Plagiarism self-reported rates, understandings, and education among teacher candidates in a faculty of education

Julia Colella

Follow this and additional works at: https://scholar.uwindsor.ca/etc

Recommended Citation
Colella, Julia, 'Plagiarism self-reported rates, understandings, and education among teacher candidates in a faculty of education' (2012). Electronic Theses and Dissertations. 4799.
https://scholar.uwindsor.ca/etc/4799

This online database contains the full-text of PhD dissertations and Masters' theses of University of Windsor students from 1954 forward. These documents are made available for personal study and research purposes only, in accordance with the Canadian Copyright Act and the Creative Commons license—CC BY-NC-ND (Attribution, Non-Commercial, No Derivative Works). Under this license, works must always be attributed to the copyright holder (original author), cannot be used for any commercial purposes, and may not be altered. Any other use would require the permission of the copyright holder. Students may inquire about withdrawing their dissertation and/or thesis from this database. For additional inquiries, please contact the repository administrator via email (scholarship@uwindsor.ca) or by telephone at 519-253-3000 ext. 3208.
PLAGIARISM SELF-REPORTED RATES, UNDERSTANDINGS, AND EDUCATION AMONG TEACHER CANDIDATES IN A FACULTY OF EDUCATION

by

Julia Colella

A Thesis Submitted to the Faculty of Graduate Studies through the Faculty of Education in Partial Fulfillment of the Requirements for the Degree of Master of Education at the University of Windsor

Windsor, Ontario, Canada

2012

© 2012 Julia Colella
PLAGIARISM SELF-REPORTED RATES, UNDERSTANDINGS, AND EDUCATION AMONG TEACHER CANDIDATES IN A FACULTY OF EDUCATION

by

Julia Colella

APPROVED BY:

____________________________
J. Singleton-Jackson (External Reader)
Faculty of Arts and Social Sciences

____________________________
K. Roland (Second Reader)
Faculty of Education

____________________________
T. Sefton (Advisor)
Faculty of Education

____________________________
Darren Stanley, Chair of Defense
DECLARATION OF ORIGINALITY

I hereby certify that I am the sole author of this thesis and that no part of this thesis has been published or submitted for publication.

I certify that, to the best of my knowledge, my thesis does not infringe upon anyone’s copyright nor violate any proprietary rights and that any ideas, techniques, quotations, or any other material from the work of other people included in my thesis, published or otherwise, are fully acknowledged in accordance with the standard referencing practices. Furthermore, to the extent that I have included copyrighted material that surpasses the bounds of fair dealing within the meaning of the Canada Copyright Act, I certify that I have obtained a written permission from the copyright owner(s) to include such material(s) in my thesis and have included copies of such copyright clearances to my appendix.

I declare that this is a true copy of my thesis, including any final revisions, as approved by my thesis committee and the Graduate Studies office, and that this thesis has not been submitted for a higher degree to any other University or Institution.
ABSTRACT

Although academic misconduct studies are common, less research on plagiarism, a specific type of academic misconduct, is available. This study has two groups of participants: teacher candidates and pre-service faculty instructors in a Faculty of Education in a southwestern Canadian university. This quantitative, online study investigates the plagiarism reporting rate among teacher candidates from different undergraduate disciplines as well as understandings of plagiarism and plagiarism information among both groups of participants. Findings from this study revealed that approximately half of the teacher candidates plagiarized at least once during their time in the B.Ed. program, and engaging in plagiarism does not seem to be affected by major area of study. Less than a quarter of the teacher candidates have an accurate understanding of plagiarism. Although this study revealed that plagiarism is present, it also demonstrates that students are unclear of the specific behaviours that constitute plagiarism.

Keywords: plagiarism; higher education; teacher candidates; academic misconduct.
ACKNOWLEDGEMENTS

I would like to acknowledge several individuals who have been a part of my thesis process. First, I would like to thank Dr. Sefton. Dr. Sefton’s constant encouragement, feedback, and support throughout the thesis process has been invaluable, and the time she took out of her busy schedule to meet with me throughout the year is greatly appreciated. Thank you also to Dr. Roland, my second reader, who has been a mentor to me not only during the thesis process, but throughout my time in the master’s program. Her genuine interest in my master’s degree has motivated me to complete my thesis. Another thanks to my external reader, Dr. Singleton-Jackson. Dr. Singleton-Jackson has been a mentor to me during completion of my undergraduate degree and master’s degree. Being a student in her courses during my undergraduate degree has encouraged me to pursue teaching.

I am very thankful to both groups of participants who completed the survey in my study. If it wasn’t for the teacher candidates and pre-service faculty instructors, I would not have been able to complete the thesis. Thank you also to Dan Edelstein in the Academic Data Centre for his patience in helping me with SPSS. He instilled confidence in me regarding working with quantitative data.

Lastly, I would like to thank Noelle Morris. Noelle, one of my classmates during the master’s program, has made the program very enjoyable and I am grateful that I was able to complete this degree with a supportive and genuine friend.
# TABLE OF CONTENTS

DECLARATION OF ORIGINALITY ................................................................. iii
ABSTRACT ........................................................................................................ iv
ACKNOWLEDGEMENTS ................................................................................. v
LIST OF TABLES ............................................................................................. viii
LIST OF APPENDICES .................................................................................... ix

## CHAPTER

### I. INTRODUCTION
- Problem Statement ................................................................. 2
- Purpose of the Study .............................................................. 2
- Educational Relevance .......................................................... 2
- Location of the Researcher ...................................................... 3
- Rationale for the Study .......................................................... 3
- Research Questions ............................................................... 4
- Definition of Terms ............................................................... 5

### II. REVIEW OF THE LITERATURE
- Self-reported Rates of Plagiarism ........................................... 6
- Plagiarism among Disciplines ............................................... 11
- Understandings of Plagiarism ............................................... 16
- Plagiarism Education ............................................................ 20

### III. METHODOLOGY
- Overview ...................................................................................... 25
- Participants ................................................................................... 25
- Procedures ................................................................................... 26
- Methodology ............................................................................... 27
- Quantitative Instrumentation .................................................. 30
- Research Design and Data Analysis ........................................ 33
- Scope and Limitations ............................................................. 33

### IV. RESULTS
- Self-reported Rates of Plagiarism Results .............................. 35
- Plagiarism among Disciplines Results .................................... 40
- Understandings of Plagiarism Results ..................................... 42
- Plagiarism Education Results .................................................. 44
- Plagiarism and Teaching Divisions Results ............................ 47
- Plagiarism Engagement and Understandings of Plagiarism Results .................................................. 47
V. DISCUSSION

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Question 1</td>
<td>49</td>
</tr>
<tr>
<td>Research Question 2</td>
<td>50</td>
</tr>
<tr>
<td>Research Question 3</td>
<td>52</td>
</tr>
<tr>
<td>Research Question 4</td>
<td>53</td>
</tr>
<tr>
<td>Limitations</td>
<td>55</td>
</tr>
<tr>
<td>Recommendations</td>
<td>56</td>
</tr>
<tr>
<td>Future Implications</td>
<td>58</td>
</tr>
<tr>
<td>Conclusion</td>
<td>59</td>
</tr>
</tbody>
</table>

REFERENCES ............................................................................. 61

APPENDIX A............................................................................. 66
APPENDIX B............................................................................. 69
APPENDIX C............................................................................. 72
APPENDIX D............................................................................. 73
APPENDIX E............................................................................. 79
APPENDIX F............................................................................. 83

VITA AUCTORIS......................................................................... 84
LIST OF TABLES

Table 1: Engagement in Plagiarism Behaviours ..................................................35
Table 2: Engagement in Plagiarism Behaviours Once and Awareness as a
Percentage of the Sample .................................................................................38
Table 3: Engagement in Plagiarism Behaviours More than Once and Awareness
as a Percentage of the Sample ........................................................................39
Table 4: Understandings of Plagiarism among Teacher Candidates and
Pre-Service Faculty Instructors .......................................................................42
Table 5: Plagiarism Education Among Teacher Candidates ............................44
Table 6: Plagiarism Education Among Pre-Service Faculty Instructors ..........45
LIST OF APPENDICES

APPENDIX A: Teacher Candidate Letter of Information ............................................. 66
APPENDIX B: Pre-Service Faculty Instructors Letter of Information .............................. 69
APPENDIX C: Letter from Associate Dean, Pre-Service ........................................... 72
APPENDIX D: Teacher Candidate Survey ................................................................. 73
APPENDIX E: Pre-Service Faculty Instructor Survey .................................................. 79
APPENDIX F: Permission to use part of Donald McCabe’s survey ............................... 83
CHAPTER I
INTRODUCTION

Plagiarism is a problem in many higher education institutions. Chapman and Lupton (2004) state “academic dishonesty in post-secondary education is a widespread, insidious and global problem” (p. 425). Although plagiarism is an issue, the number of studies on academic misconduct is few, and with respect to the Canadian context, this number is even less: “… little research has been done on the academic misconduct of Canadian students” (Christensen Hughes & McCabe, 2006, p. 1).

Since universities compete with one another for enrolment, they are hesitant to publish results of studies displaying plagiarism as an issue within their university. This is supported by Devlin (2006) when he writes “universities keen to capture their share of an increasingly competitive market are reluctant to highlight the existence of scholarly indiscretions within their institutions” (p. 45). Moreover, Devlin goes on to share that, “the unpleasant experience of those few unlucky institutions that have had recent media interest in alleged incidents of plagiarism and cheating provide one likely explanation of why universities are maintaining silence on this pervasive phenomenon” (p. 46). If plagiarism studies are not being conducted throughout campuses, it is unrealistic to expect this problem to go away. Park (2003) concurs when he states that “plagiarism is a problem that is growing bigger” (p. 471).

When plagiarism is studied, it is often grouped into the category of academic misconduct. Academic misconduct includes both cheating and plagiarism behaviours. Combining the rates of plagiarism and cheating into one category masks the incidence rate of plagiarism. Yeo (2007) states, “This question [how prevalent is student
plagiarism?] is difficult to answer because it is difficult to separate research on plagiarism from research on cheating in general” (p. 201). Breen and Maassen (2005) believe that “plagiarism is the most common form of serious academic misconduct” (p. 1).

**Problem Statement**

The literature suggests that the self-reporting rates of plagiarism in studies of post-secondary education are high, and there are many reasons why students plagiarize. Not being knowledgeable of what plagiarism entails is a recurring reason in the literature as to why students plagiarize. Lacking an understanding of what constitutes plagiarism may allow students to continue to engage in this behaviour since they are unaware of what it is.

**Purpose of the Study**

The purpose of this study is to investigate the self-reported plagiarism rate among the teacher candidates enrolled in a southwestern Canadian university’s Faculty of Education pre-service program during the 2011-2012 academic year. Additionally, this study will investigate understandings of plagiarism and plagiarism education among the teacher candidates and pre-service faculty instructors (faculty members and sessionals) in the Faculty of Education. Therefore, there are two groups of participants in this study: teacher candidates and pre-service faculty instructors.

**Educational Relevance**

The results of this study may be used to improve teaching practice. If teacher candidates have unclear understandings of plagiarism and also report that they are uninformed about plagiarism, the pre-service faculty instructors can modify their current teaching practice to include such information at the beginning of the semester. Moreover,
the results of this study will allow the instructors to determine if they too have an adequate understanding of what plagiarism entails.

**Location of the Researcher**

I chose to study plagiarism in higher education because it is a topic I formerly had limited knowledge of. Throughout my undergraduate degree, I was unclear of what was considered plagiarism; as a result, I would become anxious when submitting assignments as I was fearful that I may have inadverently cited and referenced my work incorrectly. Although the university’s plagiarism policy was on many of the course outlines, this concept was never thoroughly taught to me during my courses. When I became a teaching assistant during the fourth-year of my undergraduate degree, students would email me questions about how to avoid plagiarism; therefore, I knew that I was not the only one who was uncertain about what constitutes plagiarism and how to avoid it. Although many studies conducted on plagiarism have students self-report their plagiarism incident rate, it is more important, in my opinion, to determine if students know what plagiarism is. If students are uncertain regarding which behaviours constitute plagiarism, they may continue to engage in these behaviours since they are unaware that what they are doing is wrong.

**Rationale for the Study**

This study will use Canadian university students. As previously stated, few studies on academic misconduct have been conducted in the Canadian context. Therefore, this study will address a gap in the literature. This study will investigate plagiarism only. Focusing on this specific type of academic misconduct will allow for a narrower focus, and will avoid merging different types of academic misconduct behaviours. Furthermore,
since all of the teacher candidates hold an undergraduate degree, comparisons among
different majors can be made. Comparisons among students from different majors and
their self-reported plagiarism rates are rare in the literature. Cummings, Cleborne, Harlow
and Dyas (2002) indicate that

Most studies of college student cheating have examined academic misconduct of students in general rather than of students majoring in specific disciplines. Of the studies that have examined specific majors, business and medicine (both leading to a credential) have received the most attention (p. 289).

This study will help remedy three of the limitations that are present in the literature while simultaneously investigating the plagiarism self-reporting rate, understandings of plagiarism, and plagiarism education in a Faculty of Education, which has over 500 students enrolled in the one-year pre-service program.

Research Questions

1) What is the self-reported rate of plagiarism among teacher candidates?

2) Are teacher candidates who majored in one discipline for their undergraduate degree more likely to have plagiarized in the pre-service program compared to students who hold a different undergraduate degree? Since the teacher candidates have a minimum of an undergraduate degree, comparisons can be made among the different majors.

3) Are teacher candidates and pre-service faculty instructors aware of what plagiarism is?

