Where Sharing Should Not Go: An Environmental Scan of Originality Assurance Awareness and Efforts to Discourage or Prevent Plagiarism

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ABSTRACT

Plagiarism is a significant issue on campuses around the world. Ensuring the originality of PhD dissertations and Master’s Theses has been undertaken using a variety of different means. However, a comprehensive overview of the landscape of originality assurance had yet to be conducted. This paper provides the most current review of the plagiarism issue and how universities are addressing it. Results of an environmental assessment of nearly 300 graduate students, faculty, librarians, and academic administrators are provided along with an overview related to universities’ education of students and faculty about the plagiarism issue. Data from the survey sheds light on both attitudes toward plagiarism and how plagiarism is addressed on a university and classroom basis. In addition to presenting the results of the survey, discrepancies found on a subject basis as well as differences between the groups studied are discussed. Finally, this paper recommends areas for future research.

Keywords (Required)
Plagiarism, originality assurance, institutional repository, IR, patch writing

INTRODUCTION

Every university-based electronic thesis and dissertation (ETD) program assists faculty by documenting student scholarship and, when necessary, verifying the authenticity of the content in their repository on behalf of their institution. While there are many ways of approaching this effort, a comprehensive overview of the landscape of originality assurance has yet to be undertaken. This paper aims to provide most current 2011 review of the issue and how universities are addressing it. The topic of plagiarism in higher education provides a starting point and common denominator when discussing authenticity of student scholarship. Journal articles, conference papers, theses, and even the popular press have written about this topic often. (Schaefer, 2010; Rogers, 2009; Bouman, 2009; Eckel, 2010; Garnica, 2010) Typically, treatment of this topic is definition-based (‘what is plagiarism’) (Schaefer, 2010; Bouman, 2009; Anonymous, 2009a) or solution-based (‘how to solve the problem of plagiarism’). (Malgwi and Rakovski, 2009; Ragusa, 2009; East, 2010) However, there have been few studies that have looked at what universities are doing to minimize plagiarism. The purpose of this paper is to provide an overview of how universities are educating students and faculty about the issue and report on the environmental assessment survey which sought responses from a representation of students, faculty, librarians, and academic administrators. Data representation of notable results will allow the authors to highlight discrepancies found on a subject discipline basis. In addition to presenting the results of the survey, the paper discusses discrepancies within subject disciplines and amongst the groups studied. An insufficient number of undergraduate student survey responses were received to either report on or draw any hypothesis about undergraduate teaching or student behavior. In addition, the relatively small survey response in some disciplines and user groups may not meet a test of statistical significance.

METHODOLOGY

A survey was conducted in May of 2011 among faculty, academic administrator, graduate students and librarians. A Google Doc™ form at a stable URL served as the data collector, automatically feeding submissions into an exportable spreadsheet. A call for participation was made to several listservs with an
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explanation and link to the survey form. Distribution lists included ETD-L (listserv run by the Networked Digital Library of Theses and Dissertations), CGS-L (listserv run by the Council of Graduate Schools), and a variety of announcements and links to the survey distributed through social media, primarily Twitter™ and Facebook™. Motivation for completing the survey on a voluntary basis was provided by offering two randomly drawn gift certificates. Each respondent’s email address was collected for the purpose of the drawing. Prior to data analysis the email address was separated from the survey results. The survey questions intentionally excluded demographic data or other means of identifying participants. The accuracy of self submitted demographic or institutional data could not be verified in this study design. 275 participants completing the survey. Ambiguous, incomplete, or irrelevant survey results were removed from the analysis, leaving 268 survey results for analysis.

Graduate students were the highest number of participants (Figure 1) (Greenberg and Mclean, 2011i), followed by faculty and librarians. Academic administrators were also invited to participate in the survey.

Subject discipline among participants was reviewed as part of the analysis. (Figure 1) (Greenberg and Mclean, 2011i) Among graduate students, those in the arts and humanities had the highest participation, followed by basic or laboratory sciences. Engineering and social science/business also had strong participation rates. Faculty in the social sciences / business areas had the largest participation, with health sciences, basic / laboratory sciences and humanities and the arts also having strong showings. Among librarians, those in the health sciences made up the largest subset. One author’s work as a health sciences librarian and his use of social media for promotion is probably responsible for unbalanced subject discipline librarian participation.

