Case Studies

Teaching International Students How to Avoid Plagiarism: Librarians and Faculty in Collaboration

Jenny Gunnarsson [a], Wlodek J. Kulesza [b], Anette Pettersson [a],*

[a] The Library, Blekinge Institute of Technology, SE-371 79 Karlskrona, Sweden
[b] Department of Applied Signal Processing, Blekinge Institute of Technology, SE-371 79 Karlskrona, Sweden

ABSTRACT

This paper presents how a plagiarism component has been integrated in a Research Methodology course for Engineering Master students at Blekinge Institute of Technology, Sweden. The plagiarism issue was approached from an educational perspective, rather than a punitive. The course director and librarians developed this part of the course in close collaboration. One part of the course is dedicated to how to cite, paraphrase and reference, while another part stresses the legal and ethical aspects of research. Currently, the majority of the students are international, which means there are intercultural and language aspects to consider. In order to evaluate our approach to teaching about plagiarism, we conducted a survey. The results of the survey indicate a need for education on how to cite and reference properly in order to avoid plagiarism, a result which is also supported by students' assignment results. Some suggestions are given for future development of the course.

© 2014 Elsevier Inc. All rights reserved.

INTRODUCTION

Plagiarism has become a worldwide problem, of which one of the most important contributing factors is the easy access to Internet resources, where the majority of all scientific papers and reports are published today. However, there are additional reasons for this increasing problem, for instance a lack of ethical awareness and related lack of maturity to take into consideration the long-term consequences of the act (Colnerud & Rosander, 2009; Liddell, 2003; Sisti, 2007). Insufficient language skills, a lack of skills for using information (e.g. citing, paraphrasing and referencing) (Hendricks & Quinn, 2000; Jackson, 2006), unfamiliarity with Western scholarly traditions and pressure to achieve study results are cited to be causes of plagiarism (Duff, Rogers, & Harris, 2006). In her review of literature on international students and textual borrowing practices, Amsberry (2009) shows that reasons for plagiarism are complex and multifaceted, with many aspects to consider when addressing this issue. Amsberry focuses on reasons that can be attributed to the students' cultural, linguistic and educational background. An important concern for many academic teachers is the question of which pedagogy is most suitable for preventing plagiarism. The approach adopted by the authors aligns with McCuen's (2008) supposition that most cases of plagiarism are unintentional, and that the issue should be approached from an educational perspective, rather than punitive. In this paper we present how we have implemented our approach to plagiarism education into a Research Methodology course. International Master students' understanding of plagiarism is also described, as shown in class exercises, a mandatory quiz on plagiarism, and a survey we conducted in order to evaluate our teaching method.

BACKGROUND

The course in Research Methodology, RM, for Master students in Electrical Engineering was developed at University of Kalmar (now Linnaeus University) and Blekinge Institute of Technology in Sweden. It was later extended to include Master programs in Mechanical and Computer Engineering, all of which are dominated by international students. About 80% of the students have come from Asia, mainly from India, Pakistan, Iran and China. Of the remaining 20% most students have come from Africa and Europe. Only a few Swedish students have attended the course.

From the inception of the course, how to properly use citations and referencing in a research paper has been a central issue discussed in the course. Since the majority of the Master students in the course are young people from various countries, plagiarism education has to be related to their diversity of cultures and habits. By learning how to use

* Corresponding author. Tel.: +46 455 38 51 19.
E-mail addresses: jenny.gunnarsson@bth.se (J. Gunnarsson), wlodek.kulesza@bth.se (W.J. Kulesza), anette.pettersson@bth.se (A. Pettersson).

sources correctly, the students will avoid being suspected of plagiarism. Therefore the focus in this part of the course has not been how to avoid plagiarism, but on learning how to use information sources correctly.

The plagiarism content in the course was developed by librarians in collaboration with the course director. The librarians had previously taught similar classes, but those classes had not been fully integrated into any engineering course. The outcome of this component of the course is directly used by the students in other parts of the course, for instance to form a research question and hypothesis, and to report scientific results.

The course teachers have focused on integrating the different elements of the course for a comprehensive approach. As a complementary part of teaching the use of information resources, the course director discusses work ethics together with the students. The discussion is based on codes of ethics, according to the students' educational profile, such as the National Society of Professional Engineers (NSPE) (NSPE Code of Ethics for Engineers, 2013), the Institute of Electrical and Electronics Engineers (IEEE) (IEEE Code of Ethics, 2013), or the American Society of Mechanical Engineering (ASME) (Code of Ethics-ASME Colorado Section, American Society of Mechanical Engineers, 2013).

LITERATURE REVIEW

The results of several studies confirm that plagiarism has to be approached not only as a moral problem, but also as an educational issue. A study carried out at San José State University (Jackson, 2006) showed that students lacked the ability to apply the concept of paraphrasing in practice; they consequently need more opportunities to practice paraphrasing in order to develop a better understanding of the concept and to be able to apply it in their own texts. In her literature review, Jackson points to previous research which shows that students do not understand the concept of plagiarism and lack the knowledge and skills to avoid it. In 2007 librarians at University at Albany created workshops on the research process and plagiarism. The students who took part in the workshops also took pre- and post-tests. The results of these tests showed that the students' knowledge about plagiarism had improved after having attended the workshops (Chen & Ullen, 2011).