4) What type of plagiarism education do teacher candidates report they receive from pre-service faculty instructors regarding plagiarism compared to the type of information the pre-service faculty instructors state they share with teacher candidates?
Definition of Terms

Plagiarism: "... the unauthorized use or close imitation of the ideas and language/expression of someone else. It involves representing their work as your own" (Hannabuss, 2011, pp. 311-312).

Pre-service instructors: Instructors (whether they are faculty members or hold sessional positions) who teach a minimum of one course to teacher candidates.

Quantitative research: "... a means for testing objective theories by examining the relationship among variables. These variables, in turn, can be measured, typically on instruments, so that numbered data can be analyzed using statistical procedures" (Creswell, 2009, p. 4).

Teacher candidates: students enrolled full-time in the pre-service program who have a minimum of an undergraduate degree.

Teaching divisions: Primary/Junior (Junior Kindergarten to Grade 6), Junior/Intermediate (Grade 4 to Grade 10), and Intermediate/Senior (Grade 7 to Grade 12).
CHAPTER II

LITERATURE REVIEW

The literature on Canadian plagiarism in higher education is limited, and the studies which will be discussed are from several locations including the following: the United States, Hong Kong, Singapore, South Africa, the United Kingdom, Australia, and Canada. Applicable studies were used regardless of their time of publication. The study has four research questions, and the literature for each question will be discussed in its own section. As identified in Chapter I, the research questions include the following:

Self-reported rates of plagiarism, plagiarism among disciplines, understandings of plagiarism, and education of plagiarism.

Self-reported Rates of Plagiarism

Academic misconduct is inevitable, as it is a problem that will always be present on campuses and is seen as the norm instead of the exception (Cumming et al., 2002). Research on student cheating at the college level began in the 1960’s (Cummings et. al., 2002). It is comprised of two behaviours: plagiarism and cheating. Breen and Maassen (2005) state that “Plagiarism is the most common form of serious academic misconduct” (p. 1). Previous studies have examined self-reported rates of plagiarism among undergraduate students, and these studies have found that students do commit plagiarism, yet the self-reported rates differ (Betler & du Pre, 2009; Engler, Landau, & Epstein, 2008; Selwyn, 2008; Christensen Hughes & McCabe, 2006; Voakes & Iстл, 2006; Ellery, 2006; Dawkins, 2004; Pino & Smith, 2003; Cochorn, Chamlin, Wood, & Sellers, 1999). Betler and du Pre (2009) conducted a study using 266 undergraduate students. There were 66 participants in the control group, and there were 200 participants in the
experimental group. The participants in the experimental group completed an online academic integrity module, which was a required assignment at the beginning of the semester. The module was composed of four sections, and "the first two sections instructed the student in the essential aspects of proper quotation and citation and the values of academic integrity" (Betler & du Pre, 2009, p. 259). The students in the control group did not complete this module. All students submitted a paper. Only 6.5% of the papers submitted by the experimental group contained plagiarism, whereas 25.8% of the papers submitted by the control group contained plagiarism. These findings demonstrate that rates of plagiarism are lower for students who are cognizant of the correct way to use quotations and citations in their paper.

Christensen Hughes and McCabe (2006) also looked at the self-reported rate of academic misconduct among undergraduate students, and their study used participants enrolled in Canadian schools. There were three groups of participants in this study (undergraduate students, graduate students, and faculty and TAs). Although this study had three groups of participants, only the findings for the undergraduate participants are applicable. This group of participants includes students enrolled in their undergraduate degree who are not in first year. This group reported how often they engaged in academic misconduct behaviour within the previous twelve months. The participating institutions were sent an email, and they were encouraged to forward it to their students. These participants were enrolled in one of eleven Canadian higher education institutions. The email contained the survey link that participants click on to access it. The participants reported how often they engage in specific academic misconduct behaviours with the following scale: never, once, more than once, or not applicable. Since this study looked at
academic misconduct, it included both cheating and plagiarism behaviours. The results from the plagiarism behaviours, which are relevant to the current study, will be noted. The two most frequently engaged in plagiarism behaviours from the undergraduate participants include: “37% of participants copied a few sentences of material from a written source without footnoting, and 35% copied a few sentences from an Internet source without footnoting” (Christensen Hughes & McCabe, 2006, p. 10).

Cochran, Chamlin, Wood, and Sellers (1999) investigated academic misconduct among undergraduate students at the University of Oklahoma who were in enrolled in an upper division sociology course. Overall, 468 students completed a self-administered questionnaire taking approximately 30 – 45 minutes. This survey was voluntary, and although this survey measured five different types of academic misconduct, one of the behaviours is relevant for this study. The students were asked if they plagiarized a term paper within the last twelve months. It was found that “19 percent admitted to plagiarizing a term paper” within this time period (Cochran et al., 1999, p. 94).

Dawkins’ (2004) study looked at self-reported academic dishonesty. Participants in this study included 858 undergraduate, graduate, and professional students enrolled in a state university. Although graduate and professional students were included in this study, they comprised a small percent of the participants (7%). The sample used was a self-administered questionnaire. It asked students to report on four dimensions, but for the purpose of the current study, only the plagiarism dimension will be mentioned. This behaviour asked students if they copy from the Internet. Results display that “19 % copy from the Internet” (Dawkins, 2004, p. 120). The limitation of this result is that the authors did not specify what “copy from the Internet” meant.
Ellery (2006) also looked at plagiarism among 151 undergraduate students enrolled in a first-year geography module in South Africa. In her study, participants completed tutorials on plagiarism behaviours. Participants were in groups of 12-15, and a postgraduate tutor acted as the facilitator of these tutorials. At the end of the semester, the participants had to write an essay using a total of three sources in which two were provided and the third needed to be found on their own. When the students submitted the final essay, they were asked to include an additional page confirming that their assignment was plagiarism-free. Despite the fact that all of the students participated in the plagiarism tutorials, 26% of the essays submitted contained plagiarism. Of the 26%, 21% resubmitted their assignments again, and 19% of the resubmitted assignments still contained plagiarism.

Engler, Landau, and Epstein (2008) investigated academic dishonest perceptions among fifty-six undergraduate students who were enrolled in a psychology course. The participants in this “estimated out of 100 assigned papers the number of times that they, their friends, and the average college student would plagiarize” (Engler et al., 2008, p. 100). They did the same for cheating on tests, although only the plagiarism estimations will be noted. The participants reported these three averages (themselves, their friends, and the average college student) with the presence of an honor code in place and without an honor code. The participants reported that with the presence of an honor code, they, their friends, and the average college student are less likely to plagiarize than without an honor code present. Moreover, the participants reported that the average college student plagiarizes the greatest number of times, followed by their friends, and then themselves.
This study is interesting as it reveals that students feel they are less likely to engage in this type of academic misconduct than are other students.

Pino and Smith (2003) investigated academic dishonesty among undergraduate university students. Their study consisted of 675 participants who filled out a 20-item questionnaire. Participants were enrolled in one of ten sections of a mandatory course. The participants were asked “How many times, during a typical semester, have you engaged in any of these or other actions that would be considered academic dishonesty” (Pino & Smith, 2003, p. 492)?

Academic dishonesty included cheating behaviours such as looking off of another person’s test and plagiarism behaviours such as failing to cite. Results from this study showed that:

52.8% never committed any acts of academic dishonesty, 36.9% committed a few acts or less throughout their entire college career, 7.7% 1-2 times per semester, 2.0% 3-5 times per semester, 0.05% 6-10 times per semester, and 0.02% 11 or more times per semester (Pino & Smith, 2003, p. 492).

Although the participants were presented with 20 items and some of these items constituted plagiarism, all of the plagiarism behaviours were combined with the cheating behaviours and grouped into academic dishonesty. Thus, it is unknown the percentage of students who plagiarized.

Selwyn (2008) examined online plagiarism, and the participants in this study were 1222 undergraduate students who were enrolled full-time at one of 25 United Kingdom universities. The participants in this study were asked to self-report on their engagement in offline and online plagiarism within the previous twelve months. A four-point Likert scale was used, and participants could choose ‘never’, ‘rarely’, ‘sometimes’ and ‘a lot’ (Selwyn, 2008). Results showed that 61.9% of the participants committed online
plagiarism within the previous twelve months. It was found that 61.9% of the participants committed offline plagiarism within the previous twelve months.

The University of Windsor in Windsor, Ontario conducted an academic integrity study for the students and faculty in 2006. This survey was anonymous, and it was sent electronically to all students and faculty members at this university. One component of the survey had students report on types of academic misconduct behaviours they engaged in at least once. These behaviours included cheating behaviours and plagiarism behaviours. Only the plagiarism behaviours will be addressed. In this study “33% paraphrased a few sentences of material without citing/referencing them in a paper and 20.7% copied a few sentences of material without citing/referencing them in a paper” (Voakes & Intl, 2006, p. 15).

As demonstrated above, the rate of plagiarism found in studies is inconsistent. It is not uncommon for rates of plagiarism and cheating to be combined together, such as in Pino and Smith’s (2003) study. Combining these two limits the opportunity to compare the rates of plagiarism only. The rates of reported plagiarism among these studies differ. For instance, Dawkins’ found a rate of 19%, whereas Selwyn found 61.9%. It is unknown why these differences in the rates of reported plagiarism occurred, and the current study will determine if the rate found in this particular faculty is similar to the rate found in the literature.

**Plagiarism among Disciplines**

In addition to examining the self-reported rate of plagiarism, studies have compared self-reported plagiarism rates based on one’s undergraduate degree, whether using students enrolled in one major, comparing one major to another major, or
comparing several majors (Molnar, Kletke & Chongwatpol, 2008; Selwyn, 2008; Klein, Levenburg, McKendall, & Mothersell, 2007; Chapman & Lupton, 2004; Lambert & Hogan, 2004; Cummings et al., 2002; Coston & Jenks, 1998). Chapman and Lupton (2004) explored academic dishonesty among students enrolled in business in Hong Kong and America. The participants in this study included 443 American university business students and 622 Hong Kong university business students. The participants completed the questionnaires during class time. The final survey included 29 questions, and some of the questions in this survey asked students to report on their engagement in particular behaviours with their choices being ‘yes’ or ‘no.’ The behaviours, however, were cheating behaviours, such as providing classmates with information on an exam who will be writing it at a later time. Plagiarism behaviours were not included in the survey, yet this study reported that “Overall, it would appear that American business students are more likely to engage in academic dishonesty than Hong Kong business students” (Chapman & Lupton, 2004, p. 432). The authors in this study encompass cheating as an overall view of academic dishonesty, which is not the case since plagiarism is also a type of academic dishonesty.

Coston and Jenks’ (1998) study of academic dishonesty used criminal justice majors as the participants. These participants were enrolled in a required course, and they completed a self-reported survey. One hundred and two participants participated, and they had 15 minutes to complete the survey. The survey consisted of 18 items, and some of these items had students report on whether or not they engaged in cheating and plagiarism behaviours. Findings reveal that “fifty-one percent of those students who participated in the study admitted violating academic integrity while enrolled in the
major” (Coston & Jenks, 1998, p. 241). Nine percent of the participants reported they had someone write a term paper for them, 9% reported writing a term paper for someone else, 11% reported that they listed fake references in a paper, and 25% reported they had copied a report from a newspaper, book, or journal (Coston & Jenks, 2008).

Cummings et al. (2002) used 144 teacher education students as the participants in their academic misconduct study. In this study, the Academic Misconduct Survey (AMS) was used. AMS is “a 41 item questionnaire designed to measure self-reported academic misconduct behaviours across five factors” (Cummings et al., 1998, p. 6). The five factors measure both cheating and plagiarism behaviours. The second factor was identified as inappropriate use of resources, such as writing a paper for someone else. The behaviours in this factor include plagiarism. The participants were presented with items, and they used a five-point Likert scale to answer the questions with 1=never engaged in the behaviour, 2=rarely, 3=occasionally, 4=frequently, and 5=very frequently. To get an overall score for each factor, “Likert scores on the items within each of the five factors were summed and averaged to calculate a mean for each factor” (Cummings et al., 2002, p. 7). Overall, 5% of participants in this study plagiarized.

Klein, Levenburg, McKendall, and Mothersell (2007) were interested in cheating among business students compared to students in other disciplines. These authors found that “… literature is so scant on the topic of cheating behaviour and academic major” (Klein, et al., 2007, p. 198). One of their research question asked if business students have a higher rate of cheating compared to non-business students. The methodology used for this study was a questionnaire, and the students from the following schools participated in this study: Business, Engineering, Biomedical Sciences, Nursing, Criminal
Justice, and Social Work. Altogether, complete questionnaires were provided by 268 students. Due to a low response rate from some of these schools, they were grouped together. Therefore, the results compare students in the school of Business to students in Other Professional schools. Although cheating was examined, some of the behaviours that students self-reported on include plagiarism. The findings show that “no significant differences were found in overall reported cheating rates between business students and other students” (Klein et al., 2007, p. 201).

Molnar, Kletke, and Chongwatpol (2008) compare frequency of cheating between students in business-related disciplines to students in humanities and science related disciplines through the use of information technology (IT). This study had a total of nine hypotheses, but only three are of relevance. The three pertain to comparisons among these two groups of students:

1) Students majoring in business-related disciplines will find it more acceptable to cheat when using IT than will students majoring in humanities and science related disciplines;
2) Students majoring in business-related disciplines will find it more acceptable for them personally to cheat when using IT than will students majoring in humanities and science related disciplines;
3) Students majoring in business-related disciplines will find it more acceptable for others to cheat when using IT than will students related in humanities and science related disciplines (Molnar et al., 2008, p. 661).

