details of what is considered plagiarism and how it's dealt with, like I said earlier every Prof eludes to it but it's not really at the forefront of...you know when you go into your graduate work, I think it is sort of assumed that by then you know what is appropriate and what is not appropriate and you are working in close contact with a professional in the field so that you get that guidance but it's not really... I don't feel like we're all on the same page you know, so I guess if the department made something available to all students, something that was concise and it was understood that this is the department's stance on plagiarism, that would be helpful (SCgs1 465-471).

One participant mentioned that a central office should be responsible for keeping abreast of the issues and educating the university community.

> Oh, ah, it would depend where the expertise is I mean I can certainly see bringing somebody in if there is somebody around that has an established reputation, ah, I mean the attempt there, I think, would be to educate both faculty or students but also to acquire the in-house expertise because I think that at the end of the day this isn't things aren't going to change over the next decade other than the technology may push further forward and there will be bigger challenges with something I think that as an University we need in-house expertise. I don't think it has to be within the Faculty of Graduate Studies, but I think maybe it should be within the central university organization.... By all means I think it should bring good people in if there are folks around there, and I'm sure there are, but with the intent of both educating the broad sweep of the university but also educating the in-house experts so can then carry on that work and it would be an ongoing resource for the University (AHfac2 651-667).

*Recommendations for policy.*

Participants offered their criticisms about the current process and offered their suggestions how policy and procedures might be changed. Three faculty members and

one administrator expressed concern that faculty do not feel supported when they decide to respond to a case of plagiarism. One faculty member provided the analogy of being "thrown to the wolves" (AHfac1). Some participants struggled, after suggesting centralizing the process, whether this was the right direction to go. One administrator explained,

> I don't know...on the one hand it would be central. On the other hand you get the sense from faculty members that they feel they are less likely to pursue it because they don't feel they will get the support at the administrative level. That, in the interest of protecting student rights, which I'm not saying is a bad thing, but some faculty you feel that, well, even if you have somebody caught doing something inappropriate...sounds cynical (SCadmin 734-741).

For many participants the paramount issue is the consistency of how cases are handled. One graduate student explained, "You know what...I think it comes down to it...it has to be the same for everyone" (SCgs2 468-469). He elaborated on this point of view by adding "If we're going to go one way or the other, you deal with it case-by-case must have a hard line, where at which point everybody goes... Because, down the line....somebody who gets away with it...and gets their degree. What about that? You need that...the point of no return for the department" (SCgs2 474-477).

The Faculty of Graduate Studies representative expressed concern about the ambiguous wording of the current policy, which she contends is a contributing factor to the inconsistency of how cases are handled.

> There's discrepancy from unit to unit, because it's a vaguely worded document in many ways, and so different people may interpret it differently and derive a slightly different process as a result of that, some meetings that I've attended that are preliminary um, point will have a professor who's there and other times the professor won't be there, um, it does not completely spell out it's not a complete

> formula not a complete recipe for how to conduct an investigation from faculty to faculty with department to department (SA 278-286).

If the policy is to be revised, one faculty member stressed that "flexibility" must be built into the process to allow instructors to use their "own judgment" (AHfac1).

One student, who had a teaching appointment in another faculty, felt that the appeal process available to students tends to drags on too long. She explained "That appeals committee kills us. The appeals committee must meet within days" (AHgs5 622-623). The issue that arises when the appeal is not dealt with in an expeditious matter is all involved are left waiting for the ultimate decision.

The Faculty of Graduate Studies representative explained that policy and educational initiatives of the Faculty are in flux. "It just seems to me…that it's just an evolving process. [We will identify]…'Oh, we didn't know about that, now this is an important piece, maybe we need to educate the faculty about that, streamline the process'. So it's continuously evolving" (FGS 327-331).

Participants provided numerous suggestions for both plagiarism educational initiatives and policy. These findings will be further explored in the next chapter.

*Document Analysis*

As a secondary data source, documents referred to by the participants were collected. Only four institutional documents were mentioned and consequently the analysis of this data source was limited. These four documents (academic integrity

policy, responsibilities of academic staff document, student discipline bylaw and thesis guidelines) are discussed below. Table 3 is a summary of the document analysis.

The "Academic Integrity" policy defines plagiarism and cheating, including definitions of inappropriate collaboration and duplicate submission. The policy also serves as an admonishment against these behaviours. The document, although entitled academic integrity, does not mention those behaviors that would be seen as acting with academic integrity. Instead, the policy outlines those behaviours to avoid. Most participants mentioned the academic integrity policy, particularly when discussing the course syllabi.

The "Responsibilities of Academic Staff" document directs faculty to provide, in writing, information about academic integrity, including a reference to "Academic Integrity", a university-wide policy. Participants, when referring to the "Responsibilities" document, did not mention the policy by name, instead most mentioned that it was a requirement to include a comment about plagiarism on course syllabi. The "Responsibilities" document outlines the collective and individual responsibilities of academic staff with regard to students on a number of different issues, academic integrity being one of them.

Only three participants (representatives from Graduate Studies and Student Affairs and one faculty member) mentioned the "Student Discipline" policy. Each identified the document outlines the formal process of handling a case of plagiarism.

The lengthy document informs faculty members and administrators how to handle a case of plagiarism. The steps, how to fairly and appropriately inform a student who is

under investigation, are described. This document provides information about jurisdiction of matters and the range for disciplinary outcomes (warning to university expulsion). It clearly states that academic staff do not have jurisdiction over academic dishonesty matters. Instead, if a faculty member is satisfied the student plagiarized, for example, the matter must be referred to the department head. If the student is in a graduate program, the matter must be referred "directly to Dean of the Faculty of Graduate Studies". Although these initial steps are clearly indicated, the participants, particularly representatives from Graduate Studies and Student Affairs, mentioned there can be or should be a middle step—having the department consider the matter first and then the Department head refer the matter to the Faculty Dean. The document, as written, does not reflect the formal process that is normally followed by the Faculty of Graduate Studies. Both representatives from Graduate Studies and Student Affairs indicated the document does need to be revised to clearly indicate the handling of a case.

The "Student Discipline Bylaw" also informs students of their rights should they be under suspicion. The document also clearly outlines the levels of appeal and process of formally appealing.

The last document "Thesis Guidelines" was mentioned by only one participant, a faculty member. This document provides information about the thesis process, including distribution to the committee, copyright and patent concerns and formatting. The document does not mention plagiarism; it does provide a list of seven recommended style manuals and provides a clear statement that decisions pertaining to the referencing be made between student and advisor.

The following chapter will discuss the major findings from the three data sources, interview, case study and documents, in the context of the six research objectives and the literature review. Recommendations for educational initiatives and policies about plagiarism will be explored.

# Chapter 5

## Discussion

The main objective of the present study was to investigate the issue of plagiarism in the context of two graduate education programs. Participants were invited to reflect on their own conceptualizations of plagiarism and consider how they operationalize plagiarism within their day-to-day academic work. Twenty-two participants in graduate education—students, faculty and administrators—responded to questions and a case study designed to explore six research objectives. The preceding chapter presented the findings of the data analysis of these interviews. In this chapter, the major themes of the study are presented in response to the research objectives and in the context of the cultural knowledge framework (Sackmann, 1991). The graphical representation of the literature will be revisited and discussed within the context of the research findings. Finally, implications of the findings are presented and recommendations for educational initiatives and policy considerations are provided. Lastly, directions for future research are suggested.

As a review of the theoretical underpinnings of the cultural knowledge framework, each cultural knowledge category is briefly reviewed in the context of how the terms were adapted to fit the present study. According to Sackmann (1991) dictionary knowledge "represent[s] lexical knowledge" (p. 25) and in the present study dictionary knowledge is classified as definitions and descriptions of plagiarism. Plagiarism and other associated terms used within scholarly research and writing are, to some degree,

unique to the academic milieu. Directory knowledge, Sackmann explains, is "descriptive rather than evaluative" (p. 36). Within the study, directory knowledge pertains to how processes pertaining to plagiarism are implemented. Recipe knowledge "represent[s] an evaluation and judgement of actions and their outcomes" (p. 36). This cultural knowledge category refers to how processes pertaining to plagiarism should be implemented or improved. Axiomatic knowledge is assumptions or explanations about "why things are done the way they are" (p. 39). Within the context of the present study, axiomatic knowledge includes the reasons why plagiarism occurs or the reasons why processes pertaining to plagiarism are implemented. The next section discusses the research finding in relation to these four cultural knowledge categories.

*Research Objective 1*

*Examine how graduate students and faculty conceptualize plagiarism and how they operationalize these concepts of plagiarism in their academic work.*

Participants defined plagiarism in similar ways; typically a standardized description was provided. At a superficial level, accurate dictionary knowledge with respect to plagiarism was widespread and consistently held. However, how these definitions were described in practice (directory knowledge) revealed uncertainties. These uncertainties included the rules around group work, common knowledge and the use of unpublished work, particularly material communicated through informal means. This ambiguity about the application of the rules revealed significant gaps in dictionary knowledge.

Where knowledge about plagiarism was probed more deeply there were differences identified across the groupings of students, faculty and administrators, with students demonstrating some hesitations when it came to application of the rules — directory knowledge—particularly with distinguishing their own ideas and those of another.

For some students, issues of intellectual property arose but for different reasons across the two departments. The collaborative nature of research, particularly for those in the applied health science department, posed issues about ownership of ideas and acknowledging the work of others in the research enterprise. It was common for participants of this department to be commissioned to write papers for outside agencies and/or to receive funding for research projects. These relationships contributed to some questions around ownership of intellectual property Participants in the science department worked in a laboratory or field setting wherein collaborative relationships also occurred. Students identified concerns with the extent to which an individual should share with and/or protect work from others. For both departments, the environment in which research occurs influenced the extent to which ideas were shared and how ownership of intellectual property was recognized (axiomatic knowledge).

Plagiarism as a culturally relative concept was also identified as a significant aspect of axiomatic knowledge. For one international student, plagiarism was new notion; not so much the importance of referencing the work of others, but the idea that the idea of not acknowledging the work of others would be considered morally wrong, and considered a form of academic dishonesty resulting in a serious penalty. This perspective

is supported by the literature on ESL students and plagiarism (see for example, Myers, 1998). Some faculty also mentioned instances of their own international graduate students who have varied understandings of what plagiarism is and how to avoid it.

The intent behind an act of plagiarism is a significant consideration for all the participants when determining the severity of an offence (directory knowledge). The importance of ascertaining the motivation behind behaviour demonstrates that defining plagiarism is a complex process. This was particularly evident in the processing of the case scenario provided an opportunity for participants to apply the rules of plagiarism. All of the faculty and administrator participants and almost all of the graduate students categorized the behaviour described in the case as plagiarism (dictionary knowledge). However, these statements were made in tentative language and in some instances, justification for the plagiarism was provided (axiomatic knowledge). The directory knowledge of these participants revealed that the application of the definition of plagiarism (dictionary knowledge) is heavily determined by the context, which in turn influences and is influenced by axiomatic knowledge.

*Research Objective 2*

*Explore, from the perspectives of faculty and graduate students, expectations of plagiarism at graduate level, and how these expectations are communicated.*

The majority of the participants indicated that graduate students are expected to know about, and know how to avoid, plagiarism. However, a few participants explained that in some instances, this expectation might not be appropriate, particularly if the

student has a different cultural or educational background. Similarly, most faculty and administrator participants indicated that if a student had been educated in a similar or same institution, the expectations would be higher for that student.

One way in which these expectations are communicated to graduate students is through required statements about the university policy on course syllabi (dictionary knowledge). Unfortunately, this strategy appears to be ineffective because most of the graduate students revealed that they had not reviewed the academic integrity policy, the reference for which is mentioned in course syllabi. Moreover, participants identified that this document was the one of the only formal means by which students were informed about plagiarism. When asked how plagiarism is discussed within their respective departments, the majority of participants indicated that it was not. Consequently, graduate student participants revealed that they do not ask questions about plagiarism and related concerns (e.g. intellectual property) and instead rely on their student colleagues for assistance or draw upon their own undergraduate training when writing and presenting papers.

