Chapter 96

Students’ Cyber–Plagiarism

Tuomo Kakkonen
University of Eastern Finland, Finland

Maxim Mozgovoy
University of Aizu, Japan

ABSTRACT

Educational institutions fight against students’ plagiarism, because plagiarizing contradicts the most basic learning principles. Among ways of countering student plagiarism include understanding the reasons behind it and developing measures to detect and prevent it. Wide availability of text and other resources on the Internet makes plagiarizing easy and, thus, commonplace among students. Students’ cyber-plagiarism sets new challenges to educational institutions. Computers and technology, however, also provide solutions to the problem: plagiarism detection and prevention can be supported by automatic detection technologies that help to reveal instances of plagiarism. Ongoing research in student cyber-plagiarism is also concerned with the various ethical questions that plagiarism and its detection arise.

INTRODUCTION

Cyber-plagiarism is a type of academic dishonesty that consists of reusing whole electronic documents, or parts of them, composed by another author without proper acknowledgment of the original source. Web plagiarism is a specific type of cyber-plagiarism that consists of copying texts from the Internet. The term student plagiarism is often used to refer to the incidents of plagiarism committed by students who attend educational institutions. Teachers and academics abhor plagiarism because it is inconsistent with pedagogical aims. The mere copying of texts has no educational value. Moreover, it involves students in moral compromise and deception. Letting plagiarists incorporate parts of external texts into their works is, of course, not fair on the honest students who do not plagiarize.

Although the easy availability of information on the Internet has undoubtedly increased the incidence of plagiarism (see, for example, Lathrop & Foss, 2000), the web has also provided educators with means of countering it. For instance, Inter-
net search engines can be used in the detection of plagiarism. A manual detection process is, by any standards, both tedious and labor-intensive, however, because it requires an assessor to insert parenthesized extracts from a suspected text into the web search engine, and to examine the results manually. Fortunately, numerous systems that automate plagiarism detection are available at the present time.

Plagiarism is a widely researched topic. Typing the search keyword “plagiarism” in Google Scholar, as of September 2010, produced close to seventy thousand links to scientific articles. Hence, it is difficult to name just a few representative researchers and works from this massive body of research literature. In order to provide an overview of the most influential work in the area, the list below provides selected works of some of the most frequently cited authors and titles in plagiarism research as well as examples of recent research work:

**General References**

- Alastair Pennycook, University of Technology Sydney, Australia: Borrowing Others’ Words: Text, Ownership, Memory, and Plagiarism (Pennycook, 1996).
- Peter Ashworth et al. Sheffield Hallam University, UK: Guilty in Whose Eyes? University Students’ Perceptions of Cheating and Plagiarism in Academic Work and Assessment (Ashworth, Bannister & Thorne, 1997).
- Xin Chen et al., University of California, USA: Shared Information and Program Plagiarism Detection (Xin Chen et al., 2005).

The most active development of automatic plagiarism detection systems takes place in software companies as part of their business activities. The best known examples of such companies are iParadigms and Blackboard, the developers of TurnitIn (iParadigms, 2010a) and SafeAssign (Blackboard, 2010) plagiarism detection systems, respectively. The technical details of the work done in these companies remain, for obvious reasons, largely unpublished.

**OVERVIEW OF THE INTELLECTUAL HISTORY**

According to Lynch (2006), the word “plagiary” did not, despite its Latin root, appear in the English language until the beginning of the seventeenth century when it featured in Ben Jonson’s satire *The Poetaster* (Jonson, 1602). The concept of plagiarism appears to have been unrecognized before then. In the late nineteenth century, plagiarism among students was a widespread phenomenon and was recognized as a problem by educators (Simmons, 1999). At that time, *essay mills*, libraries of ready-made essays and homework available to students for free or for a fee, were already operating.

The rapid development of computer technologies and the Internet in the 1990s have made plagiarizing much easier; this is especially true for blatant verbatim copying that consists only of