![Figure 1: Survey Responses Analyzed (n=268)](image)

RESULTS

Respondents were questioned about their knowledge of an explicit plagiarism/copyright policy posted on a university website, repository or course management system. (Figure 2) (Greenberg and Mclean, 2011o) The majority of respondents (n=193 or 72%) indicated awareness of a policy, though nearly 28% did not. In an age of ubiquitous electronic scholarship and publishing, one could be concerned about the minority report with no immediate awareness. At the same time, many students, faculty, and other professionals can readily search their campus web site, if a policy needed to be located. More than 70% indicating immediate awareness demonstrates active discussion and advice on this topic is taking place.

Respondents were asked whether they believed that PhD dissertations or master’s theses were more likely to be plagiarized when available electronically. (Figure 3a) (Greenberg and Mclean, 2011p) Results from faculty were evenly split, with 24 faculty indicated an increased risk of plagiarism and 23 replying that plagiarism risk was not increased. There were several areas where there was marked disagreement of viewpoints. The results indicated that 3 out of 5 faculty members in social sciences or business (SO) believed that plagiarism was more likely to occur, while 5 out of 7 faculty members in basic sciences (BS) held the view that plagiarism did not increase along with availability. Several recent papers acknowledge a faculty belief that electronic thesis availability promotes plagiarism. (Abrizah, 2009; Saldaña-Gastulo et
al., 2010; Yiotis, 2008; Južnic, 2009)

When comparing these findings to results from the students, the authors find that unlike faculty, there was similarity among those in SO and humanities (HU). (Figure 3b) (Greenberg and Mclean, 2011q) The largest difference in opinion appeared among those in HU, where students that did not believe ETD repositories increased plagiarism outnumbered those that did, by a ratio of 3 to 2. Students in BS, Engineering (EN) and SO had a similar balance of opposing viewpoints.

In contrast to their responses regarding the potential threat of plagiarism in the electronic environment, students expressed significantly less concern about their own writing being plagiarized. (Figure 4) (Greenberg and Mclean, 2011e) There was a greater substantial majority, by an average 2 to 1 ratio, which did not fear plagiarism of their own work. It’s possible to hypothesize that, having grown up in a culture of sharing music, books, or opinions through social media, students are less sensitive to the idea of plagiarism. Nor do they have the professional experience to comprehend the personal consequences for misuse of their scholarship.

Awareness of an institutional repository stood at 53%. (Figure 5) (Greenberg and Mclean, 2011r) However, a significant number of respondents were not sure if a repository existed on their local campus. Few respondents reported that their university did not host an institutional repository.

Re-use of one’s own original content is commonly viewed as plagiarism in the literature (Anonymous, 2009b; Bretag and Mahmud, 2009; Chalmers, 2009). However, among faculty, the survey found that awareness of re-use as plagiarism was not as widely held as generally imagined. (Figure 6a) (Greenberg and Mclean, 2011f) Only faculty in SO shared this common opinion. Faculty in other disciplines were much more evenly split, with some faculty, such as those in BS and O, indicating that re-use was not plagiarism. This result indicates that universities should spend additional instruction time ensuring those faculties are aware of the common perception of reuse as plagiarism, lest their university have potentially embarrassing occurrences on their campuses.

When compared with faculty responses, students had a much stronger view of re-use as plagiarism. (Figure 6b) (Greenberg and Mclean, 2011g) Students in BS, EN, SO and O viewed re-use as plagiarism, with those in BS and EN expressing this view by a wide margin compared to other disciplines. Students in HU did not view re-use as plagiarism by nearly a 3:5 ratio. This contrasts with faculty in HU, who do view re-use as plagiarism. The limitations of a small sample size also limit the strength of this evidence, though we hope it can promote discussion and motivation for further study.