The graduate students revealed that their dictionary knowledge about plagiarism was learned primarily through informal means at both the undergraduate and graduate levels. The most widespread source of plagiarism education was feedback on written papers. Both faculty and students, particularly in the science department, identified this feedback as a critical (although often indirect) method of both communicating the writing conventions of the discipline and correcting inadvertent plagiarism. Consequently, the graduate students in these two departments cannot be expected to have had the same

exposure to the rules and expectations about plagiarism (dictionary knowledge). This poor communication of dictionary knowledge contributes to many of the discrepancies observed between dictionary and directory knowledge.

*Research Objective 3*

*Investigate if there are discrepancies within and between departments with respect to formal policies and informal practices: (a) in terms of how students are educated about plagiarism and (b) in terms of handling incidents of graduate student plagiarism.*

Participants indicated that there was little in the way of formal policy about plagiarism (dictionary knowledge) that was department specific and informal practices (directory knowledge) were dependent upon the faculty member's personality and supervising style. Consequently, it appeared that differences *within* a department are greater than the differences *between* two departments with regard to education or responses to plagiarism. In this section, practices in education are discussed, followed by examination of practices for handling cases of plagiarism.

*Education about plagiarism.*

Participants did not reveal any formal policies (dictionary knowledge) that pertain to the education of graduate students about plagiarism. The majority of participants indicated that although plagiarism is a serious matter, it was not a problem in their own department. Participants from each department provided different reasons for this rationale, offering insight into the axiomatic knowledge within each program.

Within the science department, it was suggested that the disciplinary requirements for a paper do not lend themselves to plagiarism and students are rewarded for appropriate referencing. All participants in this department underscored that before a research topic can be selected, a thorough review of the literature must be conducted to identify the gaps; this process was believed to protect against possible plagiarism. In the applied science department, demonstrating knowledge of the literature and having a long reference list offers a certain cachet, and consequently may act as a plagiarism deterrent. This axiomatic knowledge illustrates why graduate student plagiarism is perceived not to be an issue in both departments. This knowledge also demonstrates that avoiding plagiarism is a developmental aspect of academic writing.

An important finding from the data is the reluctance of the participants to label their own behaviour (in the case of graduate students) or that of their students (in the case of faculty and administrators), as plagiarism when the rules about acknowledging the work of others were inappropriately applied in written work. This finding helps to explain why plagiarism was generally considered not to be an issue within the two respective programs (axiomatic knowledge). It also demonstrates how teaching and learning about plagiarism occurs informally and indirectly as faculty provide corrections and advice through written and verbal feedback of student's submitted work (directory knowledge). Both faculty and students highlighted this process as paramount for learning about the writing conventions of their discipline. In their descriptions of this process, examples of poor referencing habits are amended and advice about how to properly use the literature are provided.

*Handling cases of plagiarism.*

The participants' responses provided insight about how recipe and directory knowledge interact, specifically with respect to how plagiarism cases are handled (directory), and how cases should be handled (recipe). Within these two classifications, knowledge about how to respond to plagiarism can be broken down to include formal and informal responses. Formal processes are prescribed by university policy (recipe knowledge). However, this form of knowledge was held only by the representatives of the Faculty of Graduate Studies and Student Affairs. Informal practices, widely practiced by the other participants, were influenced by the relationship between the student and the department and shaped by the department and discipline culture.

This seeming disjunction between how cases should be handled (formal policy/recipe knowledge) and how they were handled actual practice/directory knowledge) was informed by axiomatic knowledge. In both departments there was a reluctance to invoke formal policy due to the concern that the situation would become "messy and ugly", thus faculty responded to issues directly, and believed others in the department did so, too. Recipe knowledge about formal policies was also categorized as a form of organizational knowledge participants revealed they did not know. For example, the majority of the participants, including faculty, were unable to refer to the formal policy or outline the formal process for handling a case of plagiarism.

The processing of a hypothetical scenario provided an opportunity to compare participants' knowledge reflected in their responses to the interview questions with how this same knowledge was applied in a specific set of circumstances. The case description

provided situational factors, which significantly influenced how the participants responded to the questions about the case, particularly with respect to their positions on whether the student had plagiarized and how the case should be handled. The responses to the scenario also underscored the role axiomatic knowledge plays about how a case may be handled. For instance, a student who is performing well or who has a history of positive relationships in the department may be treated differently than someone who was struggling in their program.

The discussion of a hypothetical case revealed many forms of axiomatic knowledge that contributed to directory knowledge and the gaps between directory and dictionary knowledge held by the participants in this study.

*Research Objective 4*

*Identify some of the factors that contribute to incidents of plagiarism at the graduate level.*

A form of axiomatic knowledge explored within the study was the factors that contribute to plagiarism within graduate education. Participants identified four main factors: competitiveness, time pressure, lack of confidence and limited knowledge about the rules.

All participants discussed plagiarism within the larger context of academic writing. Applying Sackmann's (1991) cultural knowledge categories, writing and referencing can be considered forms of directory knowledge or "process knowledge" (pg. 91). Participants provided a range of responses to questions about this process

knowledge, such as when they initially learned about the rules. The graduate student participants realized that they are expected to know how to appropriately reference and apply the rules upon entering their program. However, they also revealed that as their academic work becomes more sophisticated and they become developers of their own intellectual property, knowing how to appropriately apply the rules becomes a challenge. Thus, knowledge of plagiarism develops with experience. Unfortunately, the findings indicate that there are limited educational opportunities that assist to enhance graduate students' understanding of plagiarism.

To strengthen the alignment between recipe and directory knowledge about plagiarism within the respective departments, there needs to be a recognition that plagiarism is as an educational matter. The number of suggestions and recommendations for educational strategies (recipe knowledge) provided by the participants, reveals that they are aware of the importance of offering instruction about plagiarism and related matters.

*Research Objective 5*

*Determine how practices and policies may be changed to respond more effectively to plagiarism at the graduate level.*

Participants provided their thoughts on current processes and practices (directory knowledge) and offered suggestions for improvements (recipe knowledge). Most participants were concerned that plagiarism cases are, or may be, handled in an inconsistent fashion. Graduate students were specifically concerned that some cases

could be dealt with unfairly if faculty were able to make unilateral decisions. Some participants contemplated the creation of a centralized university office to handle academic dishonesty cases. In particular, representatives from both the Faculty of Graduate Studies and Student Affairs office commented that the current policy could be better written so as to reduce inconsistency across departments. A broader cross section of participants suggested that such an office may also act to minimize the anxiety faculty members have about bringing a case forward and to reduce the perception that there is a lack of support for pursuing cases of plagiarism from the administration. Overall, participants want a fair and consistent policy with a non-onerous procedure that allows flexibility so that faculty may retain the opportunity to use their own judgment about a case.

Suggestions for improved policies and practices (recipe knowledge) included educational opportunities. Most participants agreed that graduate students should be better informed about the definitions of and policies about plagiarism, including how cases are handled and the possible outcomes. Faculty felt that they too should be provided with professional development opportunities to learn about plagiarism policies and how to best respond to cases.

*Research Objective 6*

*Conduct a gap analysis between knowledge and practice to identify educational opportunities with regard to plagiarism and related issues that are, or should be available for graduate students and for faculty.*

Participants were asked to describe the available educational initiatives about plagiarism. According to the responses, there were no such offerings *within* either department. Graduate students in the applied health science department mentioned attending workshops that were offered outside of their program. These sessions normally covered plagiarism within the larger topic of thesis writing. This finding suggests that these particular students will participate in learning opportunities outside of their departments, which is contrary to the view held by many participants who expressed doubt about the effectiveness of external educational opportunities.

Such external opportunities were more widespread than many participants knew. Representatives from the Faculty of Graduate Studies and the Student Affairs office mentioned a number of educational initiatives offered by their respective units. Unfortunately, the findings reveal that participants in the two graduate programs, including the administrators, were unaware of these sessions. This suggests that, department support and promotion are important considerations when creating educational opportunities.

There was also a lack of informal learning opportunities or experiences within the each of the programs. As already mentioned, feedback on papers was identified as one of the only ways graduate students were able to glean information about appropriate

referencing and writing conventions. Consequently, recommendations for more effective plagiarism education dominated participants' responses of what should be done (recipe knowledge).

In this study, recipe knowledge is a product of dictionary, directory and axiomatic knowledge for participants in the two graduate programs. Clear gaps between dictionary, directory and recipe knowledge point to a pressing need for changes in policies, practices and education.

*Revisiting the literature: Consideration of the findings*

In preparation for the research, the pertinent literature was reviewed. This review was summarized in Figure 1, wherein the elements of plagiarism knowledge and interactions between the constituents in higher education were conceptualized in a diagram. Upon completion of the study, the figure was revised to reflect the findings with respect to plagiarism in the context of graduate education (see Figure 2). The elements of this revised diagram are described below.

The figure was re-conceptualized in several ways. The most obvious change is the move from a static to a more dynamic portrayal of the elements. A second obvious difference is the inclusion of a two new elements: personal culture and disciplinary culture.

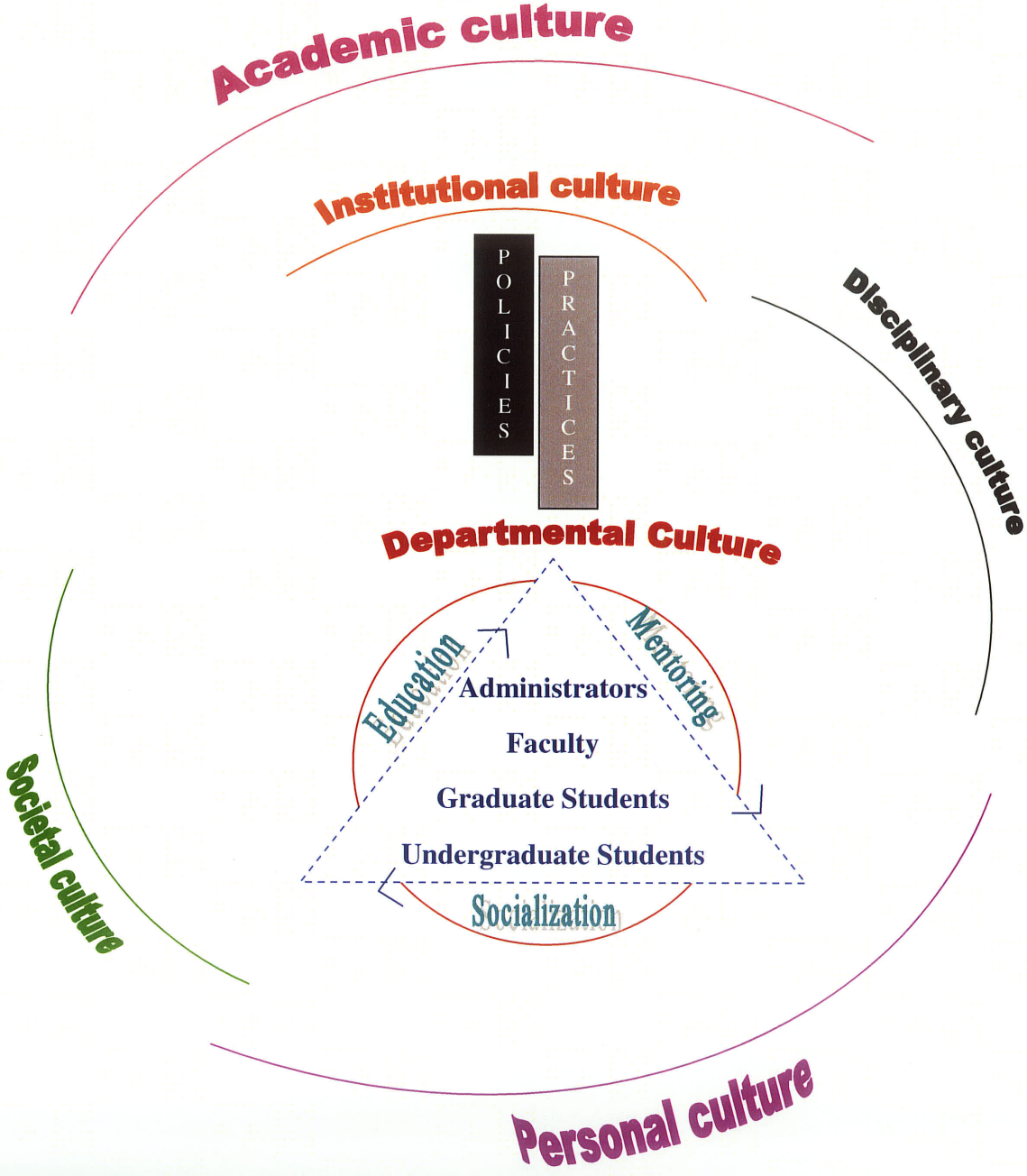


Figure 2. How knowledge about plagiarism is organized, communicated, and influenced within two graduate programs.