In her study, Broeckelman-Post (2008) shows that teaching explicitly what is expected from students with regard to the use of sources, is an effective approach for deterring plagiarism. In those cases where the teacher had talked about citing and referencing, the students were clearly less inclined to plagiarize. Liles and Rozalski (2004) describe how teaching the students to use style manuals helps them not to plagiarize.

Being explicit is especially important when teaching students who come from a different academic tradition, as the problem of plagiarism is not only closely related to ethical, but also to cultural aspects. According to Amsberry (2009), in some cultures, texts are seen as common property, and belonging to the whole society, not to one individual person. It may also be seen as a sign of respect or flattery to copy another author's text. However, as views of the concept of plagiarism and the practical application of the concept may vary greatly among students from one country, there may also be reasons to be cautious about making assumptions based on students' cultural background. Handa and Power (2005) argue "that students coming from different educational cultures require proper and explicit introduction into the principles and philosophy behind many western academic conventions as different conventions of scholarship…can create unique difficulties for them".

Similar observations were made by Duff et al. (2006), who found that the students' ideas of the concepts of academic integrity and plagiarism are founded on their historical and cultural assumptions. In their paper, Duff et al. (2006) assert that "notions of plagiarism are constructed culturally and the remedy for plagiarism is not necessarily punitive, but lies in making Western expectations of scholarship clear". Liu and

Winn (2009) who studied international graduate students in Canada also argue that, apart from teaching skills on how to correctly use information, ethical and cultural contexts must also be considered.

As the course language is often not the students' first language, this is also a consideration when teaching international students. Unfamiliarity with conventions and practices of academic writing, as well as difficulties associated with writing in a language which is not the students' native language, may result in inappropriate use of sources. For example, students may copy the original text because they feel they are not able to express themselves well enough in English, or because they doubt their ability to convey the meaning of the original text (Amsberry, 2009). A research project in South Africa also points to students' difficulties in using their own words, especially when the course language is not their first language (Hendricks & Quinn, 2000).

McCuen (2008, p. 155) argues that a time deadline can be a reason to plagiarize and that mentors therefore have "an obligation to identify situations that students face and that lead to significant pressure". Anti-plagiarism-detection software is widely used in higher education as a response to students' plagiarism. Although the tool is undoubtedly useful, it does not solve the problem, and can be applied just as a support for educational efforts aimed at reducing the problem (Youmans, 2011). According to McCuen (2008), it is common to include ethics education programs as a response to incidents of unethical behavior, but in the case of this RM course, ethics education was integrated into the course to prevent the occurrence.

From our own experience, and from literature on individual differences and unethical behavior, with an emphasis on the subjects of plagiarism and integrity (Martin, Rao, & Sloan, 2009; Wood, 2004), we believe that students can demonstrate contextual understanding of academic integrity. Handa and Power (2005, p. 74) proved that "the concept of plagiarism…elicited a wide range of responses and was not aligned with the concept of academic integrity in…practical application". This suggests that it could be valuable to integrate plagiarism and academic integrity in courses. According to Handa and Power (2005), in engineering education, it is common that the issue of plagiarism is included as part of a separate course on information literacy. Such courses are typically taught by librarians, usually at the beginning of the program, for both under-graduate and post-graduate students.

Although librarians can contribute a general approach to the problem of plagiarism, in our experience students also need to learn the nuances of plagiarism within their discipline. For example, traditions regarding citing and referencing can vary between subject fields. This is also true for issues regarding a field's common knowledge and paraphrasing. With this in mind, it is necessary for librarians and subject faculty to collaborate so that they may provide the students with specialized knowledge within the field.

In her article, Grafstein (2002) proposes such a discipline-based approach to teaching the components of information literacy, with a shared responsibility between teachers and librarians. Glassman, Sorensen, Habousha, Minuti, and Schwartz (2011, p. 346) also advocate a joint effort: "University faculty and administrators are unable to manage all plagiarism issues on their own. Librarians are a natural step into this necessary role." Carroll and Zetterling (2009) recommend a holistic or integrated approach for preventing plagiarism. They suggest using various methods of instruction to encapsulate the issue. Such an approach makes use of lectures, discussions, written assignments, course literature, and interactive exercises which expose students to different perspectives on plagiarism.

Findings from previous research, as well as our teaching and research experience and feedback from students, have influenced the design of the course. Among the most important aspects of our approach to plagiarism education have been the close collaboration of librarians and faculty, having an educational perspective, rather than punitive, and also the integration of plagiarism education into students' subject studies in engineering, for example by aligning plagiarism to professional codes of ethics. Together with reasons for plagiarism that