Incidents of plagiarism were said to be fairly common on campuses, with a majority of administration, faculty, graduate students and librarians all indicating that they were aware of at least one plagiarism issue at their university. (Figure 7) (Greenberg and Mclean, 2011h) Graduate students, by a margin of nearly 2 to 1, said that they were aware of these incidents, while librarians by a margin in excess of 4 to 1 were aware of such instances. Interestingly, almost 1/3 of administrators were not aware of instances of plagiarism, meaning that this group may not have been made aware of the incidents of plagiarism that occurred on their campuses. Librarians clearly are in the forefront of knowledge regarding plagiarism occurrences on campus.

Of those who were aware of an incident of plagiarism on campus, more than 2/3 found the university’s response to be either adequate or appropriate (figure 8) (Greenberg and Mclean, 2011s). Nearly 1/3 found the response to be inefficient, and a small number found the response exemplary. Faculty, students, administrators and librarians were split fairly evenly along these lines. The authors conclude that at most universities, faculty, students and staff believe that incidents of plagiarism are being handled appropriately.

**PATCH WRITING**

Patch writing (or "patchwriting") is a teaching tool where words, phrases, and sentences from sources are copied in either exact form or with few changes and mixed with a student’s original writing. (Linneman, 2010) Rebecca Moore Howard is said to have developed this term, and described its use among English as a second language (ESL) students as a learning tool (Linneman, 2010). For students that include patch writing as their own, Linneman concluded that this was a sign that the student was in need of instruction. She put forward the notion that the teaching should not be simply along the lines of a single instructional event, but should be included as part of the student’s education in the long term. Abasi reached a similar
conclusion, noting that institutional policies had a profound impact on student’s approach to patch writing and plagiarism. (Abasi, 2008) Further, he advocated for seminars geared toward ESL students which would be held when the graduate students began writing in earnest.

Based on this survey’s results, faculty in the health sciences were the most concerned about patch writing leading to plagiarism, while basic or laboratory science faculty were the only group to believe that patch writing did not encourage plagiarism (Figure 9b) (Greenberg and Mclean, 2011u). Several disciplines expressed confusion around the issue, with those in the social sciences or businesses and computer science of information technology expressing the most uncertainty about the impact of patch writing on plagiarism. Participants from all disciplines believed that patch writing either did not have an impact or were not sure of the impact.

In comparison to faculty, more administrators expressed the belief that patch writing did not contribute to plagiarism, with at least one administrator in the social sciences or business, humanities & the arts and computer science or information technology putting forward this view (Figure 9a) (Greenberg and Mclean, 2011t). Like faculty, there was considerable uncertainty about this topic, with those administrators in the health sciences and nearly all of the basic or laboratory science administrators indicating that they were not sure if patch writing led to plagiarism.

Presumably graduate students engage in the greatest amount of patch writing, given the description of this type of writing as a way to hone one’s writing skills. Perhaps due to this group’s writing skills and experience, concern about patch writing leading to plagiarism was lowest among this group (Figure 9c) (Greenberg and Mclean, 2011v). The majority of those in other / multidisciplinary fields, as well as a fairly large number of humanities & the arts students, did not hold the view that patch writing led to plagiarism. Like administrators, 100% of graduate students in the health sciences field were not sure if patch writing led to plagiarism. Those in humanities & the arts and basic or laboratory science were nearly split in their view regarding whether patch writing encourages plagiarism.

. Like administrator and graduate students, many librarians were unsure about patch writing and the affect on plagiarism (figure 9d). Over 50% of both health sciences and other / multidisciplinary librarians were not sure about patch writing and its affect on plagiarism.

**PLAGIARISM DETECTION SOFTWARE**

The prevalence of plagiarism detection software on some campuses prompted survey questions around its prevalence and use among survey participants. Many universities use plagiarism detection software as a part of a larger campus initiative. This integrated approach is recommended by several in the literature. (Boehm, Justice & Weeks 2009, Carroll 2009, Ryan et al. 2009, Jameson 2009)

In our literature review there were no reports of specific student knowledge of plagiarism detection software and its use on campus. Our survey found that over 50% of respondents did not know whether plagiarism detection software was used on campus (Figure 10) (Greenberg and Mclean, 2011a). Exactly 25% of respondents did know that software was used on their campus, and a nearly equal amount was certain that plagiarism detection software was used on campus. The authors conclude that plagiarism detection software does not have the visibility that many assume, based on the amount of discussion that this engenders.