Academic culture is situated near the top of the diagram, representing its influence on all activity within higher education and within graduate education. Personal culture is located at the opposite end, representing individuals' personal values, experiences and background, which shape their perceptions of academic life. The results indicated that the inclusion of personal culture was a necessary addition to the original conceptualization. The individual brings to the environment his or her own way of seeing things, which in turn impacts how academia may influence her/him. Within this figure, the equal representation of size and the placement at either end of the diagram demonstrates that academic and personal culture meet and interact rather than one being subsumed by the other. This situation sets up the relationship of all other elements within the figure. The flowing arc shape used to represent culture was a deliberate attempt to underscore the variable relationships between the elements and individuals participating in higher education, based on the interactions between individuals and between individuals and their environments.

Disciplinary culture appears on the right side of the diagram, influencing the academic activities of the department. Societal culture, placed on the left side, completes the interactive circle. Its representation is smaller compared to the other categories because, at the graduate level, its influence was not as strong as the more general literature suggested. Except for one administrative member who mentioned the Fabrikant case (see Yonson & Adolph, 1992), participants did not comment about events occurring outside of the department, with respect to plagiarism and related issues.

The figure takes on more structure as one moves toward the centre. The representation and placement of departmental culture was revised so that it now encircles its constituents (administrators, faculty and students), more accurately representing their relationships and interactions. The reason for this change was the clear indication from the findings that what occurs within the department or the larger discipline is somewhat insular and is the dominant influence in the decision-making processes of all constituents in the department.

Although there is a larger administrative unit, the Faculty of Graduate Studies, it is clear from the findings that this office is quite removed from the day-to-day activities of graduate learning experience. It makes up part of institutional culture, which remains close to its original placement, floating between academic culture and discipline culture. Fagen & Suedkamp Wells (2004) add support to this conceptualization: "students are most influenced by the policies and practices of their individual graduate programs, even more so than by their institution as a whole" (p. 90). The findings of the present study reveal that faculty and administrators in the two departments studied feel similarly.

Policies and practices were originally flanked by institutional and departmental culture. Although the placement and size has changed, the association and the colouring or shading remains the same. The findings reflect that participants saw policy as rigid and unknown. The two departments did not have formal policy, thus the placement (beside institutional culture) and the colouring (black and white) remain the same. Members of the department were more comfortable with a flexible system and to some degree eschewed formal process, preferring informal practice to policy. Practices, coloured

purposefully in grey represent the flexibility and variability of the informal departmental processes.

The four constituents, administrators, faculty, graduate students and undergraduates, remain depicted in a hierarchical fashion to reflect the way in which they relate to each other both politically and socially. Organized around the constituents are the three processes of education, mentoring and socialization, reflecting the learning and disciplinary mechanisms revealed in the data.

*Implications and Recommendations*

The mix of assumptions about graduate students' knowledge about the rules of plagiarism and other ethical matters, combined with severe consequences for plagiarism is a situation ripe for educational initiatives and for policy changes with respect to plagiarism in graduate education. The findings *suggest* that discussions about plagiarism are simply not part of the discourse between graduate students and the faculty. The issue is too important to be left to tacit learning on the part of the student.

In the following section, I discuss the findings in relation to the larger context of graduate education. In doing so I comment on the current literature and include my own professional experiences to support the implications the research findings have for plagiarism policy and education considerations. Recommendations stemming from this discussion are highlighted through out this section and are compiled in Appendix J.

*Education considerations.*

The literature supports a three-pronged approach to plagiarism: prevention, detection and response (e.g. Harris, 2001). The findings of the present study reveal that participants support the emphasis on education about the rules (prevention) rather than focusing on ways instructors may catch plagiarists (detection). Making plagiarism a teaching and learning issue more than a punitive matter should make intuitive sense given that a core goal of our universities is to educate. When institutions choose to place the strongest emphasis on detection, they do a disservice to students who need to learn that accurate citing and honest representation of the literature and one's own contribution is

the foundation of scholarly writing. This perspective, and not learning to avoid plagiarism so as to avoid punishment, should dominate in a comprehensive approach to addressing plagiarism in university communities.

**Recommendation: An effective approach to addressing the issue of plagiarism requires a comprehensive strategy that integrates prevention, detection and response such that the strongest emphasis is placed on prevention through education.**

One important research finding was that faculty and graduate students were reluctant to call inappropriately referenced work identified through the revision/feedback process as "plagiarism". Instead, episodes of inappropriate use of the work of others were seen as opportunities to teach students the conventions of writing and citing in their discipline. This observation has important implications when considering educational initiatives.

The findings reveal that there is a difference of opinion as to whether or not graduate students would attend sessions about plagiarism, particularly if they were offered outside the department. Proving the skeptics wrong, 4 out the 6 students in the applied health science department indicated that they had participated in such sessions. However, these workshops did not include the word plagiarism within the title, instead it was presented in the context of a larger educational issue.

The success of educational endeavors may be enhanced if the information about plagiarism was included in a broader based topic such as thesis writing. My professional experience as a workshop instructor supports the conclusion that can be drawn from the finding that those involved with graduate education are reluctant to call inadvertent plagiarism "plagiarism". The literature suggests avoiding the word plagiarism when discussing, the rules of referencing, particularly with international students, (Dyck, 2004). Thus, when creating educational workshops, it would be prudent to promote the importance of avoiding plagiarism in terms that will communicate to students, and faculty too, how this issue ties into the larger issues of scholarly writing and academic integrity.

**Recommendation: Rather than teaching students only "the rules" for avoiding plagiarism, educational initiatives should discuss plagiarism in the larger contexts of academic integrity and the development of effective academic writing practices.**

One of the biggest challenges for implementing any educational or policy initiatives may be the belief that plagiarism is not an issue in graduate school and this sentiment was shared by many of the participants. Unless plagiarism is seen explicitly as a matter of concern, efforts could be in vain. The onus may be on individuals and offices responsible for faculty and student development to raise awareness before initiating new programs about plagiarism. To increase the likelihood of success of these teaching and

learning initiatives, it is imperative to receive support from the academic staff in each department to raise the profile and to increase credibility.

The reluctance of the departments to recognize plagiarism as an issue may stem from their desire to avoid negative attention. In the present study, one faculty member suggested that plagiarism is not discussed because "we all like to keep our dirty linen well hidden".

**Recommendation: For educational initiatives to be successful, plagiarism must be explicitly recognized as issue by individual graduate programs.**

The findings also revealed that plagiarism is part of the larger process of the development of academic writing. As one moves through their academic career, writing and referencing skills become more sophisticated. Unfortunately, like writing, teaching about plagiarism is limited to the undergraduate level and is almost non-existent at the graduate level. The following advice should be heeded when creating and planning educational programs: "Because graduate students have the most to gain - or lose - from discussions of graduate education, they should be most vital and integral participants in any conversation on the subject" (Fagen & Suedkamp Wells, 2004, p. 87).

The participants provided a range of suggestions of educational programming. One participant indicated that opportunities have to be available through out the entire educational program, including graduate school. Many participants agreed that something should be presented upon entry into a graduate program. There were some conflicting

suggestions. Some felt initiatives should be one-time only sessions that could be part of an orientation. Some felt a message restatement is necessary, perhaps part of the curriculum or in an ethics class. Making a session mandatory was another suggestion. Others thought opportunities provided outside the department would be helpful. However, students indicated the desirability of having someone who is knowledgeable about the program and the discipline, and suggested piggybacking on teaching and learning relationships, such as the one between a student and advisor or within a classroom setting.

**Recommendation: The acquisition of knowledge about plagiarism is a developmental process. Educational initiatives should be designed to incrementally address the needs of learners at different points across the whole span of education programs.**

**Recommendation: Graduate students should be consulted and/or involved with the development of educational programs or material as a way to ensure their needs are met.**

**Recommendation: Workshop program and materials for created for different members of the university community should be evaluated to ensure the information is up to date, relevant.**

The findings of this study revealed that understandings of plagiarism are related to understandings of associated concepts. To enhance understanding, plagiarism should be discussed in conjunction with copyright and intellectual property, concepts and policies graduate students must be aware of in their roles as scholarly writers and researchers. The underlying concern of all three is the appropriate use (misuse) of another's idea (in the case of plagiarism) and the expression of ideas (in the case of all three).

**Recommendation: Plagiarism education should include discussions about related concepts, including intellectual property and copyright.**

Within academia the mentorship or apprenticeship model is considered the primary process by which graduate students learn the "the methods and values of higher learning and scientific research" (Folse, 1991, p. 345). However, the academy cannot rely exclusively on the mentor to mentee exchanges as a way to ensure that ethical and research expectations are communicated (Folse, 1991). Unfortunately, formal learning throughout a students' educational career is often inconsistent. .

Graduate students learn the requirements and expectations of their program from both formal (direct instruction, orientation, handbooks) and informal (communications with fellow students and observations of faculty and their advisor) means. Wulff and Austin (2004) stress that "both of these sources can be useful; nevertheless, mixed and contradictory messages from the environment can increase confusion about what students observe" (p. 273). Weidman, Twale & Stein (2001) suggest that perhaps even if graduate

students receive the same information, dissonance may still be created due to the individual's own personality or expectations about the program.

The findings of this study reveal that not all graduate students receive the same benefit from advising relationships. Furthermore, not all graduate students enter the program with equal levels of preparation, specifically with regard to understanding what plagiarism is and how to avoid it. Participants expressed that there are high expectations placed upon graduate students with regard to what they should know upon entering the program. These assumptions are not justified, or even fair, when educational experiences, before and after graduate school admission, are uneven across students.

**Recommendation: To equalize knowledge about plagiarism and related matters, graduate students should be able to access information about research writing and referencing practices, particularly if they are not receiving this information as part of the graduate curriculum or from their advisor. A departmental library or web page resource that houses professional and academic developmental information are two such options.**

There is a misconception that plagiarism, like other ethical issues are covered in a students degree program. However, as these researchers point out: "… the ethical dimension of faculty and professional life – how to act responsibly and in the best interests of the profession – was not, as is often assumed, part of the graduate training" (Golde & Dore, 2004, p. 27). The findings of the present study reveal that plagiarism, and

related matters are simply not part of the department's discourse. Some faculty explained that the perception is that graduate students learn what they need to know as they more through the program simply by immersion in a scholarly community.

Fagen & Suedkamp (2004) carried out a large on-line survey that involved 32,999 American and Canadian doctoral students representing a range of different programs. "Despite increasing attention to ethics in academic fields, few students reported training in this area" (Fagen & Suedkamp, 2004, p. 85). Golde and Dore (2004) surveyed 4,114 doctoral students in arts and science disciplines. They examined and compared the responses of English and chemistry graduate students. Areas of knowledge that doctoral students from both disciplines identified as requiring more guidance included the "practices for refereeing papers for publication or determining the authorship order on coauthored papers" (Golde & Dore, 2004, p. 33). The findings of this study revealed that participants also had a number of questions pertaining to intellectual property.

**Recommendation: Ethical training, including but not limited to plagiarism, should be an explicit part of the curriculum in graduate programs.**

For most of the faculty and administrator participants, there was a gradual internalization of knowledge about plagiarism. Some did not recall learning about or discussing these ethical issues, like plagiarism, within their own graduate program, a finding supported by the literature (Golde & Dore, 2004). Unsurprising, the data revealed that some faculty and administrators believed that graduate students sufficiently learned

about plagiarism in their undergraduate programs and that they were sufficiently prepared for graduate school, consequently, perpetuating the perception that whatever a student may not know, she/he will pick it up simply by way of being in the program.