Surveys were anonymous, and they were given to undergraduate students at one of the five participating universities. The results are based off of 708 returned, usable surveys. A Likert scale was used, and a 1 was assigned for ‘strongly disagree’ and a 5 was assigned for ‘strongly agree.’ The findings of this study do not support the hypotheses listed above in that business majors did not find it more acceptable to cheat when using IT, they did not find it personally acceptable to cheat when using IT, and they did not find it more acceptable for others to cheat when using IT (Molnar et al., 2008).
Selwyn (2008) is also interested in online academic dishonesty, particularly plagiarism among different subject disciplines. Specifically, one of Selwyn's research question asked "How does the level and nature of online plagiarism compare between different groups of undergraduates" (Selwyn, 2008, p. 467)? Participants were enrolled in a United Kingdom institution, and the method included a questionnaire in which participants self-reported their engagement in plagiarism during the previous year. A four-point Likert scale was used to measure self-reported frequencies, and participants could choose 'never,' 'rarely,' 'sometimes,' and 'a lot.' In total, 1222 students participated, and they were from the following disciplines:

- 30% studying social studies;
- 20% studying humanities;
- 11% business and administrative studies;
- 10% medicine;
- 9% law;
- 8% natural sciences;
- 4% computer sciences/mathematical sciences;
- 4% engineering and technology;
- 3% architecture, building and planning;
- and creative arts and design being studied by 2% of the sample (Selwyn, 2008, p. 468).

Differences were present among students in different subject disciplines for some of the plagiarism behaviours. Students studying in the humanities or medicine were "less likely to self-report all degrees of unattributed copying in their assignments than students in other disciplines" (Selwyn, 2008, p. 470). It was also reported that students in computer/mathematical sciences were the most likely to copy a few sentences or paragraphs of text for one of their assignments (Selwyn, 2008). When serious plagiarism was examined, copying an entire assignment or purchasing an assignment online were most frequently done by students in business and natural sciences (Selwyn, 2008).

Lambert and Hogan (2004) examined academic dishonesty among criminal justice majors and students enrolled in other majors at a mid-western public university. Their sample consisted of 850 students enrolled in thirty-six criminal justice and general
education courses. The general education courses were courses that were mandatory for students enrolled in a four-year program. A non-random convenience sample was used, and students were asked to complete an anonymous survey during class time.

Approximately half of the students reported they were a criminal justice major, and the other half reported they were majoring in a different discipline. Those who reported that they were majoring in a different discipline were not asked what that discipline was. Part of the survey had students report how often (0, 1, 2, 3, 4, 5, and 6 or more) they engaged in twenty different cheating behaviours. Overall, the groups (criminal justice students and students enrolled in a different discipline) seemed to be similar in their engagement of the twenty behaviours. Of the twenty behaviours, six of them had statistically significant differences. Of these six, three include plagiarism. Criminal justice majors were “less likely to have worked in a group for an individual assignment, to have made up sources, and to list unread or irrelevant sources in a biography” (Lambert & Hogan, 2004, p. 8).

These studies show that some authors are interested in plagiarism comparison rates between academic majors. Some studies use one discipline, and then make comparisons among the rate of plagiarism in that discipline and students enrolled in other disciplines, such as Lambert and Hogan (2004). Other studies examine the rate of plagiarism within a specific discipline, such as the work conducted by Coston and Jenks (1998). Selwyn (2008), however, examined plagiarism among students enrolled in different disciplines, which is similar to the second research question in the present study.

**Understandings of Plagiarism**

Although self-reported rates of plagiarism have been looked at and comparisons of these rates among students enrolled in different disciplines have been examined, “...
there has been less examination of the students who have breached plagiarism policies because of a lack of understanding about acceptable and unacceptable citation practices, the students’ perceptions of plagiarism, their skill in applying referencing techniques…” (Anyanwu, 2004, p.178). If students are plagiarizing yet unaware that they are doing so, then it is not unreasonable to expect high self-reported rates of plagiarism. Several studies have examined student understandings of plagiarism (Wilkinson, 2009; Ellery, 2008; Devlin & Gray, 2007; Yeo, 2007; Baggaley & Spencer, 2005; Anyanwu, 2004; Ashworth, Bannister & Thorne, 1997).

Anyanwu (2004) was interested in why students plagiarize through the use of case studies. In this study, one of the participants did not use citations correctly resulting in plagiarism. It was decided by the head of the department that “…the breaches were a result of ignorance and misunderstanding…” (Anyanwu, 2004, p. 179). It was determined that the student was truly unaware of the correct way to use citations. This student was allowed to resubmit the assignment in order to receive a grade without a penalty being applied.

Ashworth, Bannister, and Throne (1997) used qualitative methods to investigate students’ perceptions of cheating and plagiarism. Only plagiarism will be addressed since it is applicable to the current study. Nineteen interviews were completed in this study, and from these interviews, themes emerged. If was found that students are uncertain of which behaviours are considered plagiarism and which behaviours are acceptable. This study also found that students were unclear of the correct process to follow when incorporating someone else’s text into their own work. Findings from this study also reveal that
more than one interviewee admitted that even midway through their degree course they remained uncertain as to whether or not they referenced material properly, attributing this to not having been taught the correct method and/or being unable to make a sense of the guidelines provided” (Ashworth et al., 1997, p. 201).

Baggaley and Spencer’s (2005) research used a case study for a student they labelled as a “serial plagiarist.” This case study was completed on a graduate student who plagiarized six times while enrolled in the graduate program. At the sixth incident, the student was expelled from the university. This student was repeatedly caught for plagiarism, yet this student was not expelled until the sixth time. One of the reasons as to why the student stated he plagiarized was out of ignorance. When the student was trying to avoid the expulsion, “X suggested that he now realized he had never fully understood the meaning of plagiarism as previously explained to him” (Baggaley & Spencer, 2005, p. 59). Although this student shared that he was uncertain of what constituted plagiarism, it is unknown if this is really the case or if the student is being untruthful.

Devlin and Gray (2007) used qualitative research to determine why students plagiarize. In their study, focus groups were utilized for 56 students, and in total eight sessions for these participants were conducted. Participation in this study was voluntary, and the participants were recruited though the school’s online learning system. The participants in the focus groups were asked why students plagiarize. The data from the interviews in the focus group session was transcribed and coded into themes. Overall, different reasons why students plagiarize were provided by the participants, and two of these reasons included “poor understanding of plagiarism” and “poor research, writing and/or referencing skills” (Devlin & Gray, 2007, p. 187). Specifically, some participants
reported that “They’re not aware of what it [plagiarism] means” and “Don’t know how to reference” (Devlin & Gray, 2007, p. 187).

A component of Ellery’s (2008) study examined student understandings of plagiarism. This study “revealed little deliberate intention to deceive but instead poor understanding of both technical matters such as correct referencing norms…” (Ellery, 2008, p. 507). Park (2003) conducted a literature review on plagiarism in his paper. A component of this paper included reasons why students plagiarize. One of the reasons given was “genuine lack of understanding. Some students plagiarize unintentionally, when they are not familiar with proper ways of quoting, paraphrasing, citing and referencing…” (Park, 2003, p. 479).

Wilkinson (2009) used students and staff as participants. The students completed a questionnaire in class, and the staff received the questionnaire through email. One component of the questionnaire asked the participants to report why students cheat. Although students were asked to report why they feel students cheat, reasons for plagiarism were provided. “Among both staff and students, the most common reasons cheating occurs was thought to be a lack of understanding about the rules of referencing….” (Wilkinson, 2009, p. 100).

Yeo (2007), interested in plagiarism understanding, used first-year university physical science and engineering students in her study. Participants completed a survey during a course, and 190 surveys were used in the final analysis. A part of the survey asked students to read six scenarios and then report if plagiarism was present in the scenario, if plagiarism was not present in the scenario, or if they were unsure as to whether or not plagiarism was present in the scenario. Although plagiarism was present
in the studies, the students did not report this to be the case; this indicates poor understandings of what constitutes plagiarism.

It is evident from the studies discussed above that some students have a poor understanding of the correct ways to reference and cite material. Additionally, they are unsure of which behaviours constitute plagiarism and which do not. Since students have a poor understanding of plagiarism, it is reasonable to ask if they are being educated on plagiarism.

**Plagiarism Education**

In addition to self-reported plagiarism rates, comparisons of these rates across different majors, and understandings of plagiarism, plagiarism education will be discussed. Do students receive information on plagiarism from their instructors? If instructors report they educate students on plagiarism and students report their instructors do not, a discrepancy between the two occurs making it difficult to determine if students are educated on plagiarism. Studies have looked at plagiarism education (Bennette, Behrendt, & Boothby, 2011; Breen & Maassen, 2005; Parameswaran & Devi, 2006; Pickard, 2006; Robinson-Zanartu, 2005; Wilkinson, 2009), and their findings will be outlined.

Bennett, Behrendt and Boothby (2011) looked at plagiarism among 158 instructors. In their study, participants were asked to report what constitutes plagiarism. Although participants agreed on the majority of behaviours that are considered plagiarism, such as paraphrasing without acknowledging the source, they did not agree on recycling assignments. Results from this study “…imply that instructors should provide clear guidance regarding their views on students’ recycling of their own work from
previous classes” (Bennett et al., 2011, p. 34). Since there was disagreement among
instructors regarding recycling work being considered plagiarism, the students taught by
these instructors may be treated unfairly if some students are allowed to do so whereas
other are not.

The participants in Breen and Maassen’s (2005) study felt that plagiarism should
be taught, specifically “… in the first semester of their first year of university…” (Breen
& Maassen, 2005, p. 6). It was also found that students should be provided with examples
of plagiarism and how to avoid it, and this is evident when one student shared that
students need “…. to be given lots of examples....” (Breen & Maassen, 2005, p. 6).

Parameswaran and Devi (2006) used undergraduate engineering students in their
study to examine faculty responsibility in plagiarism. They were interested in the copying
of lab reports. Focus group sessions, observations, and interviews were the methods used
for their data collection. When participants were asked why they copy others’ lab reports,
one of the themes that emerged was “faculty don’t do anything, so they must expect us to
understand…” (Parameswaran & Devi, 2006, p. 268). Although instructors do not attend
labs and visit them on occasion, students feel that these instructors are aware of what is
going on in labs. One student shared that:

… in her first year she was a bit disturbed by how everyone was cheating.
She went up to the lecturer and told him that this was happening and everyone
was doing it. The lecturer told [her] that she should do the same, if not she would
lag behind (Parameswaran & Devi, 2006, p. 269).

It is apparent in this example that the students felt her instructor was aware that
plagiarism was occurring, and instead of punishing the behaviour, encouraged it. This
study demonstrates that faculty are not necessarily against plagiarism but in a sense
support it.
Pickard (2006) looked at staff and student attitudes of plagiarism in a United Kingdom university. Part of this paper examined plagiarism attitudes among staff and students, and another part of this paper examined the number of plagiarism cases staff detected and how they dealt with these cases. One component of this study had participants report how often they believed plagiarism occurs involving other students. For instance, how often do students submit assignments individually even though they wrote the assignment in collaboration with another student (Pickard, 2006)? This study found that “86% of students estimated that such activities never happen, only 20% of staff considered it to be this rare” (Pickard, 2006, p. 223); therefore, a discrepancy between the two groups was found. The staff members were also asked to report how many plagiarism instances they encountered within the previous twelve months. Overall, 72% (38) reported that they encountered a case of plagiarism, 24% (13) reported not encountering plagiarism, and 4% (2) reporting only encountering one case within the past ten years (Pickard, 2006). Of the 72% (38) who reported encountering a case of plagiarism within the previous year, 86.84% (33) also answered how they dealt with it. Five participants did not answer this question, and “It is possible that the five staff who did not answer this question had not acted once they had detected the case” (Pickard, 2006, p. 225). The explanations of how the staff dealt with plagiarism was not reported in this study, and instead will be published in a later study.

Robinson-Zanartu et al. (2005) were interested in perceptions of plagiarism as well as responses to plagiarism among faculty members. The participants in their survey included 270 faculty members listed in a School Psychology Graduate Program directory (Robinson-Zanartu et al., 2005). The participants completed a survey which was mailed
to them electronically. Part of the survey had participants rate ten sources as to whether or not plagiarism was present. Although plagiarism was present in each of the cases, not all of participants rated the scenarios as such. Interestingly, where the plagiarized material came from influenced whether or not that scenario was considered plagiarism. Results indicate that “material coming from an electronic source was 8.89 times more likely to be judged as plagiarism in comparison to that coming from self…” (Robinson-Zanartu et al., 2005, p. 327). Moreover, plagiarized material taken from a paper source was considered plagiarism 39.76 times more so than was plagiarism coming from self (Robinson-Zanartu et al., 2005). When faculty were asked about the consequences for students who use their own material from a previous assignment into a subsequent electronic or paper assignment, “…74% reported that a report should not be filed for this and 92% reported that a university sanction should not be given (Robinson-Zanartu et al., 2005, p. 331). It is apparent through the results of this study that “different types of plagiarism may have different degrees of gravity, thus warranting different types of consequences” (Robinson-Zanartu et al., 2005, p. 332). So, faculty members have different perceptions of what constitutes plagiarism, and some behaviours are rated more severely than others. Also, whether or not to report plagiarism seems to be subjective. If handling plagiarism is subjective, and faculty members decide individually how they want to deal with it, students may be able to plagiarize in one course only to find in a different course that the same behaviour is now being reported.