Most graduate students reported that submission of class assignments to plagiarism detection software was not mandatory (Figure 11) (Greenberg and Mclean, 2011j). This finding runs counter to other studies which have indicated compulsory submission was a requirement. Further research will need to be conducted to understand how widespread this phenomenon is among universities. The finding of minimal required submissions using plagiarism detection runs counter to what the authors found in the literature review, where submission to plagiarism detection was mandated (Thurmond 2010, Rai 2010, Lee, Bani & Chen 2009).

Most faculty were not required to attend or participate in plagiarism or copyright policy training (Figure 12a) (Greenberg and Mclean, 2011k). Only 20% of those in social sciences or business, 29% of those in humanities and the arts, 25% of engineers and 33% of computer science or information technology reported having a electronic or class based training program.

Web-based information provision and interactive training was the most popular form of plagiarism training
for faculty (Figure 12b) (Greenberg and Mclean, 2011l). The survey found that nearly 85% of responding faculty was directed to a website to receive information regarding plagiarism as a method of instruction. Interactive tutorials conducted via the web were provided to 71% of the respondents. Only 29% of responding faculty had some form of face to face training, consisting of library instruction or group training.

For faculty who received plagiarism training, over 50% of training was concluded in less than one hour (Figure 12c) (Greenberg and Mclean, 2011w). However, 43% of faculty report training that lasted longer than one hour.

The majority of graduate students did not receive specific training related to plagiarism (Figure 13a) (Greenberg and Mclean, 2011b). However, some disciplines did devote specific attention to this topic. Respondents in two disciplines reported a high degree of instruction compared to other disciplines. Respondents in Engineering (EN) and basic or laboratory science (BS) reported that over 50% had attending training of some kind. Humanities and the arts (HU) and computer science (CS) respondents reported similar findings, with 43% and 42% respectively receiving training related to plagiarism.

Web-provided training was also popular for instructing graduate students regarding plagiarism (Figure 13b) (Greenberg and Mclean, 2011m). All disciplines other than EN reported that web-provided training, most frequently in the form of website information or handouts, was supplied. (Interestingly, EN students reported that “other types of instruction” was the dominant method of training.) Faculty group discussions and web-based interactive tutorials were also popular methods of training graduate students. Library instruction was the least popular way for graduate students to receive instruction related to plagiarism.

Graduate students reported that training typically lasted less than one hour for the majority of disciplines (Figure 13c) (Greenberg and Mclean, 2011c). The notable exception is with EN students, most of whom had training which lasted between 2 – 5 hours. 50% or more of students in the BS, CS, and HU disciplines had experienced plagiarism training which lasted between 1 and 5 hours.

The survey found that the most widely used method for discouraging or preventing plagiarism was via a student agreement or code of conduct (Figure 14) (Greenberg and Mclean, 2011n). Website information and handouts was the second most popular method. 119 respondents reported classroom education, while some respondents reported that no procedures or polices were in place.

The final survey question asked respondents about the effectiveness of an institution’s procedures and protocols used to prevent plagiarism (Figure 15) (Greenberg and Mclean, 2011d). Nearly 43% of respondents indicated that their university did an average job of preventing plagiarism. In a rather standard normalized distribution, nearly 31% of respondents indicated that their university’s procedures tended toward, or achieved, effectiveness, and just over 26% reported that their institution was less than effective with plagiarism detection.

CONCLUSION

This survey found that the majority of faculty and students (72%) were aware of their university’s plagiarism policy, and students reported a high amount of codes of conduct related to plagiarism. However, in most disciplines, for both faculty and students, where plagiarism was specifically addressed, the majority of respondents reported less than one hour of time were spent on the topic. There appears to be an opportunity for universities to provide specific instruction around the policies related to original scholarship, in order for students and faculty to become very familiar with topics such as self-plagiarism and patch writing. Faculty-librarian interdisciplinary instructional design collaboration can leverage expertise and interest in the authoring of local guidelines and self-paced instructional models. The survey results also showed that Graduate students were more aligned than faculty with the belief that re-use of their own material would be classified as plagiarism. This bodes well for the next generation of faculty not only being aware of this difference, but also likely to pass this belief on to their students.