Weidman, Twale and Stein (2001) question if the informal and formal learning that occurs in graduate school prepares future faculty or to assists the individuals in their current roles as a graduate student. When considering how this applied to plagiarism, the answer would be it does neither. The data in the present study supported professional development sessions for faculty and administrators.

**Recommendation: Academic staff, including faculty and administrators, should have access to professional development opportunities to learn about and discuss issues of plagiarism.**

Another important finding was the importance of acknowledging disciplinary differences. The participants in the two departments demonstrated more similarities than differences in their responses to process questions. However, suggestions about education and comments about the writing and research process were different. Thus educational initiatives should be created "by thinking of discipline-specific ways" (Golde & Dore, 2004, p.41) to enhance the success of these efforts.

**Recommendation: To be meaningful and effective, plagiarism education materials and programs must include discipline-specific elements.**

*Policy considerations.*

Given the findings, recommending policy changes can be difficult. The data suggest that are no easy answers; creating a new policy is not the magic answer. Most of the participants emphasized the importance of education, including education about the policies and procedures to follow when handling cases of plagiarism and the integration of education options as responses to cases of plagiarism. The following section discusses the implications of the findings with regard to plagiarism policies and practices.

It is important that there be an institution-wide acknowledgement of the importance of academic integrity. The Centre for Academic Integrity (1999) suggests institutional statements or policies should identify values and behaviors that represent academic integrity. Unfortunately, most institutions, including the one that was under investigation, focus on behaviors that are considered dishonest. The ideal would be to have a complete policy or statement that explains both what is considered academic dishonesty (undesirable behaviors) and academic integrity (desirable behaviours). Interestingly, behaviors that are considered synonymous with academic integrity - honesty, trust, respect, fairness and responsibility (CAI, 1999) - were not readily mentioned in the interviews. Perhaps these words need to become part of the everyday discourse in universities among all members of the academic community.

**Recommendation: Institutional policies should be constructed and expressed in ways that focus on promoting academic integrity as well as discouraging academic dishonesty.**

**Recommendation: "Academic integrity" policies should describe behaviors to be promoted, in addition to those that are discouraged (CAI, 1999).**

"Enhancing a culture of academic integrity requires a strategic plan..." (Hendershott, Drinan, & Cross, 2000, p. 596). In many institutions, the efforts to promote academic integrity lies with the departments and individual faculty members. To truly elicit change in current standards and practices and to raise awareness about the importance of academic integrity, the senior administration of educational institutions must play a more visible and vocal role. A tangible strategy includes incorporating statements about academic integrity in the institution's mission statement (Usick, 2004). An examination of the mission statement of the university that was under investigation shows that phrases such as "academic integrity" or "academic honesty" are not mentioned.

Senior administrators could make efforts to mention the importance of academic integrity in addresses and orientation speeches with different constituents of the university community. The University could acknowledge publicly community members who are exemplary examples of individuals who demonstrate academic integrity in their academic work, teaching and mentoring or personal behaviour. Senior administrators could also endorse and provide financial support for university-wide educational initiatives created to raise awareness of the importance of academic integrity.

**Recommendation: Senior administration must play a more visible and vocal role in the promotion of academic integrity on campus.**

With regard to policy concerns, faculty members from both departments were able to comment on what they themselves would do when confronted with a case; colleagues within the department were expected to handle situations in a similar fashion. Some of the participants viewed the departmental administration as being available to provide support if required.

Although formal procedures of departments and Faculties were not widely known, the findings of this study indicate that faculty are interested what is considered the way to do things within their *own* departments. This finding is incongruent with the data that most participants believed that process and outcomes *should* be consistent across graduate programs. Yet when asked about handling cases of plagiarism, what participants say they would do (responses to interview questions) and what they do (responses to case study questions) suggest this is not as important as they may indicate. Because graduate students, faculty and administrators stressed the importance of considering contextual factors before making decisions about whether the behavior in question constitutes plagiarism and about how to proceed if it is. Thus, implying that consistent application of the rules would be difficult.

Moreover, despite the fact that the institution under question has a university-wide policy on academic integrity and a set of formal procedures about responding to academic dishonesty, the representatives from the Faculty of Graduate Studies and the Student Affairs revealed that there was inconsistent application of these processes across graduate programs, due largely to departments and individual instructors making their decisions about handling cases.

The challenge of improving or creating formal procedures and responses to plagiarism presents a balancing act of ensuring consistency and allowing for individualized responses informed by situational factors surrounding the case (including characteristics of the student) and academic discipline considerations. The strongest recommendation that I can make is that this challenge is appreciated by all stakeholders in graduate education, particularly given the number of different graduate programs that fall under the umbrella of the Faculty of Graduate Studies.

**Recommendation: In designing effective policies and procedures to guide the prevention, detection and response to plagiarism, there should be an appreciation that there needs to be a balance between consistency of responses on one hand and, on the other, accommodation for individualized responses to plagiarism cases, depending on the facts of each case.**

**Recommendation: Resources should be provided to ensure that all members of graduate programs – graduate students, faculty, and administrators – know the formal procedures that are to be followed in handling a case. Any supplemental departmental procedures or practices should be consistent with institutional policies and procedures and should be effectively communicated to all members of a department.**

The data revealed that issues of intellectual property (IP) and authorship were areas that needed more clarity. The institution where the study took place did not, at the time of the study, have an intellectual property policy document. There is a tri-sectioned policy on the research ethics, which informs, albeit briefly, the steps to take should there be an allegation of plagiarism or research fraud on the part of a non-student. Participants in neither program mentioned department specific policies on IP. In fact, some participants highlighted the fact that there were no guidelines to follow when faced with IP questions. Some departments are informed about these issues by their discipline publications. For example those in the medical sciences may refer to the Uniform requirements (see International Committee of Medical Journal Editors, 2003) and social scientists tend to refer to the American Psychological Association (APA) publication manual (see APA, 2001).

**Recommendation: Create university-wide intellectual property and authorship policies.**

The currency of academic work is the recognition having articles or papers accepted for publication in reputable journals and accepted for presentation at national or international conferences. Consequently, editors of journals and organizing committees for conferences are two important groups who play a significant role in communicating disciplinary standards in academic research and writing. One of the research findings was the potentially confounding issue that journals in some disciplines are limiting the

number of references in a paper. In some cases, this leads scholars to rely on secondary sources such as reviews, rather than citing the primary sources upon which their investigation was informed. It is common for graduate students to consult or be referred to reputable journals in their field when writing up their research. Potentially, this new trend of limiting references and subsequent reliance on secondary sources creates poor models of scholarship.

In addition, attendance and presentations at conferences are important scholarly activities that shape the experiences of graduate students. One dilemma identified in the research findings was whether or not it was appropriate to share ideas for research at conferences. This question is one of many that graduate students encounter when attending conferences. Organizing committees of conferences could ensure the needs of new scholars are considered when preparing the conference program. The program could include both professional learning opportunities and social activities, both of which would help the student to glean, in both formal and tacit ways, the conventions of the discipline.

*Directions for future research*

Research in the area of plagiarism and more globally, academic integrity and ethical training, is a growing area in the literature. The following are suggestions for research that emerged from the findings and the review of the literature.

One suggestion is to further explore the disciplinary differences between graduate programs. Information gleaned from such investigations would contribute to better policy creation and revision, and more effective educational initiatives.

A second suggestion is to examine the different ways in which graduate students learn about ethical training. Compiling such information would be helpful, given that the literature laments the fact that most of the calls for changes in how graduate students are prepared for academic commitments, including ethical responsibilities (Folse, 1991) and teaching commitments (Nyquist et al., 1999) have gone largely unheeded.

A third suggestion is to examine how faculty and administrators are informed of policies and procedure related to plagiarism. Most institutions have orientations for new administrators and for new faculty. It would be useful to examine if the topics covered in these sessions touch on academic dishonesty. It would also be valuable to ascertain what type of workshops and professional development opportunities are provided to assist administrators and faculty members who wish learn more about this area.

A final suggestion is to examine the type of training teaching assistants receive in the areas of plagiarism and to assess the impact of this training on their own understandings of plagiarism and on their teaching practices.

# Chapter 6

# Reflections

Self-reflection on the part of the researcher is an important component of the research process. Seidmann (1991) encourages the researcher to reflect on one's role in the research, particularly how one's own personal interests and biases shape decisions made about the data collection and analysis. Lincoln and Guba (1985) suggest compiling an audit trail as one strategy to assist the researcher in making her decision-making process more transparent. One aspect of the audit trail is the keeping of a reflexive journal. In this study, the role of the researcher and the quality assurance tests for the research design were described in detail in the methodology chapter. The following section shares retrospective insights and excerpts about these topics from my reflexive journal kept through out the writing and research process.

## *Role of the Researcher*

My intention was to keep a separate journal for my thoughts and reflections as I carried out the research. However, this "journal" became a collection of notes on the literature which were later the starting points for chapter drafts, references and websites to look up, observations and thoughts to remember for the data analysis and write-up stages, questions and ideas to follow through on, to-do lists and timelines, and notes from meetings with my advisor. The following are some excerpts from my journal that

illustrate my decision making and thought processes at different stages during the research.

> While writing up my methodology chapter I documented:
>
> Really, my side is the student perspective. Can I argue that because I engage in daily conversations with students through my work at Student Advocacy, that I have some idea of their perspective and that is my point of entry into the research?

During this time I was contemplating the idea of "taking sides" as a researcher. I had just read sections of Dorothy Smith's (1987) book and was struck by her declaration that "detachment is not a condition of science" (p. 177). Being rather new to qualitative research and the notion of self as research instrument, I was pondering my own influence and biases upon the research project on which I was about to embark.

When considering the data collection phase, I anticipated potential issues, such as familiarity with the a participant and/or topic or the risk of making assumptions as to the meanings of what a participant may be stating. I thought of ways to reduce this risk, one of which included asking myself critical questions after I conducted an interview, which I later did.

> I will have to review the interview transcripts to see if I engaged in 'active listening'. Did I provide the terms or did I allow the respondents to explain using their own words? Did I assume a familiarity with what was said? Perhaps a strategy to use while in an interview is if I'm intrigued or agree with what is said by the respondent, rather than assume that I understand her/his meaning, I will ask respondent to explain.

During the interview process, most, if not all, participants demonstrated their engagement in the interview and their interest of the topic by asking questions either

during or at the conclusion of the interview. These questions varied from queries about prevalence rates and the formal process of the University to concerns about the influence of the Internet.

While reviewing the interviews, either reading the transcripts or listening to the tapes, I was able recall the interview. I noted the following in my journal: "I am very pleased to realize that I can recall the interview once I hear the tape. I see the interviewee's face, the location where the interview took place and I can recall a sense or feel of the interview." I am fortunate that I am skilled in conducting interviews, as it is a requirement of my employment, and that I am able to establish rapport quickly.

While analyzing the data, I entered the following into my journal:

> I realize that I need to take a step back and look at the larger picture. When analyzing a transcript, I have to refrain from filing in the gaps with my own knowledge and experience and let the data speak for itself. But I also have to remember that—because I am so familiar with the topic and with the institution—I must allow myself to see how it all fits together and to actively look for those things that I did not know.

For example, when I asked participants about the process for handling cases of plagiarism, occasionally an individual would respond in a such a way that had I not asked follow up questions, I would have "filled in the gaps" of the response and have assumed that the participant was knowledgeable about the formal university process that I had in mind, when in fact s/he was not. Furthermore, by asking more questions, I was informed of the individual's own process for handling cases, information that was valuable for my study.

While coding the data, I reminded myself not to make assumptions and to use as much as possible the language of the participants when creating sub-theme codes. This was carried into the writing up stage as well.