In addition to examining reasons why students plagiarize as outlined previously in Wilkinson’s (2009) study, discrepancies between plagiarism information from students and staff perceptions were also investigated. Specifically, students and staff in this study
were asked to report whether or not they felt they have received enough information about what is unacceptable regarding plagiarism. Although 78% of staff reported students receive enough information concerning what is not acceptable, only 43% of the students reported this to be true.

These studies demonstrate that there is disagreement regarding behaviours that constitute plagiarism among faculty. If such discrepancy occurs, students may become confused regarding what is and what is not acceptable with respects to plagiarism because recycling (submitting an assignment to two or more courses without permission to do so) in one course may be off limits in another. Moreover, students want examples of how to stop plagiarism. Providing students with examples may allow them to see first-hand how to avoid engaging in plagiarism. Lastly, Wilkinson’s (2009) study indicates that there is disagreement among students and faculty concerning the receipt of information about plagiarism.

Although plagiarism is present in higher education, the self-reported rates of plagiarism differ among studies. Few studies have been able to compare rates of plagiarism among students enrolled in different disciplines. When understandings of plagiarism are investigated, it was found that students have poor understandings of plagiarism and want to see examples to know how to avoid it. Knowing that plagiarism is present and that students have an inadequate understanding of it, it is important to ask how they are being educated on plagiarism in the first place.
CHAPTER III
METHODOLOGY

Overview

To collect the data in this study, an online survey was used. The participants in this study were sent an email with a link to the letter of information. A reminder email was sent two weeks after the original email. The Letter of Information contained the survey link and the survey password. The links and passwords differed for the two groups of participants (See Appendix A and B). Participants answered questions pertaining to the research questions. Once the survey ended, the results were analyzed. This survey was quantitative since numerical values were assigned to the participants’ responses. Further, the majority of the survey contained close-ended questions, and the groups of participants answered identical questions which allowed for the survey to be standardized.

Participants

This study had two groups of participants: teacher candidates and pre-service faculty instructors. At the time of data collection, 507 teacher candidates were enrolled in the pre-service program, and the Faculty of Education employed 69 pre-service faculty instructors who were teaching a minimum of one pre-service course. A total of 36 teacher candidates and 7 pre-service faculty instructors participated in this study. One teacher candidate as well as one pre-service faculty instructor started the survey but did not complete it; therefore, responses from 35 teacher candidates and 6 pre-service faculty instructors are used. A purposive sample was used in this study. In this study, the teacher candidates and the pre-service faculty instructors comprised the participants as they were
the individuals chosen to be studied. Although all teacher candidates and pre-service faculty instructors were given the opportunity to participate, the sampling was non-random.

**Procedures**

After receiving clearance from the university Research Ethics Board (REB) and permission from the Faculty of Education’s Associate Dean Pre-Service to send out an email (See Appendix C), data collection began. In January of 2012, the primary researcher went to the Law and Ethic Courses, which is a mandatory course for all teacher candidates, to explain the purpose of the study. In total, there were four Law and Ethic courses, and permission to go to these courses was given ahead of time by the instructors. Although the primary researcher visited these courses, it was not to collect data. Data were collected through an online survey. Different email recruitments were sent to the two groups of participants. Two surveys (one for each group of participants) were created through the use of Fluid Surveys. The university has access to Fluid Surveys, and the Computer Consultant in the Information Technology Services set up an account for the primary researcher. Additionally, the Letters of Information were made live on the university’s server by the Manager of Web and Desktop Services in the Information Technology Services at the university. The participants in this study were sent the recruitment email the second week of classes during the winter 2012 semester. The email was sent by the Associate Dean Pre-Service’s secretary. Approximately two weeks after receiving the first email recruitment, a reminder email was sent. Approximately a week and an half after receiving the reminder email, a final email was...
sent to the participants. The recruitment email contained a link to the Letters of Information.

**Methodology**

This study investigated plagiarism reporting rates, plagiarism reporting rate comparisons across undergraduate majors, understandings of plagiarism, and education on plagiarism. Since the responses were assigned a numerical value, this study was quantitative, and a survey was developed to answer the four research questions. “Quantitative methods involve writing questions for surveys and in-depth interviews, learning to quantify or count responses, and statistically (mathematically) analyzing archival, historical, or our own data” (Nardi, 2006, p. 17). Moreover, “Quantitative research is a means for testing objective theories by examining the relationship among variables. These variables, in turn, can be measured, typically on instruments, so that numbered data can be analyzed using statistical procedures” (Creswell, 2009, p. 4). This study utilized instruments, and each response was coded so that the data could be analyzed.

Furthermore, this study was anonymous. Since academic misconduct is a sensitive topic and students may feel uncomfortable reporting their engagement in it, they were ensured complete anonymity with hopes of increasing the response rate. Participants were informed that since it was anonymous, “... there is no way of connecting any identifying information with the person completing the survey” (Nardi, 2006, p. 35). Also, since the participants completed the survey on computers, they may have been more likely to answer honestly; this idea is supported by Sue and Ritter (2007): “People generally give more honest answers when faced with a computer screen than when faced with an
interviewer (even if the interviewer is on the telephone)” (p. 40). Having participants answer at a computer potentially helped to mitigate the risk of students feeling compelled to give dishonest responses. Participants may have felt more inclined to answer truthfully since they were not physically completing a questionnaire in the presence of others and then handing it on.

A computer-assisted survey was the method chosen, and there are several advantages to using this. One of the advantages of using this type of survey is that it allows for skipping of questions so that participants only answer questions that are applicable to them. This is easier than doing so on a hard-copy format since participants may skip to the incorrect question which can impact the findings.

Also, allowing participants to complete the questionnaire on a computer provides them with flexibility regarding time. They are free to complete it at any hour, and this may increase their likelihood of completing it since they are not constrained to a specific time. Computer-assisted questionnaires are becoming more popular, especially because the tasks of having people code the data and enter the results into a program for data analysis are minimized (Nardi, 2006, p. 92).

Fluid Surveys was the hosting site of the survey, and it allows the results to be exported into Statistical Package for the Social Sciences (SPSS); therefore, the researcher does not have to enter the data which may lead to errors.

I completed a pilot test of the questionnaire. A classmate, who is also in the master’s program, completed both surveys prior to the data collection period. Once the graduate student completed the surveys, the duration of time it would take to complete the survey was known, and this time was added to the REB application. Once the survey was live and participants could complete it, the thesis advisor noticed that the time specified on the letter of information for the pre-service faculty instructors was too long.
so the duration of time was adjusted. “All data-gathering instruments should be piloted to test how long it takes recipients to complete them, to check that all questions and instructions are clear and to enable you to remove any items which do not yield usable data” (Bell, 1993, p. 84).

The format of the survey required the participants to answer the questions in order; that is, participants needed to give a response to a question before moving on to the next question. If the participants did not answer a question and instead chose to move on to the second question, they would receive a notice indicating they need to answer the question before they can move on. “Questionnaires can be constructed screen-by-screen so that each time an answer is provided the respondent goes to a new question on a screen” (Dillman, 2007, p. 372), and this was intentionally done so that participants would not be able to avoid answering questions. The first research question involved skipping. Skipping allows for participants to answer the questions that apply to them, and results in more accurate data (Sue & Ritter, 2007). For instance, the students were asked to report if they engaged in specific behaviours. If a participant selected yes, then the participant was asked if they were aware that what they were doing was plagiarism. If the participant selected no, they were redirected to the next question since the follow-up, being aware, was irrelevant to them. Also, the questions asked were identical for that group of participants, and this is an advantage of using quantitative surveys. Nardi (2006) writes “Advantages of quantitative surveys are standardized questions and they are ideal for asking about opinions and attitudes” (p. 17). Moreover, the majority of the questions in this survey were close-ended, and the participants were almost always presented with a list of options to choose from. Doing so was advantageous since having options provided
can make it easier for the participant to answer a question as the possible responses are present, and close-ended questions oftentimes comprise online questionnaire (Sue & Ritter, 2007, p. 47).

Since there were 507 teacher candidates, it was beneficial to utilize an online survey due to the large sample size. Using an online survey is both cost effective and efficient. It is efficient in that the researcher did not need to be present when the participants completed it, and it was cost effective in that the university created the Fluid Survey account and a fee for this access was not needed. As stated previously, two reminder emails were sent to the participants, and this is encouraged as the response rate may increase from being exposed to the study at later times (Sue & Ritter, 2007, p. 93).

The survey did contain an option that the participants could click on to end their participation. If the participants wanted to withdraw from the survey, there was an option to exit and discard their responses. In the Letters of Information, the participants were informed of this option. By choosing this option, any responses the participants provided were eliminated. If a participant chose this option by mistake, a confirmation window appeared asking if they are positive they want to end the survey. If participants ended their participation in the survey, and then decided that they in fact want to complete the survey, they were able to do so by opening the Letter of Information again and then clicking on the survey link and providing the appropriate password.

**Quantitative Instrumentation**

This survey was divided into four sections for the teacher candidates and three sections for the pre-service faculty instructors (See Appendix D and E). The first section
for both groups of participants included demographic questions. These questions were
created by the primary researcher with feedback from the thesis advisor.

The second section for the teacher candidates included self-reporting of specific
plagiarism behaviours they engaged in during their time in the B.Ed. program. The items
in this section were taken from the Centre for Academic Integrity’s Assessment Project
with permission from McCabe (See Appendix F), who was involved in the development
of this instrument. Permission was also given to modify items on this instrument. This
instrument was used in Christensen Hughes and McCabe’s (2006) study, which
investigated academic misconduct among high school, undergraduate, and graduate
students in the Canadian context. Although the instrument had students report on 25
specific academic misconduct behaviours, this study used only 9 of the behaviours which
constituted measurement of plagiarism, which was the focus of this study. A modification
was made to one of the original items. “Turning in work done by someone else” was
reworded to “During your time in the B.Ed. program, how often have you turned in
written work done by someone else?” Since this study investigated plagiarism only, the
word “written” was added. Additionally, a tenth item was added; therefore, students in
this study self-reported their engagement in ten plagiarism behaviours. The tenth item,
which was added, asked students whether they had recycled their own material
(submitted work they completed to more than one course).

In Christensen Hughes and McCabe’s (2006) study, the participants were
presented with each behaviour and reported how often they engaged in that behaviour
with the options of never, once, more than once, and not applicable. They were also
asked to report how serious they thought the behaviours were with the options of not
cheating to serious cheating. The teacher candidates in this study were presented with each item (plagiarism behaviour), and they could select their engagement from one of the following: never, once, and more than once. For one item regarding copying a friend’s computer program, a fourth option, not applicable, was added since not everyone took a computer course during their undergraduate degree.

Unlike Christensen Hughes and McCabe’s (2006) study, the students were not asked how serious they though each behaviour was. Instead, they were asked if they were aware that it was plagiarism when they engaged in the behaviour. If ‘never’ was selected, participants would move to the next item. If ‘once’ was selected, participants were then asked if they knew at the time if it was plagiarism (they could choose yes or no). They would then be directed to the next behaviour. If ‘more than once’ was selected, participants were asked if they were aware that it was plagiarism any of the times they engaged in the behaviour (they could choose yes or no). They would then be directed to the next behaviour.

The third section for the teacher candidates and the second section for the pre-service faculty instructors presented five plagiarism scenarios, and the participants were asked to rate each of the scenarios as either plagiarism, not plagiarism, or unsure. Rating these scenarios utilized a nominal scale. The university’s plagiarism policy lists five specific behaviours that constitute plagiarism. These five behaviours were incorporated into the scenarios, and they were used to assess understandings of plagiarism from the two groups of participants. The scenarios were created by the primary researcher.

The fourth section for the teacher candidates and the third section for the pre-service faculty instructors explored education on plagiarism. In this section, the teacher
candidates were asked to report on plagiarism information they received from their pre-service faculty instructors. An example of an item in this section is “Do you feel that your course instructors provided enough information to you on plagiarism?” In contrast, the pre-service faculty instructors were asked “Do you feel that you provided enough information on plagiarism to your students?” These questions were developed by the primary researcher.

**Research Design and Data Analysis**

SPSS was used to perform statistical analyses in this study. This program is used in many social science disciplines since it is user-friendly and can perform several common analyses that are used by researchers, such as regressions and analysis of variances (ANOVA). SPSS allows one to reorder data easily as well as export the data into tables and graphs if needed. As previously stated, FluidSurveys was the hosting site of the survey, and it is compatible with SPSS in that the results from the surveys can be exported into SPSS for analysis. Frequencies, ANOVAs, and a bivariate regression, which can be performed in SPSS, were completed for this study.

**Scope and Limitations**

The participant selection was a delimitation of this study since only the students enrolled in the Faculty of Education’s pre-service program were given the opportunity to participate, and students enrolled in a Concurrent program were not. For instance, the university’s Faculty of Education offers a concurrent program in addition to the one-year pre-service program, and students enrolled in this five-year program also receive their Bachelor of Education degree. It is not uncommon for the instructors of the pre-service courses to teach students enrolled in concurrent programs as well. Since one of the
research questions of this study was to compare plagiarism reporting rates among teacher candidates with different undergraduate degrees, they were the only group of participants used in this study as the students enrolled in the concurrent program do not yet have an undergraduate degree. If students enrolled in a concurrent program were also included in this study, then their years of study (first year, second year, etc.) could have been compared to see if years of study differ in engagement in plagiarism behaviour and understandings of plagiarism.

The limitation of recruiting participants through email must be noted. All students enrolled at the university have a student webmail account, and it is the university’s policy that students only use their webmail to communicate with instructors, staff, etc. Not all students check their webmail often. Thus, some teacher candidates may have checked their email and attempted to complete the survey once the deadline to do so had passed.