AREAS FOR FUTURE RESEARCH

This survey found that most graduate students were not concerned about their work being plagiarized. Further, the majority of graduate students did not believe that making ETDs available in a repository led to plagiarism. With the millennial generation’s ideas of sharing and privacy differing from earlier generations, it will be interesting to observe graduate students that transition to become future scholars.
Will their ideas align with or transition beyond previous generations’ views on sharing, intellectual property, and copying, with or without intent?

The authors suggest that future studies look more closely at the differences between faculty and students who received less than one hour of instruction related to plagiarism, compared to those that received 2 – 5 hours. Were incidents of plagiarism at colleges and universities with higher levels of instruction on ethical scholarly writing equal, less, or greater than those institutional settings where individuals reported less than an hour of instruction? The ability to tie amount of instruction with outcome could be used as a driver toward increased discussion and programmatic action to address plagiarism in academic institutional settings.

Finally, there is evidence among students and faculty of plagiarism awareness, as well as awareness of prevention strategies for plagiarism in a variety of settings. Future surveys could explore methods for lowering incidents of plagiarism through programmatic responsibilities and instructional collaboration to improve awareness and compliance among graduate students and faculty.

REFERENCES

http://dx.doi.org/10.1038/nm0709-707

http://dx.doi.org/10.1016/S0140-6736(09)61536-1

Abasi, A. 2008, Writing under the gaze: Plagiarism policies and international ESL students’ patchwriting in graduate school, University of Ottawa (Canada).  
http://gradworks.umi.com/NR/50/NR50714.html


http://dspace.lib.iup.edu:8080/dspace/bitstream/2069/211/1/

http://dx.doi.org/10.1007/s10805-009-9092-1


http://dx.doi.org/10.1016/S0140-6736(08)61345-8

http://dx.doi.org/10.1007/s10734-009-9234-9

http://scholarworks.wmich.edu/library_pubs/1/


Greenberg, C.J. & Mclean, A. 2011a. Figure 10: Response to the question "Does your university utilize plagiarism detection software?" (n=268).  
https://classesv2.yale.edu/access/content/user/cg99/fig-10.png

Greenberg, C.J. & Mclean, A. 2011b. Figure 13a: Graduate student (n=144) response to question: "Do graduate students receive a required plagiarism/copyright policy training (electronic or class based)?  
https://classesv2.yale.edu/access/content/user/cg99/fig-13a.png

Greenberg, C.J. & Mclean, A. 2011c. Figure 13c: Graduate students who received training (n=68) in question 13a, responding to "If you answered yes to the previous question about student training, what is the total amount of training time?"  
https://classesv2.yale.edu/access/content/user/cg99/fig-13c.png

Proceedings of the 14th International Symposium on Electronic Theses and Dissertations, Cape Town, South Africa, 13-17 September 2011
Greenberg, C.J. & Mclean, A. 2011d. Figure 15: Responses (n=268) to the question “Do your institution's procedures and protocols designed to discourage and prevent plagiarism work effectively?” A range of 1-5 was presented, where 1 indicates not very effective and 5 indicates very effective.
https://classesv2.yale.edu/access/content/user/cg99/fig-15.png

Greenberg, C.J. & Mclean, A. 2011e. Figure 4: Dissertation or thesis author (n=173) response to "If you are or have been a thesis or dissertation author, are you concerned about your work being plagiarized?"
https://classesv2.yale.edu/access/content/user/cg99/fig-4.png

Greenberg, C.J. & Mclean, A. 2011f. Figure 6a: Faculty responses to question "In your view, is re-using your own original content from assignments or publications without attribution a form of plagiarism?"
https://classesv2.yale.edu/access/content/user/cg99/fig-6a.png

Greenberg, C.J. & Mclean, A. 2011g. Figure 6b: Student responses to question "In your view, is re-using your own original content from assignments or publications without attribution a form of plagiarism?"
https://classesv2.yale.edu/access/content/user/cg99/fig-6b.png

Greenberg, C.J. & Mclean, A. 2011h. Figure 7: Responses to question “Are you aware of incidents of plagiarism at your institution?”
https://classesv2.yale.edu/access/content/user/cg99/fig-7.png