I was pleased that my research project was successful. Although it took some time to recruit the participants required for the study, the interviews themselves were enjoyable and I was struck after each interview, how fortunate I was to interview this person who so willingly shared their time and thoughts. I was aware of the problem that sometimes arises when the outcomes of a research project yield disproportionate outcomes for the researcher compared to the participants. Although my research did not "take advantage" of anyone, I was rather cognizant that the interview relationship sets up a situation that I am the only likely to benefit or to benefit the most. However, when I was writing my research proposal, Lincoln and Guba's tests of authenticity (1986) led me to the conclusion that the process could be reciprocal. Indeed, many participants indicated that they enjoyed the opportunity to discuss this issue and felt the conversation assisted them to articulate their understandings about plagiarism and their preferences for handling cases. One faculty member shared the following:

> I think to say, that it's been a very useful exercise for me just to sit down and think about it, because like most of the more unpleasant things in life find lots a reason not to think about it usually don't until it happens, then there is a bit of a panic. We all agree that this is very unpleasant and handle as best as we can. I think it is good to have the opportunity or forced to sit down and kind of think of it in advance, it is always better to be prepared than to have to react and panic (AH fac2 671-679)

One of the outcomes of conducting this research is how discussion raises awareness of plagiarism or academic integrity in general within the departments, and

how, in turn, that may inform understanding and potentially policy or practice. Whether or not questions were asked, I endeavored at the end of the interview to provide participants with information or to correct misinformation, particularly about applying the rules, the formal process and where to access further information. One administrator explained: "No, it's interesting...it's just never [discussed]...I suspect we may have a discussion as a result of your project" (AH admin 470-471). As a Student Advocate, my involvement in plagiarism research has heightened my awareness and I have developed a much larger appreciation for how complex the topic is within higher education. My involvement with this study in a larger research project on plagiarism, which received a research grant from the Social Science and Humanities Research Council of Canada[1] has provided mutually beneficial insights and experiences. For example, the pilot study that was carried out before embarking on the larger study allowed me to make informed decisions about my own methodology.

*Quality Assurance*

It is the responsibility of the researcher to ensure their methodology meets tests of rigor and quality. In the qualitative research paradigm, these tests include strategies to improve the trustworthiness of the methodology and the authenticity of the research design. These tests were applied to the present study and were each explained in the

[1] The research team is comprised of principal investigator, K. Lynn Taylor, Dalhousie University, co-investigators Barbara Paterson, University of British Columbia and Lynn Smith, University of Manitoba, project manager Brandy Usick and research assistants Jori Thordarson and Sarah Armistead.

methodology chapter. In this section, I share retrospective insights on my role as a researcher with regard to some of the strategies that I employed to increase the trustworthiness of my study.

Tests of trustworthiness involve four main areas: credibility, transferability, dependability, and confirmability. One of the most successful strategies that I used to increase credibility in my study was triangulating methods: a semi-structured interview, a case study and document analysis. It was apparent to me after my first interview that the inclusion of a case study was a critical methodological decision. The participants were quick to identify with the scenario and were able to provide their perspective with limited prompting. The ability to compare the interview and case study responses provided me with an excellent opportunity to compare participants' comments on what they think they would do (interview questions) and what they do (case scenario). Although the scenario was hypothetical, the description was detailed enough which contributed to the participants' ability to respond more accurately because there was now a context. Responses to the interview questions alone provided insight about the participants' perspectives. However, the responses to the case scenario provided more details or shadings to their responses. The comparisons allowed to me gain a richer understanding of someone's perspective, including if there were dissonance between their responses to the interview questions and the case study.

In addition to a strategy for increase credibility, peer debriefing was an important methodological consideration, particularly because I am a new researcher. Lincoln and Guba (1985) comment that "debriefing sessions provide the inquirer an opportunity for

catharsis, thereby clearing the mind of emotions and feelings that may be clouding judgment or preventing emergence of sensible next steps" (p. 308). My advisor provided me a sympathetic ear and was able to steer me in the right direction when I felt I was coming off track during the research and writing process. I was not prepared for the "existential angst" that I experienced at times, despite the warnings that I read about in research textbooks and the advice that I received from my external committee member. Fortunately, my advisor was understanding and available to meet with me during these critical moments. My journal contains entries where I prepared questions and issues to discuss with her. Subsequent pages in my journal are filled with her suggestions and advice that I jotted down during and after the meetings – information that greatly aided me throughout my entire thesis adventure.

The archival requirement of "referential adequacy" (Lincoln & Guba, 1985), a test of credibility was met by transcribing the interviews. I was fortunate to receive financial assistance from a special projects grant from the Canadian Association of College and University Student Services, which allowed me to hire someone to transcribe my interviews for me. Having these transcripts assisted me to include "thick descriptions" (Lincoln & Guba, 1985) by way of incorporating verbatim quotes into the presentation of my results. Individuals reading my study will be aided by these descriptions when determining the transferability quotient of my findings to her/his own personal or research context.

Some of the trustworthiness strategies that I used were beneficial for more than one test. This is most apparent with the decision to keep an audit trail, which satisfied tests of dependability and confirmability.

*Valuing one's own work*

Sometimes spending an extended period time studying one topic can contribute to devaluation of one's own contribution to the literature. My involvement with this issue on a professional level (assisting students who are being investigated, advising faculty with the process) and academic level (this study and a larger study) almost over saturated me in this subject area and experienced a second "existential angst". Originally I was thrilled with my findings. Then I wondered if what I found was "new". Alas, I found myself back in the book stacks looking for articles that would help me place my findings in the larger context. I already knew from the literature, my involvement with plagiarism research, and anecdotally that education on this issue rarely occurs at the graduate level, at least not in a formal sense. Thus, my first instinct was not to look for literature about how graduate students are educated about plagiarism but how graduate students are prepared in general for academic writing and scholarly presentations. The participants tended to situate plagiarism within the writing process and consider knowledge on this topic to be developmental in nature. So, I looked to see if there was any recent literature examining the issue of graduate student preparation and I came across a few important documents, which I referred to in the conclusion/implication section.

When I think of these objectives and the types of recommendations that I made make, I think of a statement that I read when I was reviewing the literature on qualitative methodology: "the desire to make things better for teachers and learners has always been important to many educational anthropologists" (Eisenhart, 2001, p. 19). Although I would not classify this study as an ethnography this statement resonated with me because I agreed with the author and because I wondered is not making things better the goal for all research? My professional experiences made me feel frustrated at the lack of instruction on plagiarism and yet the expectations to which students, in particular, are held. I would not feel so passionately had I not seen the serious consequences for graduate students who are considered to have plagiarized.

I wondered at times, really, how many graduate students are not aware of the rules and in danger of inadvertent plagiarism? How many would actually take the risk to plagiarize purposefully. The unprecedented attention the topic pf plagiarism has received both in by scholarly publication and the media has provided a number of examples that individuals on all levels in the academic hierarchy are vulnerable to the risk and the temptation. Recent statistical evidence reveals plagiarism is a problem in our graduate programs (Hughes & McCabe, 2003).

*Conclusion*

The opportunity to self-reflect allowed me to consider what I was learning about myself. One entry in my journal revealed that I was becoming conscious of how participating in research was affecting my world-view at times:

> It's funny how once you become involved in research, how highly aware you become aware of the different types of research being conducted both locally and nationally. In addition to becoming more interested in research- particularly involving higher education. I have noticed that I have become, at times, a keen observer of human interactions. This is likely a mix of influences (e.g. work) but this type of research has contributed to more self-reflection in my interpersonal interactions.

The process of research and writing up research has been a very rewarding and, at times, very challenging task. It was interesting that I was able to emphasize with the graduate student participants who mentioned the struggle it is sometimes to write. I greatly appreciate that the purpose of a thesis is not just the final product, but the process and development that results in the final product.

The thesis process was sometimes challenged, but mostly benefited by my other roles of full-time Student Advocate and project manager for a large study on plagiarism. I am very fortunate that my different roles of student, researcher and employee overlapped and that these experiences in each informed the other.

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# Appendix A

## Letter of Permission to Department Head

Date

Dr. _____
Head, Department of _____

Dear Dr. _____,

I am writing to request your permission to invite graduate students and faculty members in the department of _____ to participate in a research project designed to examine plagiarism within graduate education.

Plagiarism is a growing concern within higher education. However, this issue has not been well examined in the area of graduate education, where the expectation is that students are aware of the rules and how to avoid plagiarism. Consequently, the outcomes for violations are often severe. Although academic integrity is fundamental to scholarly work, students rarely receive formal instruction. The proposed study, an educational ethnography, will investigate a number of research questions created to illuminate the phenomenon of plagiarism within the graduate education context.

Two departments with active graduate programs have been selected for potential participation in the study. Your department and one other were selected because they represent different academic disciplines, which may have differing views of specific knowledge, experiences, and practices with regard to plagiarism at the graduate level. I understand that your department has a large graduate program and that within your discipline, there is a broad base of research interests, theoretical perspectives and methodologies.

The attached letter of consent outlines details of the study, including how confidentiality will be maintained. The involvement of volunteers from your department in this research will require participation in a single, 60 - 90 minute individual interview on their views about the meaning of plagiarism, where they learned about plagiarism, strategies for avoiding plagiarism and why it happens. Questions will also include how cases of plagiarism at the graduate level are handled and how graduate students are educated about plagiarism. During the interview, participants will also be asked to respond to a brief scenario involving graduate level plagiarism. At no time will participants be asked to reveal their own acts of plagiarism.

Permission is requested to contact faculty members and graduate students through an information and consent letter. In addition, your permission is sought to augment recruitment by asking faculty members' permission to make a ten-minute presentation

and to distribute information to recruit students from in their graduate classes. Faculty members and graduate students may be sent follow up invitations through email to participate in the study

I look forward to your support for this study, which will influence future definitions of plagiarism and form the basis for programs to educate academic communities about plagiarism. To respond and/or if you have any questions about any aspect of this study, please contact me at [redacted] or [redacted]

Sincerely,

Brandy Usick.
Principal Investigator, M.Ed. Student

Appendix B

Recruitment Letter

Academic Departments

DATE:

TO: Graduate students/Faculty members/Head, Department of XXX

FROM: Brandy Usick, M.Ed. student, Post-secondary Studies, Faculty of Education

**RE: Research project examining plagiarism within graduate education**

---

I am writing to invite graduate students and faculty members in the Department of _____ to participate in a research project designed to examine plagiarism within graduate education.

Plagiarism is a growing concern within higher education. However, this issue has not been well examined in the area of graduate education, where the expectation is that students are aware of the rules and how to avoid plagiarism. Consequently, the outcomes for violations are often severe. Although academic integrity is fundamental to scholarly work, students rarely receive formal instruction. The proposed study, an educational ethnography, will investigate a number of research questions created to illuminate the phenomenon of plagiarism within the graduate education context.

Two departments with active graduate programs have been selected for potential participation in the study. Your department and one other were selected because they represent different academic disciplines, which have, potentially, contrasting views of the knowledge, experiences, and practices with regard to plagiarism at the graduate level. I understand that your department has a large graduate program and that within your discipline, there is a broad base of research interests, theoretical perspectives and methodologies.

The attached formal letter of consent delineates information about the study, including how confidentiality will be maintained. Your participation in this study is completely voluntary. Participating will involve a single 60-90 minute interview that will take place at the University of Manitoba in a place and at time convenient to you. During the interview, you will be asked your views about the meaning of plagiarism, where you learned about plagiarism, strategies for avoiding plagiarism and why it happens. Questions will also include how cases of plagiarism at the graduate level are handled and

how individuals are educated about plagiarism. During the interview, you will also be asked provide your views on a brief scenario involving graduate level plagiarism. At no time will you be asked to reveal your own acts of plagiarism.

Thank you for your interest in this study which will contribute to improving plagiarism policy and education at the graduate education level.

To schedule an interview and/or if you have any questions about any aspect of this study, please contact me by telephone at 223-8612 or by e-mail at Brandy_Usick@umanitoba.ca My thesis advisor, Dr. Lynn Taylor, may also be reached if you have any questions. She can be contacted via email at Lynn_Taylor@umanitoba.ca

# Appendix C

## Consent Form

Dear Participant,

This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

This research project is being conducted to satisfy partial fulfillment of the requirements for the Master of Education (Post-Secondary Studies) program at the University of Manitoba.