Another limitation that should be noted before interpreting the results is that students were asked to self-report. Although the survey was anonymous, teacher candidates may have underreported their engagement in plagiarism. Also, the primary researcher has personal relationships with some of the teacher candidates (has worked with them in the past, currently works with them, or was their GA). Therefore, some teacher candidates who participated in the study may have done so out of a feeling of obligation to the primary researcher. This may have skewed the results in that these participants may have answered in a way that they feel the primary researcher wanted. Although it is unknown if this was the case, it is important to mention prior to reading the results.
CHAPTER VI

RESULTS

The response rate for this study is 6.9% for the teacher candidates, and 8.7% for the faculty instructors. These response rates are comparable with that found in Christensen Hughes and McCabe’s 2006 online academic integrity study in that the response rates for their study were between 5 and 25%. The results will be presented by research question, and additional analyses, which were not part of this study’s original research questions, will also be outlined.

Self-reported Rates of Plagiarism Results

The self-reported rate of plagiarism among teacher candidates is the first question answered (see Table 1).

Table 1

*Engagement in Plagiarism Behaviours*

<table>
<thead>
<tr>
<th>Behaviour</th>
<th>Never</th>
<th>Once</th>
<th>More than once</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>During your time in the B.Ed. program, how often have you copied a few sentences of material from a written source without footnoting them in the paper?</td>
<td>77.1</td>
<td>11.4</td>
<td>11.4</td>
<td>___</td>
</tr>
<tr>
<td>During your time in the B.Ed. program, how often have you copied a few sentences from an Internet source without footnoting them in the paper?</td>
<td>77.1</td>
<td>11.4</td>
<td>11.4</td>
<td>___</td>
</tr>
</tbody>
</table>
During your time in the B.Ed. program, how often have you copied a friend's program rather than create your own program in a computer course?
*If you did not have to take a computer course that required you to create a program, choose the fourth option (not applicable).

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>During your time in the B.Ed. program, how often have you turned in written work done by someone else?</td>
<td>91.4</td>
<td>2.9</td>
<td>5.7</td>
</tr>
<tr>
<td>During your time in the B.Ed. program, how often have you copied material word for word from a written source and turned it in as your own?</td>
<td>94.3</td>
<td></td>
<td>5.7</td>
</tr>
<tr>
<td>During your time in the B.Ed. program, how often have you provided a previously graded assignment for someone to submit as their own?</td>
<td>88.6</td>
<td>8.6</td>
<td>2.8</td>
</tr>
<tr>
<td>During your time in the B.Ed. program, how often have you turned in a paper copied from another student?</td>
<td>97.1</td>
<td></td>
<td>2.9</td>
</tr>
<tr>
<td>During your time in the B.Ed. program, how often have you turned in a paper obtained in large part from a term paper &quot;mill&quot; that did not charge?</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>During your time in the B.Ed. program, how often have you turned in a paper obtained in large part from a term paper &quot;mill&quot; that did charge?</td>
<td>100.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
During your time in the B.Ed. how often have you recycled your own material (submitted an assignment you completed in one course to another course)?

From this table, it is evident that the last item, “During your time in the B.Ed. program, how often have you recycled your own material (submitted an assignment you completed in one course to another course)?” was the behaviour most frequently engaged in. In this study, 11.4% of the teacher candidates admitted to doing this once, and 22.9% admitted to doing this more than once. Of the 11.4% who reported doing this once, 5.7% knew it was plagiarism at the time they did it. Of the 22.9% who admitted doing this more than once, 11.4% admitted that they were aware it was plagiarism at least one of the times they did it. Overall, 48.57% (n=17) of the participants in this study never plagiarized during their time in the B.Ed. program, 11.43% (n=4) of the participants plagiarized once, and 40% (n=14) of the participants plagiarized more than once. With respect to the students who plagiarized once, 50% knew it was plagiarism the time they engaged in that behaviour and 50% did not (see Table 2).
Table 2

*Engagement in Plagiarism Behaviours Once and Awareness as a Percentage of the Sample*

<table>
<thead>
<tr>
<th>Behaviour</th>
<th>Once</th>
<th>Aware it was plagiarism</th>
</tr>
</thead>
<tbody>
<tr>
<td>During your time in the B.Ed. program, how often have you copied a few sentences of material from a written source without footnoting them in the paper?</td>
<td>11.4</td>
<td>50.0 50.0</td>
</tr>
<tr>
<td>During your time in the B.Ed. program, how often have you copied a few sentences from an Internet source without footnoting them in the paper?</td>
<td>11.4</td>
<td>50.0 50.0</td>
</tr>
<tr>
<td>During your time in the B.Ed. program, how often have you turned in written work done by someone else?</td>
<td>2.9</td>
<td>100.0</td>
</tr>
<tr>
<td>During your time in the B.Ed. program, how often have you provided a previously graded assignment for someone to submit as their own?</td>
<td>8.6</td>
<td>100.0</td>
</tr>
<tr>
<td>During your time in the B.Ed. program, how often have you recycled your own material (submitted an assignment you completed in one course to another course)?</td>
<td>11.4</td>
<td>50.0 50.0</td>
</tr>
</tbody>
</table>

With respect to the students who plagiarized more than once, 64.29% knew it was plagiarism at least one of the times they engaged in a plagiarism behaviour, and 35.71% never knew it was plagiarism any of the times they engaged in that behaviour (see Table 3).
<table>
<thead>
<tr>
<th>Behaviour</th>
<th>More than once</th>
<th>Aware it was plagiarism any of the times</th>
</tr>
</thead>
<tbody>
<tr>
<td>During your time in the B.Ed. program, how often have you copied a few sentences of material from a written source without footnoting them in the paper?</td>
<td>11.4</td>
<td>Yes 75.0 25.0</td>
</tr>
<tr>
<td>During your time in the B.Ed. program, how often have you copied a few sentences from an Internet source without footnoting them in the paper?</td>
<td>11.4</td>
<td>Yes 75.0 25.0</td>
</tr>
<tr>
<td>During your time in the B.Ed. program, how often have you turned in written work done by someone else?</td>
<td>5.7</td>
<td>Yes 100.0</td>
</tr>
<tr>
<td>During your time in the B.Ed. program, how often have you copied material word for word from a written source and turned it in as your own?</td>
<td>5.7</td>
<td>Yes 100.0</td>
</tr>
<tr>
<td>During your time in the B.Ed. program, how often have you provided a previously graded assignment for someone to submit as their own?</td>
<td>2.9</td>
<td>Yes 100.0</td>
</tr>
<tr>
<td>During your time in the B.Ed. program, how often have you turned in a paper copied from another student?</td>
<td>2.9</td>
<td>Yes 100.0</td>
</tr>
<tr>
<td>During your time in the B.Ed. program, how often have you recycled your own material (submitted an assignment you completed in one course to another course)?</td>
<td>22.9</td>
<td>Yes 50.0 50.0</td>
</tr>
</tbody>
</table>
Plagiarism among Discipline Results

To answer the second research question, the reported undergraduate majors were grouped by the different university faculties. The reason for grouping the undergraduate degrees into faculties is so there were be fewer groups. For example, only one student had an undergraduate degree in mathematics and statistics, and since this degree is from the Faculty of Science, it was combined with two biology majors to increase the sample size to three. Students in this study were from the following faculties: Faculty of Human Kinetics (2), Faculty of Engineering (1), Faculty of Science (3), Inter-Faculty Program Environmental Studies (1), and Faculty of Arts and Social Sciences (24). One participant reported “none” as the undergraduate major. Two students reported double-majors in which one of their two degrees were from different faculties. One participant reported a double major in music and biology (Faculty of Arts and Social Sciences and Faculty of Science), and another participant reported geography and earth sciences (Faculty of Arts and Social Sciences and Faculty of Science) as the major. Additionally, physical education was reported as an undergraduate major, and this major is not present at the university this study was conducted at. These four participants were not included in this research question. Thirty-one teacher candidates were used as the participants in the second research question. A variable, undergraduate faculty, was created. Participants from the Faculty of Human Kinetics were assigned a 1, the participant from the Faculty of Engineering was assigned a 2, the participants from the Faculty of Science were assigned a 3, the participant from the Inter-Faculty Program Environmental studies was assigned a 4, and the participants from the Faculty of Arts and Social Sciences were assigned a 5. It must be noted, however, that the number of participants in each of the
faculties is not even, and the majority of the participants in this study have an undergraduate degree from the Faculty of Arts and Social Sciences. If the participants in the Faculty of Arts and Social Sciences were instead grouped by major, such as psychology majors, for this analysis, then this research question would have compared specific majors (for the participants in the Faculty of Arts and Social Sciences) and participants in other faculties, which is not the intention of this research question. A variable, plagiarism behaviour averages, was created to answer this question. Each participant was given an average score for their reported rate of engagement in plagiarism for the items in the first research question. Since 1 was assigned for Never, 2 was assigned for Once, and 3 was assigned for More than once, each participant was given an average score with 3 being the maximum and 1 being the minimum. Since one of the items only applied to students who have taken a computer class, this item was excluded when the average score for the participants was calculated if they chose not applicable to this question. The maximum average reported was 2.4, and the minimum average reported was 1.0 (participants who have never engaged in any of the plagiarism behaviours). An ANOVA was conducted to answer this question. The dependent variable was the plagiarism behaviour averages and the factor was undergraduate faculty. The results for this question were not statistically significant, $F(4, 26) = .106, p = .979$. Therefore, the faculty one completed their undergraduate major in did not make a difference in their self-reported rate of engagement in plagiarism behaviours.
Understandings of Plagiarism Results

To answer the third research question, frequencies were used to compare the teacher candidates’ understandings of plagiarism as per the university’s course outline as well as the pre-service faculty instructors’ understandings of plagiarism (see Table 4).

Table 4

Understandings of Plagiarism among Teacher Candidates and Pre-Service Faculty Instructors

<table>
<thead>
<tr>
<th>Plagiarism Scenario</th>
<th>Teacher Candidate (n = 35)</th>
<th>Pre-Service Faculty Instructor (n = 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student A has to do research on cognitive development for an Educational Psychology course. Student A does not have time to write the entire paper, so this student copies a few paragraphs online and submits the assignment as their own. Did Student A engage in plagiarism?</td>
<td>100.00</td>
<td>100.00</td>
</tr>
<tr>
<td>Yes</td>
<td>100.00</td>
<td>100.00</td>
</tr>
<tr>
<td>No</td>
<td>94.3</td>
<td>100.00</td>
</tr>
<tr>
<td>Unsure</td>
<td>5.7</td>
<td></td>
</tr>
</tbody>
</table>

Student B submits a report on Bullying for a Law and Ethics course. Student B used a journal article on bullying and paraphrased some of the concepts in the report. Student B does not reference the source. Did Student B engage in plagiarism?

Yes 94.3 100.00
No
Unsure 5.7
As part of a literacy report, Student C has to include a passage on adverbs in it. This student finds information on adverbs in a blog, and uses this material in the report. Student C does not use quotation marks or acknowledge the source. Did Student C engage in plagiarism?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>82.9</th>
<th>100.00</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>2.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unsure</td>
<td>14.3</td>
<td></td>
</tr>
</tbody>
</table>

Student D submitted the same lesson plan to both a mathematics course and a science course. Permission to do this was not given. Did Student D engage in plagiarism?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>51.4</th>
<th>83.3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>34.3</td>
<td>16.7</td>
</tr>
<tr>
<td></td>
<td>Unsure</td>
<td>14.3</td>
<td></td>
</tr>
</tbody>
</table>

The major assignment in a physical education course requires students to submit a one-page write-up on a health-related topic of their choice. Student E, Student F, and Student G work on the assignment together, but they modify parts of it so their submissions are not identical. Group work is not permitted for this assignment. Did these three students engage in plagiarism?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>62.9</th>
<th>100.00</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>22.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unsure</td>
<td>14.3</td>
<td></td>
</tr>
</tbody>
</table>

Although each of the five scenarios constitute plagiarism, not all of the teacher candidates rated them as such. Only Scenario A was understood as plagiarism by all of the teacher candidates. Overall, 22.86% (n=8) of the teacher candidates knew that all five of the scenarios included plagiarism. Plagiarism was better understood by the pre-service faculty instructors in that 100% of the participants rated four out of the five scenarios as plagiarism. One participant, representing 17% of the sample, identified one of the five
scenarios as not plagiarism. Therefore, this group of participants correctly identified plagiarism 97% of the time.

**Plagiarism Education Results**

Frequencies were also used to compare education on plagiarism among the teacher candidates and the pre-service faculty instructors. Although all of the pre-service faculty instructors reported that they include the plagiarism policy on their course outline, only 51.4% of the teacher candidates reported all of their instructors include it (see Table 5 and Table 6).