Greenberg, C.J. & Mclean, A. 2011i. Figure 1: Survey Responses Analyzed (n=268)
https://classesv2.yale.edu/access/content/user/cg99/fig-1.png

Greenberg, C.J. & Mclean, A. 2011j. Figure 11: Graduate student responses to the question "If your university does use plagiarism detection software, is submission of class assignments to the system mandatory?"
https://classesv2.yale.edu/access/content/user/cg99/fig-11.png

Greenberg, C.J. & Mclean, A. 2011k. Figure 12a: Faculty (n=44) response to question: "Do faculty receive a required plagiarism/copyright policy training (electronic or class based)?"
https://classesv2.yale.edu/access/content/user/cg99/fig-12a.png

Greenberg, C.J. & Mclean, A. 2011l. Figure 12b: Faculty who received training (n=7) in question 12a, responding to "If you answered yes to the previous question about faculty training, what kind of training?" (Responders could choose more than one).
https://classesv2.yale.edu/access/content/user/cg99/fig-12b.png

Greenberg, C.J. & Mclean, A. 2011m. Figure 13b: Graduate students who received training (n=68) in question 13a, responding to "If you answered yes to the previous question about faculty training, what kind of training?" (Responders could choose more than one).
https://classesv2.yale.edu/access/content/user/cg99/fig-13b.png

Greenberg, C.J. & Mclean, A. 2011n. Figure 14: Responses (n=268) to question “Does your institution have procedures or protocols used by your institution to discourage and prevent plagiarism?” (Responders could choose more than one)
https://classesv2.yale.edu/access/content/user/cg99/fig-14.png

Greenberg, C.J. & Mclean, A. 2011o. Figure 2: Responses to "Are you aware of an explicit plagiarism/copyright policy posted conspicuously on the university or institutional web site, repository, or course management system?” (n=268),
https://classesv2.yale.edu/access/content/user/cg99/fig-2.png

Greenberg, C.J. & Mclean, A. 2011p. Figure 3a: Faculty response to "In your view, are master’s theses or PhD dissertations more likely to be plagiarized, now that they are available electronically?"
https://classesv2.yale.edu/access/content/user/cg99/fig-3a.png

Greenberg, C.J. & Mclean, A. 2011q. Figure 3b: Student response to "In your view, are master’s theses or PhD dissertations more likely to be plagiarized, now that they are available electronically?"
https://classesv2.yale.edu/access/content/user/cg99/fig-3b.png

Greenberg, C.J. & Mclean, A. 2011r. Figure 5: Response to the question: "Does your institution have an institutional repository?".
https://classesv2.yale.edu/access/content/user/cg99/fig-5.png

Greenberg, C.J. & Mclean, A. 2011s. Figure 8: Response to question: "If you have heard of a plagiarism incident, was the response in your opinion...".
https://classesv2.yale.edu/access/content/user/cg99/fig-8.png

Greenberg, C.J. & Mclean, A. 2011t. Figure 9a: Academic Administrator responses to: "Patch writing ... Do you think this encourages plagiarism?".
https://classesv2.yale.edu/access/content/user/cg99/fig-9a.png

Greenberg, C.J. & Mclean, A. 2011u. Figure 9b: Faculty responses to: "Patch writing ... Do you think this encourages plagiarism?".
https://classesv2.yale.edu/access/content/user/cg99/fig-9b.png

Greenberg, C.J. & Mclean, A. 2011v. Figure 9c: Graduate student responses to: "Patch writing ... Do you think this encourages plagiarism?".
https://classesv2.yale.edu/access/content/user/cg99/fig-9c.png
Greenberg, C.J. & Mclean, A. 2011w. Figure 12c: Faculty who received training (n=7) in question 12a, responding to "If you answered yes to the previous question about faculty training, what is the total amount of training time?". https://classesv2.yale.edu/access/content/user/cg99/fig-12c.png

Greenberg, C.J. & Mclean, A. 2011x. Figure 9d: Librarian responses to: "Patch writing ... Do you think this encourages plagiarism?". https://classesv2.yale.edu/access/content/user/cg99/fig-9d.png