Plagiarism is a growing concern within higher education. However, this issue has not been well examined in the area of graduate education, where the expectation is that students are aware of the rules and how to avoid plagiarism. Consequently, the outcomes for violations are often severe. Although academic integrity is fundamental to scholarly work, students rarely receive formal instruction. The proposed study, an educational ethnography, will endeavor to investigate a number of research questions created to illuminate the phenomenon of plagiarism within the graduate education context.

The project will focus on two departments at the University of Manitoba that have large graduate programs and which represent different disciplines to provide contrasting views of the knowledge, experiences, and practices with regard to plagiarism at the graduate level. Six graduate students, two faculty members and one administrator will be interviewed from each department. Representatives from the Faculty of Graduate Studies and the Student Advocacy office will also be interviewed, for a total of 20 participants.

Your participation in this study is completely voluntary. Participating will involve a single 60-90 minute interview that will take place at the University of Manitoba in a place and at time convenient to you. During the interview, you will be asked your views about the meaning of plagiarism, where you learned about plagiarism, strategies for avoiding plagiarism and why it happens. Questions will also include how cases of plagiarism at the graduate level are handled and how individuals are educated about plagiarism. At no time will you be asked to reveal your own acts of plagiarism.

All interviews will be audio-taped and transcribed. Access to the interview transcripts will be safe guarded and personal information will be kept confidential. Interview tapes and transcripts will be identified only by a code, which will maintain the confidentiality of each participant's name and significant identifying characteristics. Only the researcher will have access to the code key and only the transcriptionist and the researcher will have

access to the original tapes. In the presentation of the results the participants may be identified by their gender, role (student, faculty or administrator), and/or discipline. In cases where gender designation may inadvertently identify a participant (e.g. administrators) this information will not be revealed. Each participant's academic unit will be identified only as an applied health science or a basic science program. Other information provided in the context of an interview that could potentially identify an informant or another individual will be masked as the transcripts are prepared. The hard copies of the entire interview transcripts will be stored in a locked filing cabinet and will be accessed only by the researcher and the thesis committee members, as necessary. The electronic versions will be stored on a diskette and accessed only by the researcher. Upon successful completion of the thesis defense, the audiotapes and the code key will be destroyed. In presenting the data, only short quotes that will be carefully examined will be used to minimize the likelihood that an informant would inadvertently be identified from a specific incident or pattern of speech. Transcriptions will be kept until dissemination of the findings, a period not to exceed five years. At the end of this period, the transcripts will be shredded.

At the conclusion of the interview, the researcher will summarize what was said during the interview and will invite the participant to provide any additional information. The participant will also be asked if they would like to receive a summary of the findings. The participant will be asked to fill out a form making this request and to indicate where they would like the summary to be sent.

There is minimal risk in participating in this study. There will be no direct compensation for taking part in this research project.

Your signature on this form indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the researchers, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from the study at any time, and /or refrain from answering any questions you prefer to omit, without prejudice or consequence. Your continued participation should be as informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation.

Please feel free to contact me or my thesis supervisor should you have any questions about the research project or your role as a participant.

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Tel: 474-7456
Email: lynn_taylor@umanitoba.ca

This research has been approved by the Education/Nursing Research Ethics. If you have any concerns or complaints about this project you may contact any of the above-named persons or the Human Ethics Secretariat at 474-7122. A copy of this consent form has been given to you to keep for your records and reference.

Sincerely,

Brandy Usick
M.Ed. Student

_____ _____
(Signature of Participant) (Date)

_____ _____
(Signature of Researcher) (Date)

Appendix D
Recruitment Letter
Faculty of Graduate Studies and Student Affairs

DATE:

TO:

FROM: Brandy Usick, M.Ed. student, Post-secondary Studies, Faculty of Education

**RE: Research project examining plagiarism within graduate education**

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I am writing to invite you to participate in a research project designed to examine plagiarism within graduate education. You have been invited to participate because of your experience in dealing with cases of plagiarism.

Plagiarism is a growing concern within higher education. However, this issue has not been well examined in the area of graduate education, where the expectation is that students are aware of the rules and how to avoid plagiarism. Consequently, the outcomes for violations are often severe. Although academic integrity is fundamental to scholarly work, students rarely receive formal instruction. The proposed study, an educational ethnography, will investigate a number of research questions created to illuminate the phenomenon of plagiarism within the graduate education context.

The attached formal letter of consent delineates information about the study, including how confidentiality will be maintained. Your participation in this study is completely voluntary. Participating will involve a single 60-90 minute interview that will take place at the University of Manitoba in a place and at time convenient to you. During the interview, you will be asked your views about the meaning of plagiarism, where you learned about plagiarism, strategies for avoiding plagiarism and why it happens. Questions will also include how cases of plagiarism at the graduate level are handled and how individuals are educated about plagiarism. During the interview, you will also be asked provide your views on a brief scenario involving graduate level plagiarism. At no time will you be asked to reveal your own acts of plagiarism.

Thank you for your interest in this study which will contribute to improving plagiarism policy and education at the graduate education level.

To schedule an interview and/or if you have any questions about any aspect of this study, please contact me by telephone at 223-8612 or by e-mail at Brandy_Usick@umanitoba.ca My thesis advisor, Dr. Lynn Taylor, may also be reached if you have any questions. She can be contacted via email at Lynn_Taylor@umanitoba.ca

Appendix E

Research Objectives and Related Interview Questions

***(1) Examine how graduate students and faculty conceptualize plagiarism and how they operationalize their concepts of plagiarism.***

- What is your definition of plagiarism?
- How were you made aware of the rules concerning plagiarism?
- What do these rules mean to you in the general course of academic work, such as writing papers and researching the literature?
- What are your personal strategies for avoiding plagiarism?

***(2) Explore from the perspectives of faculty and graduate students, faculty expectations in regard to plagiarism among graduate students, and how these expectations are communicated.***

- Can you explain how your understanding of plagiarism has changed since you were an undergraduate student? *(for students)*
- Can you explain the difference in expectations that faculty have with regard to plagiarism when it comes to graduate students versus undergraduate students? *(for faculty/administrators)*
- Can you tell me how the issue of plagiarism is discussed within your department (i.e. with advisor, with other faculty, with other students)?

- Can you tell me about your experience as graduate student learning how to use the work of others in your academic work?
- Can you tell me about your experience with teaching graduate students how to use the work of others in your academic work? *(for faculty/administrators)*

***(3) Investigate if there are discrepancies within and between disciplines with respect to formal policies and informal practices (a) in terms of how students are educated about plagiarism and (b) in terms of handling incidents of graduate student plagiarism.***

- What is the process in your department for handling cases of plagiarism?
- How do you decide what to do when you discover plagiarism?
- Can you tell me about an incident of plagiarism that you have experienced?
- Can you explain the challenges faculty may face when handling incidents of plagiarism?
- How might your department or discipline be unique in its response to plagiarism (i.e. educational initiatives, ways of responding to cases, types of outcomes for incidents).

***(4) Identify some of the factors that contribute to incidents of plagiarism at the graduate level.***

- What are the some reasons why plagiarism occurs at the graduate level?

***(5) Determine how practices and policies may be changed to respond more effectively to plagiarism at the graduate level.***

- If you could change the way plagiarism is dealt with at the university and in your department, how would you change the process?

***(6) Conduct a gap analysis between knowledge and practice to identify educational opportunities with regard to plagiarism and related issues (e.g. intellectual property) that are or should be available for graduate students and for faculty.***

- How could graduate students/faculty be encouraged to learn more about preventing and responding to plagiarism? Prompts: suggestions for educational initiatives, thoughts on initiatives offered within the department, thoughts on initiatives offered outside of the department.

Appendix F

Interview questions organized within the Cultural Knowledge framework

| **Cultural Knowledge** | **Interview Questions** |
|---|---|
| Dictionary Knowledge | • What is your definition of plagiarism?<br>• How were you made aware of the rules concerning plagiarism?<br>• Can you explain how your understanding of plagiarism has changed since you were an undergraduate student? *(for students)*<br>•<br>• What do these rules mean to you in the general course of academic work, such as writing papers and researching the literature?<br>• What are your personal strategies for avoiding plagiarism? |
| Directory Knowledge | • What is the process in your department for handling cases of plagiarism?<br>• How do you decide what to do when you discover plagiarism?<br>• How might your department or discipline be unique in its response to plagiarism (i.e. educational initiatives, ways of responding to cases, types of outcomes for incidents)?<br>• Can you explain the difference in expectations that faculty have with regard to plagiarism when it comes to graduate students versus undergraduate students? *(for faculty/administrators)*<br>• Can you tell me how the issue of plagiarism is discussed within your department (i.e. with advisor, with other faculty, with other students)?<br>• Can you tell me about your experience as graduate student learning how to use the work of others in your academic work?<br>• Can you tell me about your experience with teaching graduate students how to use the work of others in your academic work? *(for faculty/administrators)* |

| | |
|---|---|
| | • Can you tell me about an incident of plagiarism that you have experienced?<br>• Can you explain the challenges faculty may face when handling incidents of plagiarism? |
| Recipe Knowledge | •<br>• If you could change the way plagiarism is dealt with at the university and in your department, how would you change the process?<br>• How could graduate students/faculty be encouraged to learn more about preventing and responding to plagiarism? |
| Axiomatic Knowledge | • What are the some reasons why plagiarism occurs at the graduate level? |

# Appendix G

## Case Study

Matthew is a Master's student who has just completed the first year in his program. During this past academic session, he completed the majority of his courses and volunteered with the department's graduate student council. Matthew was looking forward to starting his research project that would begin, pending acceptance of his thesis proposal. He had been working on the proposal through out the second term, and it is ready to be presented to his committee.

Matthew's advisor is Dr. Sheryl Anderson. Matthew enjoys a pleasant working relationship with Dr. Anderson and one of her Ph.D. students, Erin Johnson. Matthew's research project will build upon Erin's Master's research. The two students' research projects, although different in focus, share similar research methods in terms of the theoretical framework, data collection tools and analytical process.

When Matthew began to write his research proposal, Professor Anderson provided him with a copy of Erin's Master's thesis to use as a guideline. Professor Anderson discussed providing the thesis with Erin, who was pleased to help Matthew out. In fact, Matthew ad Erin had met to discuss, in more detail, the research procedures she had used. Although the procedure was commonly used in their field, it was quite technical for a new researcher, and Matthew appreciated Erin's help. In the course of writing his proposal, Matthew copied several paragraphs from Erin's methods chapter without citing her.

Dr. Anderson reviewed Matthew's thesis proposal a number of times before it was forwarded to his thesis committee for review. Dr. Mark Simmons, Matthew's internal committee member, was suspicious after reading the thesis proposal and a few days later recalled why some of the sections seemed very familiar. After ascertaining the original source was Erin Johnson, a student whose committee he sat on last year, he contacted Dr. Anderson to report his discovery.

# Appendix H

## Case Study Protocol

- Is Matthew guilty of plagiarism? Why or why not?
- Can you explain why Matthew may not have provided the reference?
- Can explain why the advisor should share or not share in the responsibility for this situation?
- If this occurred in your department, how would this matter be responded to?