**Table 5**

*Plagiarism Education Among Teacher Candidates*

<table>
<thead>
<tr>
<th>Plagiarism Education</th>
<th>None</th>
<th>Some</th>
<th>Most</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many of your course instructors include the plagiarism policy on the course outline?</td>
<td>5.7</td>
<td>31.4</td>
<td>31.4</td>
<td>31.4</td>
</tr>
<tr>
<td>How many of your course instructors verbally told you that information regarding plagiarism can be found on the course outline?</td>
<td></td>
<td>57.1</td>
<td>25.7</td>
<td>17.1</td>
</tr>
<tr>
<td>How many of your course instructors read the plagiarism policy in the course outline to you?</td>
<td></td>
<td></td>
<td>57.1</td>
<td>25.7</td>
</tr>
<tr>
<td>How many of your course instructors sent information regarding plagiarism to you electronically (CLEW or email)?</td>
<td>40.0</td>
<td>28.6</td>
<td>17.1</td>
<td>14.3</td>
</tr>
</tbody>
</table>
Table 6

*Plagiarism Education Among Pre-Service Faculty Instructors*

<table>
<thead>
<tr>
<th>Plagiarism Education</th>
<th>Yes</th>
<th>No</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you have the University's plagiarism policy in your course outline(s)?</td>
<td>100</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>Did you verbally explain to your course(s) that plagiarism information can be found in the course outline?</td>
<td>33.3</td>
<td>66.7</td>
<td>___</td>
</tr>
<tr>
<td>Did you discuss plagiarism in your class(es)?</td>
<td>50.0</td>
<td>50.0</td>
<td>___</td>
</tr>
<tr>
<td>Did you send plagiarism information to your class(es) electronically (CLEW or email)?</td>
<td>16.7</td>
<td>83.3</td>
<td>___</td>
</tr>
<tr>
<td>Did your class(es) complete an in-class activity on plagiarism?</td>
<td>___</td>
<td>100.0</td>
<td>___</td>
</tr>
<tr>
<td>Question</td>
<td>50.0</td>
<td>16.7</td>
<td>33.0</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>Do you feel you provided enough information on plagiarism to your students?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you feel you should have allocated more of class time to plagiarism?</td>
<td>33.3</td>
<td>50.0</td>
<td>16.7</td>
</tr>
<tr>
<td>Have you encountered plagiarized assignment(s) this semester?</td>
<td>16.7</td>
<td>83.3</td>
<td></td>
</tr>
<tr>
<td>Do you feel you have adequate knowledge of the University's policy to identify student plagiarism?</td>
<td>50.0</td>
<td>50.0</td>
<td></td>
</tr>
<tr>
<td>Do you feel you have adequate knowledge of the University's policy to handle student plagiarism?</td>
<td>83.3</td>
<td>16.7</td>
<td></td>
</tr>
<tr>
<td>Would you require students to complete a plagiarism tutorial if one was available for free?</td>
<td>50.0</td>
<td>16.7</td>
<td>33.3</td>
</tr>
</tbody>
</table>

Additionally, 50% of the pre-service faculty instructors reported that they do not feel they have adequate knowledge to identify plagiarism. Only one pre-service faculty instructor had a student who plagiarized. This instructor dealt with it informally, and the following was reported as to how and why it was handled this way: “A meeting was held with the student; it was my belief that the student did not maliciously plagiarize or do so out of laziness. There is a cultural difference and a language barrier as well. The student was given a “0”, was directed to the university’s policies and literature on plagiarism, and will be setting up an appointment with the writing centre.” The results from this question also reveal that 94.3% of the teacher candidates did not complete an in-class activity on plagiarism. When asked about making a plagiarism tutorial mandatory, 50% of the pre-
service faculty instructors stated they would require this from their students, 16.7% said no, and 33% said they were unsure.

**Plagiarism and Teaching Division Results**

In addition to the four research questions answered above, teaching division (primary/junior, junior/intermediate, and intermediate/senior) among the teacher candidates and engagement in plagiarism behaviours was looked at to see if there was a difference between the three groups as this data was available. An ANOVA was used. The dependent variable was the plagiarism behaviour averages, and the factor was teaching division. The results were not statistically significant, \( F(2, 32) = 2.038, p = .141 \).

**Plagiarism Engagement and Understandings of Plagiarism Results**

A bivariate regression was also conducted to determine if a relationship between students’ engagement in plagiarism and their plagiarism understandings existed. The purpose of using a bivariate regression was to determine the relationship between the independent and dependent variable. A new variable, plagiarism understandings average, was created based on the average scores in the third research question for the teacher candidates. A 0 was assigned to No, a 1 was assigned to Unsure, and a 3 was assigned to Yes. The dependent variable in this analysis was the plagiarism behaviour average scores, and the independent variable was the plagiarism understanding average scores. The results were significant in that people with higher understandings of plagiarism based on the five scenarios were less likely to engage in plagiarism, \( r^2 = .185, F(1, 33) = 7.477, p = .010 \). Thus, the teacher candidates who had high understandings of plagiarism were less
likely to report that they engaged in the plagiarism behaviours compared to the teacher candidates who had low understandings of plagiarism.
CHAPTER V

DISCUSSION

For the Discussion, each research question will be addressed individually. Following that, the limitations of this study will be outlined, recommendations for future studies will be noted, and implications will be addressed. Lastly, a conclusion will be provided.

Research Question 1: What is the self-reported rate of plagiarism among teacher candidates?

Engagement in plagiarism was present in this study among the pre-service teachers. Results from this study demonstrate that 51.43% of the participants admitted to engaging in plagiarism at least once during their time in the B.Ed. program. Since many studies on plagiarism group plagiarism and cheating into academic dishonesty and report that rate, it is difficult to compare the rate of plagiarism alone. The results from the self-reported rate of plagiarism in this study is much lower than the number found in Selwyn’s (2008) study (61.9% admitted to plagiarizing a term paper). In contrast, the finding from this study is much higher than that in Betler & du Pre’s (2009) study (25.8% of papers submitted contained plagiarism), Cochran et al. (1999) study (19% of participants plagiarized a term paper), and Ellery’s (2006) study (26% of essays submitted had plagiarism present). The finding from this study is similar to the number of students in Pino and Smith’s (2003) study in that 47.2% of participants never engaged in any forms of academic dishonesty. Direct comparison is not possible however, as Pino and Smith’s (2003) category of academic dishonesty included both cheating and plagiarism, and the breakdown for the two was not reported. Cummings et al. (2002)
reported that 5% of participants in their study plagiarized, which is much lower than the students enrolled in the teacher education program at this university (51.43% plagiarized at least once). The rate found in Cummings’ et al. (2002) study (5%) may be substantially lower than the rate found in this study is because students were asked about the inappropriate use of resources, and the number of items asked may be very few; the students may not have engaged in these behaviours as often as they would have in other behaviours, which may not have been asked in their survey.

In addition to analyzing overall rates of plagiarism, comparisons for some of the individual types of plagiarism behaviours can be examined. In this study, 22.9% of the participants copied a few sentences of material from a written source without footnoting them at least once during their time in the B.Ed. program, whereas Christensen Hughes and McCabe (2006) reported that 37% of the participants in their study did so. Additionally, 22.9% of participants in this study copied a few sentences from an Internet source without footnoting, and 35% of the participants in Christensen Hughes and McCabe’s study did so. A similar finding from this study was found in the 2006 University of Windsor study. The university study found that “20.7% copied a few sentences of material without citing/referencing them in paper” at least once (Voakes & Istl, 2006, p. 15), and 22.9% of participants in this study did so.

**Research Question 2:** Are teacher candidates who majored in one discipline for their undergraduate degree more likely to have plagiarized in the pre-service program compared to students who hold a different undergraduate degree? Since the teacher candidates have a minimum of an undergraduate degree, comparisons can be made among the different majors.
This study found that one’s engagement in plagiarism is not impacted by their undergraduate degree. A limitation of this, however, is that only five faculties were compared: Faculty of Human Kinetics, Faculty of Engineering, Faculty of Science, Inter-Program Faculty Environmental Studies, and Faculty of Arts and Social Sciences. Some of the previous studies found academic misconduct and academic integrity rates among specific majors: business majors (Chapman & Lupton, 2004) and criminal justice majors (Coston & Jenks, 1998). In addition to examining rates of academic misconduct among certain disciplines, some studies have compared such rates of students enrolled in different disciplines. For instance, Klein et al. (2007) did not find a significant difference in cheating between business students and students in other disciplines. Likewise, Lambert & Hogan (2004) did not find overall significant differences between criminal justice majors and students in the general education course. Selwyn (2008), however, did find differences in plagiarism rates among students enrolled in different subject disciplines.

**Research Question 3:** Are teacher candidates and pre-service faculty instructors aware of what plagiarism is?

When examining plagiarism understandings, approximately a fifth of the teacher candidates (22.86%) knew that plagiarism was present in each of the scenarios whereas 97% of pre-service faculty instructors knew it was present. The finding in this study for the teacher candidates is lower than what was found in Yeo’s (2007) study in which “Forty-six percent of students expressed a good understanding of the elements of plagiarism” (Yeo, 2006, p. 206). It is common for students to have poor understandings of plagiarism, and this is supported in the literature. A student in a case study in
Anyanwu’s (2004) study plagiarized, but it was because there was a misunderstanding and the student was ignorant that she plagiarized. Devlin and Gray (2007) and Ellery (2008) also found that one reason why students reported they plagiarize is due to their poor understanding of plagiarism. Interestingly, Baggaley and Spencer (2005) outline a master of education student who plagiarized six different times. In the sixth instance, the student was expelled. The reason given “In a final attempt to pre-empt his expulsion from the University, X, suggested that he now realized he had never fully understood the meaning of plagiarism as previously explained to him” (Baggaley & Spencer, 2005, p. 59). Participants in Wilkinson’s (2009) study reported that one of the main reasons why plagiarism occurs is because the rules of referencing; therefore, these students are not clear on how to reference their work properly which in turn may lead them to receive a zero on an assignment due to their poor understandings of referencing work.

Bertram Gallant and Drinan (2006) state that “Our research found, however, that more institutions are attending to the policing and punishing of academic dishonesty than to the promotion of academic integrity and educating students and faculty to its intent and importance” (Bertram Gallant & Drinan, 2006, p. 76). Plagiarism punishing is time-consuming for the instructors too. Postle (2009) shares that “Detection of plagiarism is becoming increasingly difficult and time consuming” (p. 353). This suggests that instructors may be spending more time reporting plagiarism cases than actually teaching about it and ways to avoid it which may account for why only 22.86% of the teacher candidate participants in this study were aware that each of the cases included plagiarism.

Although the majority of the instructors were aware that all of the scenarios included plagiarism, one instructor did not agree with scenario D (submitting the same
assignment to different courses even though permission to do so was not given). Thus, the pre-service faculty instructors may not agree on the presence of plagiarism in this behaviour. This can be troublesome for the teacher candidates. Some teacher candidates might be in a course in which the instructor permits them to do this, whereas other teacher candidates have instructors who do not allow this. So, the teacher candidates may be allowed to plagiarize in some courses but not in others. This may impact their understanding of plagiarism with regards to submitting the same assignment to different courses, as they may be encouraged to do so from some of their instructors, yet disciplined for doing so from other instructors. Submitting the same assignment to different courses involved recycling of one’s work. Bennett, Behrendt, and Boothby (2011) found that 22% of instructors in their study do not consider recycling work to constitute plagiarism whereas 24% were neutral and 50% do.

**Research Question 4:** What type of information do teacher candidates report they receive from pre-service instructors regarding plagiarism compared to the type of information the pre-service instructors state they share with teacher candidates?

The third research question, which assessed plagiarism understandings, revealed that a low percentage of teacher candidates are knowledgeable as to what constitutes plagiarism. It was reported that 31.4% of the teacher candidate reported that their instructors told them verbally that plagiarism information is on the course outline. This finding is similar to the instructor finding as 33.3% of pre-service faculty instructors reported they did so. None of the teacher candidates reported that all of their instructors read the plagiarism policy to them. This may demonstrate that not all instructors in this particular faculty discuss plagiarism with their students; however, it should be asked who
is responsible for ensuring the students are knowledgeable of plagiarism. Is it the instructor’s responsibility, administration’s responsibility, or the student’s responsibility to be educated on plagiarism? If the instructors do not discuss it then their students may not feel that it is an issue since class time was not spent on it. Moreover, 51.4% of the teacher candidate participants reported that all of their instructors include the plagiarism policy on the course outline, yet 100% of the pre-service faculty instructors report they include it. Thus, more than half of the teacher candidate participants knew that the plagiarism policy was on the course outline, but it would seem that they did not all take the time to read it as a low percentage were aware that the scenarios included plagiarism; this is despite the fact that the behaviours in the scenarios were directly taken from the plagiarism policy on the course outlines. Further, only 20% of the teacher candidate participants reported that all of their course instructors provided enough information on plagiarism compared to 50.0% of the pre-service faculty instructors who felt they did.

Additionally, 94.3% of the teacher candidate participants reported they did not complete an in-class activity on plagiarism and 100% of the pre-service faculty instructors reported they did not require their students to do so. This contrasts with recommendations found in the literature, such as “…our findings suggest that we must teach students to properly paraphrase their own work as well as to paraphrase articles and books they read for their class assignments” (Bennett, Behrendt, & Boothby, 2011, p. 34); “…many incidents of plagiarism are likely to result from ignorance and poor skill development rather than intentional cheating” (Breen & Maassen, 2005, p. 2). Devlin (2006) suggests that instructors “thoroughly educate students about the expected conventions for authorship and the appropriate use and acknowledgement of all forms of
intellectual material” (Devlin, 2006, p. 49). Regarding activities on plagiarism, half of the pre-service faculty instructors (50%) would require their students to complete a plagiarism tutorial if one was available, 33.3% reported they are unsure if they would have their students do so, and 16.7% reported no.

One interesting finding is that although 100% of the pre-service faculty instructor participants reported that the plagiarism policy is on the course outline, one of these participants did not rate all five scenarios as plagiarism. However, the scenarios were taken from the behaviours on the course outline. This may be problematic as an instructor might be sharing information with the course that is in line with the university’s policy but not actually follow that policy.

Limitations

The first limitation in this study is the low response rate. Although the response rate is similar to the response rate in Christensen Hughes and McCabe’s (2006) academic misconduct study, the low numbers did not allow for students with different majors to be compared and instead the students were grouped by faculty. If a greater number of teacher candidates completed the survey, engagement in plagiarism among specific majors could have been analyzed. Two ways to increase the response rate may have been to offer an incentive or to have the professors collaborate and administer the survey during class time and then take it up with the class.

The second limitation of this study is a large number of teacher candidate participants completed the majority of their schooling in Canada. If this sample had a greater number of students who completed their schooling in other countries, the results may have been different. A cultural effect may have been present indicating that students
from a certain background may have been more likely to engage in plagiarism are less likely to understand what plagiarism entails.

Recommendaitions

1. Future studies on academic integrity should continue to study plagiarism separately from general cheating or academic misconduct as opposed to grouping the specific behaviours for these two categories together. Looking at plagiarism and cheating separately allows for a breakdown by behaviour to see how often participants commit each type of academic misconduct.

2. It would be beneficial for future studies to examine academic misconduct and then compare the rates of cheating and plagiarism. Comparing these two behaviours will provide information as to which one is engaged in more frequently and by how much the engagement rates differ.

3. This study was quantitative, but qualitative information may have provided additional information. In this study, students were forced to select from one of the provided responses, and they were not able to provide additional information. If opportunities for explanations were provided in this study, particularly in the understandings of plagiarism items questions, the data collected could have been in-depth with regard to personal detail. For instance, instead of having participants report whether or not each of the five scenarios included plagiarism, if they were allowed to also explain why they felt plagiarism was not present, if they chose this as the option, would have provided knowledge on what the participants do not specifically understand about plagiarism.
4. If the faculty instructors in these courses discussed this study with their students and informed them that they would come back to it at a later time when the results were made available, it may have been more applicable for the teacher candidates and their participation may have been increased. Knowing that their instructor was going to discuss the results at a later time, teacher candidates may have felt encouraged to complete it since they would be familiar with the study when it was addressed at the end of the semester.

5. Studies on plagiarism should also look at why students plagiarize. This study found that when teacher candidates plagiarize, some admit that they are aware they are plagiarizing, but do not provide the reason for doing so. If students are knowingly plagiarizing, what is motivating them to do so? Having knowledge as to why students plagiarize may change practice. For instance, if students report that their workload in the program is too high during certain time periods, and they are resorting to plagiarism as a way to cut corners and save time, then this can be looked at in more depth by administrators, as a structural issue, as well as an administrative one.

6. Future studies on plagiarism could also ask participants to self-report their engagement on plagiarism and then share how often their friends plagiarize. If a relationship between the two is found, it might display that there is a type of academic misconduct “culture” and characteristics of those who plagiarize may be revealed.

7. Although this study asked participants if they have plagiarized, future studies can ask participants if they have plagiarized with a follow-up question reporting if
they were caught. If students are repeatedly plagiarizing and getting away with it, it would not be surprising for the rate of plagiarism to increase since there is no penalty. This would lead to evaluating the importance of academic misconduct in that institution.

**Future Implications**

From this study, it is evident that teacher candidates engage in plagiarism knowingly. Knowing that they are committing an “academic crime” and continuing to do so may have an impact beyond their university program. If teacher candidates are engaging in something they know is wrong, how will this carryover to their professional behaviour in their teaching career? Teachers are expected to have high professional standards and follow ministry and board policies; but if they are failing to follow university standards of ethical behaviours, what are the implications for their careers? A longitudinal study may help to answer this question. For instance, the teacher candidates who participated in this study and self-reported that they knowingly plagiarize could be asked at a later time how often they engaged in certain behaviours while teaching, such as using worksheets that a colleague has created without receiving permission to do so. Further study might reveal correlations between their plagiarism behaviours and their teaching practice behaviours.

It is apparent from the literature that one of the reasons why plagiarism occurs is because students have a poor understanding of plagiarism. Also, the additional finding in this study found that students with higher understandings of plagiarism are less likely to plagiarize compared to students with poor understandings of plagiarism. If plagiarism is taught at the beginning of the semester, it may save the instructors time during the year
since less time may be spent on calling students in, going over plagiarism in their assignments, and then deciding on a penalty and whether or not paper work needs to be filled out to file a formal complaint. This, of course, is at the discrepancy of the instructor. Instructors would need to follow the same plagiarism policy so that students understand what is and what is not plagiarism rather than some instructors treating certain behaviours as plagiarism and other instructors treating those same behaviours as not plagiarism, which may cause confusion and frustration among the students.

Also, international students may need extra guidance on this issue. As was reported in the results section, one pre-service faculty instructor who experienced plagiarism felt that this plagiarism occurred as a result of cultural difference. Students from certain countries may feel as though they do not have adequate English skills, and they may resort to passing off another’s work as their own for fear of falling behind or receiving a low mark. From personal experience working as a sessional at the university, I had seven cases of plagiarism. Six of these cases were from students who came here from a different country and were unaware that what they engaged in was plagiarism. Ensuring that all students receive information on plagiarism and are given the opportunity to practice these skills, the rate of plagiarism among students may be reduced.

Conclusion

Overall, plagiarism was present in this study amongst teacher candidates. Some of these participants plagiarized even though they were aware that what they were doing was plagiarism. There was no statistically significant difference between the plagiarism engagement rate among students enrolled in different faculties for their undergraduate degree. The teacher candidates in this study did not have adequate understandings of
plagiarism despite reporting that their course outlines contain the plagiarism policy. The pre-service faculty instructors had adequate understandings of plagiarism, but they did not agree 100% of the time on plagiarism behaviours. Differences were noted between the two groups with respect to education on plagiarism. Particularly, a low percentage of the teacher candidate participants reported they received enough information on plagiarism from all of their instructors (20%) compared to half of the pre-service faculty instructors who felt they provided enough information on this. Plagiarism is an issue, and dealing with students who have plagiarized takes time. A tutorial which addresses plagiarism may save instructors time, inform students what plagiarism is, and provide opportunities for students to practice the correct way to cite material.
REFERENCES


Park, C. (2003). In other (people’s) words: Plagiarism by university students –literature

Pickard, J. (2006). Staff and student attitudes to plagiarism at University College


Robinson-Zanartu, C., Pena, E., Cook-Moraless, V., Pena, A., Afshani, R., & Nguyen, L.
(2005). Academic crime and punishment: Faculty members perceptions’ of and r

Selwyn, N. (2008). ‘Not necessarily a bad thing....’: A study of online plagiarism
amongst undergraduate students. *Assessment & Evaluation in Higher Education,
33*(5), 465-479.

Publications.

Voakes, V., & Istl, D. (2006). *Student and Faculty Academic Integrity Assessment
Report: University of Windsor*. Retrieved from
http://www.uwindsor.ca/aio/reports.

APPENDIX A: Teacher Candidate Letter of Information

LETTER OF INFORMATION FOR CONSENT TO PARTICIPATE IN RESEARCH FOR TEACHER CANDIDATES

Title of Study: Plagiarism Incident Rates, Understandings, and Attitudes Among Teacher Candidates in the Faculty of Education.

You are asked to participate in a research study conducted by Julia Colella who is a graduate student in the Faculty of Education. The results of this study will contribute to her Master's Thesis.

If you have any questions or concerns about the research, please feel to contact Julia Colella (colell2@uwindsor.ca), by telephone at (519) 819-8900; or Dr. Terry Sefton (tsefton@uwindsor.ca), by telephone at (519) 253-3000 ext. 3832.

PURPOSE OF THE STUDY

The purpose of this study is to investigate plagiarism reportage among the teacher candidates enrolled in the University of Windsor’s Faculty of Education pre-service program during the 2011-2012 academic year. This study will also investigate plagiarism understandings and plagiarism attitudes of the pre-service faculty instructors (faculty members and sessionals) in the Faculty of Education.

PROCEDURES

If you volunteer to participate in this study, you will be asked to complete an anonymous online survey. The survey will take you approximately fifteen minutes to complete. You will only need to complete this survey once, and it must be completed in one sitting. You will not be able to save your answers and return to them at a later date to complete the survey. The link to access the survey and the Password are at the end of this letter of information.
POTENTIAL RISKS AND DISCOMFORTS

There are no foreseeable risks, discomforts, or inconveniences involved by your participation in this study.

POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

You will be able to review the results of the study which will allow you to determine if you were accurate in your understanding of plagiarism. This study will also add to the current literature regarding plagiarism in higher education, specifically in the Canadian context as research in this context is currently limited.

COMPENSATION FOR PARTICIPATION

You will not receive compensation for participating in this study.

CONFIDENTIALITY

The responses to the survey will be anonymous. You will use a generic Password to complete the study. Your IP address will not be collected.

PARTICIPATION AND WITHDRAWAL

You can choose whether or not to be in this study. If you volunteer to be in this study, you have the ability to withdraw at any time without consequences of any kind. To withdraw from participating in this study, click the Discard responses and exit button. You will then be asked to confirm that you want to end your participation in the pop-up box.

Clicking this will end your participation, and any responses you have provided prior to withdrawing will not be included in the data analysis.
FEEDBACK OF THE RESULTS OF THIS STUDY TO THE SUBJECTS

The findings of this study will be made available to you on April 30, 2012. The findings will be posted on the Faculty of Education’s website (uwindsor.ca/education) as well as the REB website. Since this survey is anonymous, you will not be contacted with the results.

Date when results will be available: April 30, 2012

SUBSEQUENT USE OF DATA

Data will be kept for possible secondary use.

RIGHTS OF RESEARCH SUBJECTS

If you have questions regarding your rights as a research subject, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: ethics@uwindsor.ca

*Please print a copy of this letter of information for consent to participate in this study for your own records.

By clicking the survey link you are acknowledging that you consent to participate in the research.

Login Instructions:

Password: plagiarism1

Survey link: http://uwindsor.fluidsurveys.com/s/uofwteachercandidatesplagiarismstudy/
LETTER OF INFORMATION FOR CONSENT TO PARTICIPATE IN RESEARCH FOR PRE-SERVICE FACULTY INSTRUCTORS

Title of Study: Plagiarism Incident Rates, Understandings, and Attitudes Among Teacher Candidates in the Faculty of Education.

You are asked to participate in a research study conducted by Julia Colella who is a graduate student in the Faculty of Education. The results of this study will contribute to her Master’s Thesis.

If you have any questions or concerns about the research, please feel to contact Julia Colella (colell2@uwindsor.ca), by telephone at (519) 819-8900; or Dr. Terry Sefton (tsefton@uwindsor.ca), by telephone at (519) 253-3000 ext. 3832.

PURPOSE OF THE STUDY

The purpose of this study is to investigate plagiarism reportage among the students enrolled in the University of Windsor’s Faculty of Education pre-service program during the 2011-2012 academic year. This study will also investigate plagiarism understandings and plagiarism attitudes of the pre-service teachers and faculty instructors (faculty members and sessionals) in the Faculty of Education.

PROCEDURES

If you volunteer to participate in this study, you will be asked to complete an anonymous online survey. The survey will take you approximately five minutes to complete. You will only need to complete this survey once, and it must be completed in one sitting. You will not be able to save your answers and return to them at a later date to complete the survey. The link to access the survey and the Password are at the end of this letter of information.
POTENTIAL RISKS AND DISCOMFORTS

There are no foreseeable risks, discomforts, or inconveniences involved by your participation in this study.

POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

You will benefit from participating as the results will reveal your students' attitudes about this topic which may encourage you to address this topic differently the following semester. This study will also add to the current literature regarding plagiarism in higher education, specifically in the Canadian context as research in this context is currently limited.

COMPENSATION FOR PARTICIPATION

You will not receive compensation for participating in this study.

CONFIDENTIALITY

The responses to the survey will be anonymous. You will use a generic Password to complete the study. Your IP address will not be collected.

PARTICIPATION AND WITHDRAWAL

You can choose whether or not to be in this study. If you volunteer to be in this study, you have the ability to withdraw at any time without consequences of any kind. To withdraw from participating in this study, click the Discard responses and exit button. You will then be asked to confirm that you want to end your participation in the pop-up box.

Clicking this will end your participation, and any responses you have provided prior to withdrawing will not be included in the data analysis.
FEEDBACK OF THE RESULTS OF THIS STUDY TO THE SUBJECTS

The findings of this study will be made available to you on April 30, 2012. The findings will be posted on the Faculty of Education's website (uwindsor.ca/education) as well as the REB website. Since this survey is anonymous, you will not be contacted with the results.

Date when results will be available: April 30, 2012

SUBSEQUENT USE OF DATA

Data will be kept for possible secondary use.

RIGHTS OF RESEARCH SUBJECTS

If you have questions regarding your rights as a research subject, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: ethics@uwindsor.ca

*Please print a copy of this letter of information for consent to participate in this study for your own records.

By clicking the survey link you are acknowledging that you consent to participate in the research.

Login Instructions:

Password: plagiarism2

Survey link: http://uwindsor.fluids-surveys.com/surveys/julia/course-instructor-plagiarism/
FACULTY OF EDUCATION
University of Windsor

October, 2011

Julia Collela has my permission to have the Pre-Service Program secretary send a recruitment/letter of information to all of the pre-service teachers in the consecutive education program as well as to the pre-service instructors. This letter will contain the link to her survey. She also has permission to have our office send a follow-up reminder.