# Appendix I

## The Coding Grid

| *Category Name* | *Prototype Example(s)* | *Code* |
|---|---|---|
| Global Category: *DICTIONARY KNOWLEDGE* | • Definitions & descriptions of plagiarism<br>• "What" | DC: |
| *Subcategories* | | |
| definition of plagiarism | "Good question. I would define plagiarism as the use of…a creative material, whether that is ideas, or written work and even verbal without the explicit acknowledgement of the source where it came from…" (AHfac2 4-7)<br>" | DC:defn |
| grey areas | "…but it gets a bit grey with things like powerpoint presentation and um…you know notes or sticky notes for meeting and um the way in which stuff if exchanges in this environments that we work in, we work very much in a public policy context" (AHadmin 34-37) | DC:grey |
| working in group collaborative | "We did some of the stats assignments, we gathered as a group, we figured it out as a group. But who's who? But that doesn't matter, because that is the way knowledge, it, you meet with people to discuss, and that's how you learn" (AHgs2 493-496) | DC:gw |
| degree of seriousness | "…there is a problem with that because there is the degree of the extent of the…misattribution. I guess, whether it's a single sentence of an entire chapter…" (AHfac2 9-11) | DC:deg |
| types of plagiarism | "I think the major risk would be that someone would pay someone to write something" (AHgs2 523-525) | DC:typ |
| assumed knowledge | "Because, as I say, we don't talk about it in this department. I guess we assume that they'll pick this up while they're in here" (AHadmin 659-661) | DC:askn |

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|---|---|---|
| expectations of what graduate student should know | "…I think shifts for grad students because they have been around longer and they have had the chance to do this sort of thing for a significant number of years, more than undergrads and they should be able to get it right and you know they are less likely to make innocent mistakes" (AHfac2 239-243) | DC:exgs |
| differences (or not) of expectations between master and Ph.D. students | "No, I don't think that I'd make any distinctions there both have solid basis of training" (AHfac2 254-255) | DC:dexgs |
| differences between proposal and final thesis | "Now if this had come out in the thesis, or in a publication, I would feel quite differently about it." (SCfac3 485-487) | DC:p/f |
| example of plagiarism case/incident | "One of my cohorts, who I think is in a different department then me but similar area of work, went through several years of PhD research and right at the end, I guess just a few months before she is getting to defend, her advisor essentially took her information and published it" (SCgs1 264-268) | DC:eg |
| plagiarism as a morality /ethical issue | "It was almost one of the these things like the Ten Commandments we were supposed to know it was a bad things" (AHfac2 22-23) | DC:eth |
| formal policy docs | "Faculty of Graduate Studies is very clear about all of these issues. The General Calendar of our university has a section on expectations, plagiarism and cheating."(AHfac3 224-227) | DC:docs |
| understanding of rules as a new researcher | "It's critical, I mean it's considered par for the course and now that I'm involved in my own research that puts a new twist on it too in terms, you know, I wouldn't want someone to take my (laughs) findings and claim them as their own" (SCgs1 77-80) | DC:new |
| plagiarism seen as an undergraduate issue | "So undergraduate opportunity for plagiarism, which I'm sure is a much more serious issue in departments that have large undergraduate programs" (AHadmin 384-387) | DC:ungs |

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|---|---|---|
| citing like special form of communication, dept vernacular | "I guess, you know, where you go look in journals and like actual sources, where you learn to cite things properly after that and it's a way of communicating ethic. Among scientists too, is that is almost like a different language they way that you have to cite things and you have to know all those things." (SCgs6 113-118) | DC:eso |
| disciplinary differences | "I would think that in my field it would be more black and white. More sort of clear-cut in terms of what is acceptable or what is not acceptable just because of the nature of the program. In good science you attempt to prove or disapprove something clearly. I think that would spill over into how the department might deal with those sorts of issues…" (SCgs1 229-236) | DC:disdif |
| academic standards for referencing/writing papers | "It's almost, it be a weakness if you don't reference" (AH gs2 91-92) | DC:acastd |
| challenge of distinguishing between own and others ideas | "Then I might, because sometimes then again, this is an issue, someone said it but you had also thought about it or another author had…" (AHgs2 931-33) | DC:own/other |
| authorship | "Um, probably the biggest issue of grad students where intellectual contribution might be discussed as in terms of order of authorship and stuff like that. And that's never really become an issue, and that's not really considered plagiarism as much as a family feud, so…" (SCfac3 240-244) | DC:auth |
| faculty plagiarism | "I think there's potential for, certainly a lot of potential for faculty, sort of claiming the work of graduate students as their own or not giving, specifically giving the proper credit to the student…Yeah, I think that's concern." (SCgs1 211-214) | DC: facplag |
| plagiarism in the media | "...because of the Fabricant case in Montreal" (SCadmin 57) | DC: media |

| Category Name | Prototype Example(s) | Code |
|---|---|---|
| Global Category: *DIRECTORY KNOWLEDGE* | • How processes pertaining to plagiarism are implemented<br>• "How" | DR: |
| *Subcategories* | | |
| personal strategy for referencing | "Well, what I've been using up to now, and that is for several years, is Reference Manager" (AHgs2 126-127) | DR:psref |
| how initially learned how to appropriately reference | "That would have been, I think, very early on in my undergraduate career, and again I have no recollection of specific tutoring in that area other than getting a first draft of assignments back…" (AHfac2 31-37) | DR:lrnref |
| how learned how to use the work of others as a grad student | "It really was almost like a continuation and intensification of that because you work with your supervisor on a much more kind of personal and directive level" (AHfac2 82-84) | DR:lrnrefgs |
| differences between educational experiences | "Well here ____ there was more emphasis on paper writing…" (AHgs2 199) | DR:eddfref |
| teaching graduate students | …"I guess you can model the experience you have yourself somehow, that is a smaller class and what I tend to do there is sit with the students individually and talk about ah…specific issues" (AHfac2 114-117) | DR:tgs |
| feedback from advisor/Prof | "I've got some papers back saying: 'you said a lot in this paragraph and haven't used any references. Where did you get this information from?' It's just some cases where I have just forgotten to put them in or whatever" (SCgs1 423-433) | DR:feed |
| learning from peers | "Exactly, I mean my first degree, my master's degree was at _____ University, and we had quite an active group of students at the time, and we would always pass papers off to each other that we were working on and get comments of others." (SCfac3 94-98) | DR:peer |

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|---|---|---|
| syllabus | "I haven't actually, I haven't read it over, so it seems like a technicality that the profs have to do what they have to do and from that point on the onus is on me to use my good judgment. And along the way if I am getting assignments back or essays or whatever they give me feedback, so" (SCgs1 138-142) | DR:syll |
| how would handle case | "Yes…I would just say, boy this look better than what I normally would see. Are you sure it's all properly referenced? And if they say absolutely…then I would just leave it" (AHadmin 301-303) | DR:pspro |
| how assess if plagiarism | "The problem here is…depending on how long the passage was…and uh how verbatim it was…so if we're looking at a page that was totally verbatim, Ph.D. student's name doesn't appear anyway in the text, then that's clear plagiarism" (AHadmin 536-540) | DR:assess |
| assumption faculty know lit (prevention) | "I guess I always go under the assumption that they are intimately familiar with the literature that I'm looking at, typically in a situation where a Prof assigns a potential, a specific area research, or choose from one of the following. I assume that they know it a lot better than I do (laughs) and be able to identify that." (SCg1 412-417) | DR:litprev |
| dept's process | "…if it's a very minor thing the instructor should solve it first" (AHgs2 298) | DR:oppro |
| how faculty in dept handle case | "Um, I think it's a case-by-case thing. If someone comes across a case of plagiarism and they are not really sure where it fits in the overall scheme of transgressions that have occurred, they'll discuss it with other faculty members to get a feel for what's gone on before. That's sort of an informal, uh, I guess you'd say a common-law perspective on plagiarism." (SCfac3 280-286) | DR:facpro |
| belief /thought that other depts. approach plagiarism similarly | "I'm not saying that this is necessarily the right thing to do but I think that a lot, my gut tells me a lot of departments would do it similarly. In other words, this is a bad thing you did and you must pay the price for it but we will keep it in the family, if you will." (AHfac2 296-300) | DR:dptsim |

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| dept process for dealing with plagiarism cases (or lack thereof) | "…but we don't have an explicit policy in the department about plagiarism" (AH admin 380-381) | DR:dptpro |
| outcomes the department have given for plagiarism | "…fail the course but that nothing would appear on their official university transcript other then the F" (AHfac2 288-292) (actual case) | DR:out |
| what would do if own work plagiarized | "I think I would try to approach them first and make them aware of the fact that this is what I think. I think that you have done something wrong here, approach them first. I would probably let them know that, yeah, I will be going to a higher level and make them aware of the situation, but I'm coming to you first, so you know what I am doing. I haven't really thought of it that much, but I think that is what I would do" (SCgs1 412-417) | DR:ownplagpro |
| ways to detect | "And I have heard of one Prof who actually checks every reference in a list to see if it has been appropriately used" (SCgs1 417-419) | DR:det |
| Consequence to students credibility" | "…because if I thought that I had a student who wasn't representing work properly, but I had no intention of tracking him down and proving it, it might effect the way I would write letters of reference about that student…" (AHadmin 275-278) | DR:cred |
| publication review as safeguard | "…of course in publication there is a safeguard, because uh, the reviewers of manuscripts um, often, tell you if you haven't cited somebody…Cite the person you might someone but somebody else may have done earlier work." (SCadmin 91-94) | DR:jour |
| expectations of academic community (discipline and journals) re publications practices | "Occasionally you get info bind where you're forced by journals, or whatever the medium is, they don't give you the opportunity to cite everything that you have to cite because they have a limitation on the number of references." (SCadmin 149-158) | DR:pubexp |

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| Educational initiatives | "We do a workshop with them on some of the mechanics, some of the 'do's and the don'ts' Some of the critical pathways that they can employ very early on to avoid these problems in the first place" (SA 148-152) | DR:eduinit |
| uncertainty if ever formally learnt rules about plagiarism | "I'm not sure I ever explicitly was [taught], either as a student or as a faculty member" (AHfac2 17-18) | DR:uncrul |
| uncertainty about formal process (i.e. FGS) | "And that I guess points to the fact that as a department, probably we are not quite sure what the university would like us to do in that situation" (AH fac2 192-194) | DR:unfpro |
| uncertainty about the dept's process | "I don't know [the dept's process]" (AHfac2 245) | DR:unpro |
| uncertainty how department/discipline might be different from another | "I don't think that there is anything we do that's particularly, I suspect, particularly different" (AHfac2 282-283) | DR:uncunq |

| Category Name | Prototype Example(s) | Code |
|---|---|---|
| Global Category: *RECIPE KNOWLEDGE* | • How processes pertaining to plagiarism should be implemented or improved<br>• "Should" | R: |
| *Subcategories* | | |
| reluctance to invoke formal policy | "So, again, we have this general reluctance to invoke university regulations. These things can get very messy and very ugly." (SCfac3 490-492) | R:reluc |
| opinion on role of FGS | "[The Faculty of Graduate Studies] would be a very sensible please to have a policy come out from, that would be apply right across the university" (AHfac2 444-446) | R:opFGS |
| how case should be handled according to university policy | "And I guess the real, although you know, technically we are supposed to treat every case with the full force of the law, um, or the regulations I guess, it's not really the law" (SCfac3 294-297) | R:polpro |
| concern how policy would affect student | "It's also a situation if someone's academic future, then I'd hate to you know, accidentally maybe we are erring too much in favor of the student, but accidentally put something on the student's record that would be following them, um, when what it was, was just a misunderstanding of the way things actually functioned, or what plagiarism was or, what it is that they'd done wrong." (SCfac3 301-307) | R: polcons |
| how situation should be handled | "Well I think in that case, the committee members would have to deal formally with the department head and discuss the problem with the thesis, because at that point there's no excuse for not being familiar with other work that goes on, particularly work that you yourself have been the supervisor of. So that's a toughie" (SCfac3 493-498) | R:shha |
| assessment of scenario | "I think that Mathew should have cited Erin in the Method section and I think Mathew shouldn't have copied it…let me just make sure that's what happened (pause while reading case study)…." (SCgs1 520-524) | R:scen |

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| outcome of scenario | "I suspect it would just be recommended that it be corrected and probably not go much beyond that… and I guess what I read into this is that it is an oversight or a misjudgment of some sort which is relatively easy remedied just by saying 'this isn't appropriate and this is what you should do in the future'….so" (SCgs1 579-584) | R:oscen |
| consideration of context | "…depends on my assessment of both the seriousness of it and the intent of it" (AHfac2 211-216) | R:cntxt |
| should give benefit of the doubt | "…but you have to give people chances" (AHgs2 776) | R;bod |
| tacit knowledge through academic culture | "During my master's I occasionally, it's not something that is formally discussed or it's…absorbed in the culture…" (Scfac1 76-78) | R:excul |
| standard of writing expected from grad students | "Well, I guess I always expect more, than what I get. But absolutely, a graduate student has to be doing this at a professional level. So it has to be done perfectly. Undergraduate students should also be working at a professional level, certainly at the third and fourth year level, but often time constraints prevent them from doing as thorough a job as they should be doing" (Scfac2 260-266) | R:exwri |
| should not make assumption of what grad student's know | "We make a lot of assumptions that students by this stage know what is right and wrong and maybe we shouldn't do that…" (AHfac2 283-285) | R:noassmp |
| opinion on appropriate outcomes (penalties or remedial) | "As much that it makes me sound like a punitive person, I think that the shock of getting caught and the pain of failing the course is probably the major sort of educational component. I think with smaller, ah, less blatant issues then certainly it is important to sit down and work with the student and say look this really isn't the right way to do things but there is a danger you will be seen as trying to sell this as your own idea and I know that is not what you meant to do." (AHfac2 416-425) | R:opout |
| suggested ways to improve dept process | "…I think it would be to our advantage to have somebody, a friendly face, a friendly mind from outside the department…" (AHfac2 364-400) | R:supro |

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|---|---|---|
| should have consistency/uniformity | "…but those are things we need to get some uniformity on and get help on" (AHfac2 280-281) | R:consis |
| students need to be informed regarding rights | "I think that would be, but again people should be made aware of that, before the courses starts, assigning papers, we do this. Like having cameras, people should know that there are cameras" (AHgs2 455-458) | R:infrgh |
| responsibility of advisor | "Well it is the supervisor's job. Supervisor should have caught it, should have been aware…" (AHadmin 620-621) | R:rspadv |
| difference of responsibility of advisor/committee | "It varies, this university has widely different standards, but my own personal feeling is that I don't send documents off to committees that are not up to snuff, that aren't properly edited, and aren't properly cited. And so, I feel it's my role as a graduate student supervisor to catch those things way before a committee would ever see it." (SCfac2 477-478) | R:diffst |
| need to education those who have plagiarized | "I always believe people can be reformed, I hate to say no you are out of here forever because then you have given up on that person and I think the shaming part is a growing experience and they would have some time off to think. They would set themselves back a couple of years; it's a good way to make them think of what they have done." (SCgs4 352-357) | R:reform |
| importance to give feedback in educational versus confrontational way | "Some people are more open to suggestions. A lot of people, no one wants to be told they are wrong or that they did something wrong. Some people have more integrity in dealing with that than others and you have to deal with that without having it escalate um, unnecessarily" (SCfac3 380-384) | R:feededu |
| suggested ways to educate students | "…but with the intent of both educating the broad sweep of the University but also educating the in-house experts so can then carry on that work and it would be an ongoing resource for the University" (AHfac2 651-667) | R:suedu |
| dept doesn't have a formal policy | "I don't think we ever bitten the bullet of putting down in black and white what we would do" (AHfac2 171-173) | R:nodptpol |

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|---|---|---|
| no discussion about plagiarism in dept | "It is like sex, you don't discuss it. I don't think it has been discussed; it's a sin that doesn't!" (AHgs2 227-228) | R:nodis |
| no process/action because feel not worth it | "I sense, and this is more from what I have heard… in terms of when students are being taught, are caught cheating, it's a very extreme process, it is somewhat similar. But there have been some frustrations that, like, it's almost not worth pursuing, cause there is so much hassle involved and people want almost want to just not go. The atmosphere, or the right now seems to favor the student more than anything and it's, it's such a, guess a large job to prove that plagiarism or cheating has taken place, and people kind of shy away from that…" (SCfac1 295-305) | R:noact |

| Category Name | Prototype Example(s) | Code |
|---|---|---|
| Global Category: *AXIOMATIC KNOWLEDGE* | • reasons for why plagiarism occurs or reasons why process pertaining to plagiarism implemented<br>• "Why" | A |
| *Subcategories* | | |
| factors that contribute to undergraduate plagiarism | "…a lot of students are not so much interested in the subject area no intention of building relationships with faculty or university, all they want is the A so they can get into a professional faculty…temptations…purchase term papers" (AHadmin 451-454) | A:fug |
| factors that contribute to graduate plagiarism | "Well, you know, I think there is a huge amount of pressure and I know there was when I was a grad student, at least we felt there was. And I'm sure it's more intense now and to get the best grades you can, of course, you want to get A's rather than B+'s" (AHfac2 339-343) | A:fgs |
| outcome dependent on quality of student | "I have a feeling that, this is the unfortunate part, I feel that the variable of the matter would be quality of the student, quality of the work, which is not fair" (AHadmin 582-584) | A:outqual |
| difficulties in referencing | "I think we've all been there as students, if you aren't…if something is very technical, you do an 'Ah God' and you always see other people, other people always write things better than you do…" (AHfac2 489-492) | A:dfref |
| methodology chapter | "Yeah, it might be a but more serious if it's the conceptual framework…" (AHgs2 681-688) | A:methch |
| ignorance (potential to plead) | "The only real excuse for that I think is one of almost ignorance, in a sense, 'I have never really done this before, I didn't realize I couldn't do that' " (AHfac2 261-265) | A:igrul |
| challenges- time | "And time, it takes the energy how much people was to invest in that. I am sure that instructors suspect many times, but they just brush it aside because well they have too much work to do" (AHgs2 429-435) | A:chti |

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|---|---|---|
| challenges- detection | "…before you worry about what to do about it you have to find it. And that is a way presupposed that you either know the literature reasonable well and can say 'wait a minute that's'…" (AHfac2 306-315) | A:chdet |
| challenges- personal bias towards/against student | "…because the person you are dealing with is a human being, who as another human being, you may like or dislike" (AHfg2 325-332) | A:chbias |
| differences between students culture | "You said it's this or it's got to be that. He had come from a foreign country…and I get the sense that this was something that wasn't considered… because it wasn't going to change the big picture in the end. It was the one time, my other students, we talked about it in a lab, my other students immediately said "oh no, you can't do that'. I think, I'm not sure in the end I completely convinced this person, but at least they realized they couldn't do it. And so in the thesis, I actually, I picked that out before, so it was okay." (SCadmin 627-636) | A:culdif |
| differences between education | "I would say not a major difference, I would think they might be a little more…lenient. Well, that it probably depends on the background. Our graduate students come from a variety of backgrounds, other countries, [and] other institutions Grad students that have gone through our program we would say 'okay you took this and this course, you should know this'. With undergrads, well, [they're] still in the embryonic development stage" (SCadmin 433-441) | A:eddif |
| personalities influencing how cases are handled | "So I suppose if there was some bad blood between the internal committee member and the advisor, he could give the advisor a hard time about it. We like to think that departments haven't become entirely that dysfunctional, and because you can always get someone on something, nobody's perfect" (SCfac3 476-481) | A:pers |
| challenge: assessing intentionality and seriousness of incident (Context) | "I guess that's the thing with plagiarism…in some ways, some kinds of plagiarism are very obvious and straight forward: somebody steals ideas…text directly…you know I guess there are lots of circumstances in every situation, intentional plagiarism" (AHadmin 359-363) | A:chcntxt |

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| why plagiarism is not discussed within the department | "…Ah, there is probably a bit of a sense that we all like to keep our dirty linen well hidden. We have a faculty grad committee where the chairs of all the graduate programs in our faculty meet on a monthly basis and we talk about a lot of stuff but interestingly, we never talk about the issue of plagiarism or what our prospective policies are."(AHfac2 199-205) | A:hush |
| why plagiarism not an issue in graduate education (in their own department) | "The way most courses are done here, I would doubt that there could be much of a serious problem" (AHgs2 9438-439) | A:noplg |
| why educational initiatives must come within dept | "It would just hit closer to home. I mean Grad Studies says a lot of things to grad students and you know that sort of…and it's easier to brush it off but if 'Oh this is what doc is telling us' I think that it would just hit closer to home, I think. And you would get more people thinking about it…. [in a]direct and immediate way" (SCgs1 485-490) | A: eddept |
| reason why there is reluctance to create formal policy in dept | "Partly because we recognize, perhaps, that there are some degrees of plagiarism from the unintentional, you know, just the lack of knowledge of how to reference and cite, through the clearly, blatantly intentional form, when you misrepresent the body of work as yours" (AHfac2 174-178) | A:reldptpol |
| challenge: faculty do not feel have supported by administration | "I don't know, um, on the one hand it would be central. On the other hand the you get the sense from faculty members that feel they are less likely to pursue it because they don't feel they will get the support at the administrative level, that in the interest of protecting student rights, which I'm not saying is a bad thing, but some faculty you feel that, well, even if you have somebody caught something inappropriate and some students are good at…Sounds cynical" (SCadmin 733-740) | A:AHupp |
| impact technology has had on referencing/researching papers | "…I came at a time where it was. There…just the literature became much faster in the last ten years, much easier, so you could kind of, on your finger tips you could rapidly find authors" (AHgs2 204-207) | A:techref |

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| reasons why referencing important | "And again, from the graduate student culture end of things, there always seems to be a wee bit of status associated with the length of your references you have included. So, as a consequence I tend to see way more citations than are necessary. And so, I guess that's why I'm not as up to speed as I should be on plagiarism, I see people over-citing, not under-citing, again because there is a certain level of bravado having fifty or sixty citations in each document as opposed to having less citations" (SCfac2 428-436) | A:nbref |
| realization part of field/discipline | "...I guess you go through a stage in your life early on where you are kind of egocentric about everything you do and you realize that you really fit into a broader field of endeavor with a number of people contributing and it is not just giving credit to people who might have had the idea first but also at the same time linking you into the whole field, so more of a collective perspective of knowledge" (SCfac 3 47-58) | A: field |
| challenge: whistle-blowing | "And another obvious challenge would be wondering what kind of feathers would be ruffled by pursuing something like this, there might be a temptation to just sweep it under the rug and not be seen as a trouble maker. There could be bit of a stigma even to complaining and ruffling feathers" (SCgs1 327-331) | A:chwh |
| challenge: not knowing rules/rights | "I guess it would be difficult to know what the, what the rules are, you know. If there are any clear cut rules" (SCgs1 323-324) | A: chrig |

# Appendix J

## Recommendations

An effective approach to addressing the issue of plagiarism requires a comprehensive strategy that integrates prevention, detection and response such that the strongest emphasis is placed on prevention through education.

Rather than teaching students only "the rules" for avoiding plagiarism, educational initiatives should discuss plagiarism in the larger contexts of academic integrity and the development of effective academic writing practices.

For educational initiatives to be successful, plagiarism must be explicitly recognized as an issue by individual graduate programs.

The acquisition of knowledge about plagiarism is a developmental process. Educational initiatives should be designed to incrementally address the needs of learners at different points across the whole span of education programs.

Graduate students should be consulted and/or involved with the development of educational programs or material as a way to ensure their needs are met.

Workshop program and materials for created for different members of the university community should be evaluated to ensure the information is up to date, relevant and effective.

Plagiarism education should include discussions about related concepts, including intellectual property and copyright.

To equalize knowledge about plagiarism and related matters, graduate students should be able to access information about research writing and referencing practices, particularly if they are not receiving this information as part of the graduate curriculum or from their advisor. A departmental library or web page resource that houses professional and academic developmental information are two such options.

Ethical training, including but not limited to plagiarism, should be an explicit part of the curriculum in graduate programs.

Academic staff, including faculty and administrators, should have access to professional development opportunities to learn about and discuss issues of plagiarism.

To be meaningful and effective, plagiarism education materials and programs must include discipline-specific elements.

Institutional policies should be constructed and expressed in ways that focus on promoting academic integrity as well as discouraging academic dishonesty.

"Academic integrity" policies should describe behaviors to be promoted, in addition to those that are discouraged (CAI, 1999).

Senior administration must play a more visible and vocal role in the promotion of academic integrity on campus.

In designing effective policies and procedures to guide the prevention, detection and response to plagiarism, there should be an appreciation that there needs to be a balance between consistency of responses on one hand and, on the other, accommodation for individualized responses to plagiarism cases, depending on the facts of each case.

Resources should be provided to ensure that all members of graduate programs–graduate students, faculty, and administrators–know the formal procedures that are to be followed in handling a case. Any supplemental departmental procedures or practices should be consistent with institutional policies and procedures and should be effectively communicated to all members of a department.

Create university-wide intellectual property and authorship policies.