Dr. Clinton Beckford
Associate Dean, Pre-Service
APPENDIX D: Teacher Candidate Survey

Teacher Candidate Plagiarism

1) Please select your age
   a) 23 years or younger
   b) 24-28 years
   c) 29-33 years
   d) 34-38 years
   e) 39-43 years
   f) 44 years or older

2) Please type your gender in the box below

3) Select the number of years it took you to complete your undergraduate degree.
   a) 3 years or less
   b) 4 years
   c) 5 years
   d) 6 or more years

4) Which teaching division are you in?
   a) Primary/Junior
   b) Junior/Intermediate
   c) Intermediate/Senior

5) Please type your undergraduate major in the box below (for example, business major, psychology major, etc.).

6) Did your undergraduate degree lead to a professional accreditation?
   a) No
   b) Yes (if yes, please explain in the box)

7) Please indicate your highest level of education.
   a) Undergraduate degree
   b) Graduate degree
   c) PhD
8) Where applicable, please type the name of the country you completed your following education.
   a) Elementary school
   b) High school
   c) Undergraduate degree
   d) Graduate degree (if applicable)
   e) PhD (if applicable)

In this section, you will answer questions regarding your involvement in specific behaviours. After you have read a behaviour, report if you have never engaged in that behaviour during your time in the B.Ed. program, engaged in that behaviour once during the B.Ed. program, or engaged in that behaviour more than once during your time in the B.Ed. program.

1) During your time in the B.Ed. program, how often have you copied a few sentences of material from a written source without footnoting them in the paper?
   a) Never
   b) Once
      Follow up: Did you know at the time that is was plagiarism? (Yes or No)
   c) More than once
      Follow up: Were you aware that it was plagiarism any of the times you engaged in that behaviour? (Yes or No)

2) During your time in the B.Ed. program, how often have you copied a few sentences from an Internet source without footnoting them in the paper?
   a) Never
   b) Once
      Follow up: Did you know at the time that is was plagiarism? (Yes or No)
   c) More than once
      Follow up: Were you aware that it was plagiarism any of the times you engaged in that behaviour? (Yes or No)

3) During your time in the B.Ed. program, how often have you copied a friend's program rather than create your own program in a computer course? If you did not have to take a computer course that required you to create a program, choose the fourth option (not applicable)?
   a) Never
   b) Once
      Follow up: Did you know at the time that is was plagiarism? (Yes or No)
   c) More than once
      Follow up: Were you aware that it was plagiarism any of the times you engaged in that behaviour? (Yes or No)
4) During your time in the B.Ed. program, how often have you turned in written work done by someone else?
   a) Never
   b) Once
      Follow up: Did you know at the time that is was plagiarism? (Yes or No)
   c) More than once
      Follow up: Were you aware that it was plagiarism any of the times you engaged in that behaviour? (Yes or No)

5) During your time in the B.Ed. program, how often have you copied material word for word from a written source and turned it in as your own?
   a) Never
   b) Once
      Follow up: Did you know at the time that is was plagiarism? (Yes or No)
   c) More than once
      Follow up: Were you aware that it was plagiarism any of the times you engaged in that behaviour? (Yes or No)

6) During your time in the B.Ed. program, how often have you provided a previously graded assignment for someone to submit as their own?
   a) Never
   b) Once
      Follow up: Did you know at the time that is was plagiarism? (Yes or No)
   c) More than once
      Follow up: Were you aware that it was plagiarism any of the times you engaged in that behaviour? (Yes or No)

7) During your time in the B.Ed. program, how often have you turned in a paper copied from another student?
   a) Never
   b) Once
      Follow up: Did you know at the time that is was plagiarism? (Yes or No)
   c) More than once
      Follow up: Were you aware that it was plagiarism any of the times you engaged in that behaviour? (Yes or No)

8) During your time in the B.Ed. program, how often have you turned in a paper obtained in large part from a term paper "mill" that did not charge?
   a) Never
   b) Once
      Follow up: Did you know at the time that is was plagiarism? (Yes or No)
   c) More than once
      Follow up: Were you aware that it was plagiarism any of the times you engaged in that behaviour? (Yes or No)
9) During your time in the B.Ed. program, how often have you turned in a paper obtained in large part from a term paper "mill" that did charge?
   a) Never  
b) Once  
   Follow up: Did you know at the time that is was plagiarism? (Yes or No)  
c) More than once  
   Follow up: Were you aware that it was plagiarism any of the times you engaged in that behaviour? (Yes or No)  

10) During your time in the B.Ed. program, how often have you recycled your own material (submitted an assignment you completed in one course to another course)?
   a) Never  
b) Once  
   Follow up: Did you know at the time that is was plagiarism? (Yes or No)  
c) More than once  
   Follow up: Were you aware that it was plagiarism any of the times you engaged in that behaviour? (Yes or No)  

In this section you will read five scenarios. After reading a scenario, decide if the student(s) has/have committed plagiarism. If you are unsure whether the student has committed plagiarism, select Unsure (third option).

1) Student A has to do research on cognitive development for an Educational Psychology course. Student A does not have time to write the entire paper, so this student copies a few paragraphs online and submits the assignment as their own. Did Student A engage in plagiarism?
   a) Yes  
b) No  
c) Unsure  

2) Student B submits a report on Bullying for a Law and Ethics course. Student B used a journal article on bullying and paraphrased some of the concepts in the report. Student B does not reference the source. Did Student B engage in plagiarism?
   a) Yes  
b) No  
c) Unsure
3) As part of a literacy report, Student C has to include a passage on adverbs in it. This student finds information on adverbs in a blog, and uses this material in the report. Student C does not use quotation marks or acknowledge the source. Did Student C engage in plagiarism?
   a) Yes
   b) No
   c) Unsure

4) Student D submitted the same lesson plan to both a mathematics course and a science course. Permission to do this was not given. Did Student D engage in plagiarism?
   a) Yes
   b) No
   c) Unsure

5) The major assignment in a physical education course requires students to submit a one-page write-up on a health-related topic of their choice. Student E, Student F, and Student G work on the assignment together, but they modify parts of it so their submissions are not identical. Group work is not permitted for this assignment. Did these three students engage in plagiarism?
   a) Yes
   b) No
   c) Unsure

**In this section you will answer questions regarding your course instructors and plagiarism.**

1) How many of your course instructors include the plagiarism policy in the course outline?
   a) None
   b) Some
   c) Most
   d) All

2) How many of your course instructors verbally told you that information regarding plagiarism can be found on the course outline?
   a) None
   b) Some
   c) Most
   d) All
3) How many of your course instructors read the plagiarism policy in the course outline to you?
   a) None  
   b) Some  
   c) Most  
   d) All

4) How many of your course instructors sent information regarding plagiarism to you electronically (CLEW or email)?
   a) None  
   b) Some  
   c) Most  
   d) All

5) How many of your course instructors asked you to complete an in-class activity on plagiarism?
   a) None  
   b) Some  
   c) Most  
   d) All

6) Do you feel that your course instructors provided enough information to you on plagiarism?
   a) None  
   b) Some  
   c) Most  
   d) All

7) Do you feel that your course instructors should have allocated more class time to plagiarism?
   a) None  
   b) Some  
   c) Most  
   d) All

8) To your knowledge, did your course instructors report or discipline any students for plagiarism?
   a) None  
   b) Some  
   c) Most  
   d) All

If you are ready to submit your responses, click the Submit button. Thank you for taking the time to complete this survey.
APPENDIX E: Pre-Service Faculty Instructor Survey

Course Instructor Plagiarism

1) Please select your age
   a) 23 years or younger
   b) 24-28 years
   c) 29-33 years
   d) 34-38 years
   e) 39-43 years
   f) 44 years or older

2) Please type your gender in the box below
   

3) Select the number of pre-service courses you are currently teaching.
   a) 1 course
   b) 2 courses
   c) 3 courses
   d) 4 courses
   e) 5 courses
   f) 6 courses
   g) 7 or more courses

4) Select your status within the Faculty of Education.
   a) Sessional
   b) Faculty member
   c) Other (please, specify) 

5) Please indicate your highest level of education.
   a) Undergraduate degree
   b) Graduate degree
   c) PhD

6) Which pre-service course(s) do you teach? If you prefer not to answer, type "Prefer not to answer" in the box.


79
7) What is your area of concentration (mathematics, English, etc)?

In this section you will read five scenarios. After reading a scenario, decide if the student(s) has/have committed plagiarism. If you are unsure whether the student has committed plagiarism, select Unsure (third option).

1) Student A has to do research on cognitive development for an Educational Psychology course. Student A does not have time to write the entire paper, so this student copies a few paragraphs online and submits the assignment as their own. Did Student A engage in plagiarism?
   a) Yes
   b) No
   c) Unsure

2) Student B submits a report on Bullying for a Law and Ethics course. Student B used a journal article on bullying and paraphrased some of the concepts in the report. Student B does not reference the source. Did Student B engage in plagiarism?
   a) Yes
   b) No
   c) Unsure

3) As part of a literacy report, Student C has to include a passage on adverbs in it. This student finds information on adverbs in a blog, and uses this material in the report. Student C does not use quotation marks or acknowledge the source. Did Student C engage in plagiarism?
   a) Yes
   b) No
   c) Unsure

4) Student D submitted the same lesson plan to both a mathematics course and a science course. Permission to do this was not given. Did Student D engage in plagiarism?
   a) Yes
   b) No
   c) Unsure
5) The major assignment in a physical education course requires students to submit a one-page write-up on a health-related topic of their choice. Student E, Student F, and Student G work on the assignment together, but they modify parts of it so their submissions are not identical. Group work is not permitted for this assignment. Did these three students engage in plagiarism?
   a) Yes
   b) No
   c) Unsure

In this section (the last section), you will be asked to answer questions about plagiarism attitudes.

1) Do you have the University's plagiarism policy in your course outline(s)?
   a) Yes
   b) No
   c) Unsure

2) Did you verbally explain to your course(s) that plagiarism information can be found in the course outline?
   a) Yes
   b) No
   c) Unsure

3) Did you discuss plagiarism in your class(es)?
   a) Yes
   b) No
   c) Unsure

4) Did you send plagiarism information to your class(es) electronically (CLEW or email)?
   a) Yes
   b) No
   c) Unsure

5) Did your class(es) complete an in-class activity on plagiarism?
   a) Yes
   b) No
   c) Unsure

6) Do you feel you provided enough information on plagiarism to your students?
   a) Yes
   b) No
   c) Unsure
7) Do you feel you should have allocated more of class time to plagiarism?
   a) Yes
   b) No
   c) Unsure

8) Have you encountered plagiarized assignment(s) this semester?
   a) Yes
      Follow-up: Did you deal with it formally and report it? (Yes or No)
      If yes, What were the consequence(s) for the student?

   If no, Did you deal with it informally with the student(s)? (Yes or No)
      If yes, How did you deal with it informally?

   b) No

9) Do you feel you have adequate knowledge of the University's policy to identify
   student plagiarism?
   a) Yes
   b) No
   c) Unsure

10) Do you feel you have adequate knowledge of the University's policy to handle
    student plagiarism?
    a) Yes
    b) No
    c) Unsure

11) Would you require students to complete a plagiarism tutorial if one was available
    for free?
    a) Yes
    b) No
    c) Unsure

If you are ready to submit your responses, click the Submit button. Thank you for
taking the time to complete this survey.
Hi Dr. McCabe,
My name is Julia Colella, and I am a master’s student at the University of Windsor in Windsor, Ontario, Canada. I recently spoke to you on the phone about using some items in a survey. For my thesis, I want to look at plagiarism perceptions as well as the incidence rate among pre-service teachers in the Faculty of Education at the University of Windsor. The thesis will contribute to my master’s degree. I was wondering if I can use the items below in my thesis. I took these items from the Center for Academic Integrity’s Assessment Project.
Thank you for your time.
Julia

<table>
<thead>
<tr>
<th>During this semester, how often have you:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) copied a few sentences of material from a written source without footnoting them in the paper</td>
</tr>
<tr>
<td>2) copied a few sentences from an Internet source without footnoting them in the paper</td>
</tr>
<tr>
<td>3) copied a friend’s program rather than doing your own in a computer course</td>
</tr>
<tr>
<td>&quot;will have the option “not applicable”&quot;</td>
</tr>
<tr>
<td>4) turned in written work done by someone else</td>
</tr>
<tr>
<td>5) copied material word for word from a written source and turned it in as your own</td>
</tr>
<tr>
<td>6) provided a previously graded assignment to someone to submit as their own</td>
</tr>
<tr>
<td>7) turned in a paper copied from another student</td>
</tr>
<tr>
<td>8) turned in a paper obtained in large part from a term paper &quot;mill&quot; that did not charge</td>
</tr>
<tr>
<td>9) turned in a paper obtained in large part from a term paper &quot;mill&quot; that did charge</td>
</tr>
</tbody>
</table>

McCabe, Donald dmccabe@business.rutgers.edu via uwindsor.ca

You have my permission to use these but I would caution that students seem to ‘confuse’ the first two items by including material they access from a written source via the Internet as copying from a written source.

From: julia.colella13@gmail.com [julia.colella13@gmail.com] On Behalf Of Julia Colella [colellj2@uwindsor.ca]
Sent: Monday, October 24, 2011 1:10 PM
To: Don McCabe
Subject: Center for Academic Integrity’s Assessment Project - Survey Items
VITA AUCTORIS

NAME: Julia Colella

PLACE OF BIRTH: Windsor, Ontario

EDUCATION: Bachelor of Arts (Psychology and Sociology)
University of Windsor
Windsor, Ontario
2003-2007

Bachelor of Education (Primary/Junior)
University of Windsor
Windsor, Ontario
2009-2010

Master of Education (Curriculum Development)
University of Windsor
Windsor, Ontario
2010-2012