**Dossier “Academic Cyberplariaism”**

**On academic plagiarism in Europe. An analytical approach based on four studies***

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Abstract
With the development of information and communication technology (ICT), plagiarism becomes an ever more serious problem in the academic community. According to the studies on academic plagiarism conducted at universities in four different European countries, plagiarism rates among students are quite high and students mostly ignore or allow plagiarism because of a lack of knowledge, lack of consequences, or simply because ICT makes plagiarism easy to commit. The findings of the studies presented in this paper indicate that strict policies against plagiarism need to be introduced at universities. We believe that the problem of plagiarism should be brought to public attention and discussed at a higher level and that effective measures against plagiarism should be implemented. Prevalence of plagiarism among students and their attitudes towards plagiarism are influenced by cultural environment as well as the academic setting. In multicultural communities, such as the European community, it is necessary to investigate and compare academic behaviour in different countries in order to establish equivalent standards in education across Europe.

Keywords
academic misconduct, Europe, intellectual property, plagiarism, students

Introduction
Plagiarism is widely present in the academic and scientific community despite the fact that it is contradictory to the basic academic and scientific principles. Although there are different general definitions of academic misconduct, which includes plagiarism, many universities still do not have explicit rules on academic and scientific dishonesty. As a result, those involved in academic misconduct almost never suffer any consequences (Bilic-Zulle, 2005; Elzubeir, 2003).

Prevalence of plagiarism largely depends on the cultural characteristics of the academic setting and the degree to which plagiarism is implicitly allowed or explicitly accepted in the academic community and wider society. Different societies have different attitudes toward plagiarism. Plagiarism among students is generally considered a less serious form of misconduct than cheating on exams (Baruchson-Arbib, 2004; Elzubeir, 2003; Martin, 1994). Strict rules should exist not only to deter and prevent students and all members of the academic and scientific community from dishonest behaviour, but also to educate them and help them avoid it. Many cases of plagiarism are committed due to the lack of knowledge or lack of consequences for such behaviour. Therefore, the best approach to prevent plagiarism is to educate students and point out the importance of honesty in science and professional work (Petrovecki, 2001). Students should be acquainted with different forms of breach of scientific and academic integrity, including plagiarism, through examples from the history of science and their awareness should be raised regarding the unacceptability of such behaviour.

In order to clearly formulate the rules against plagiarism and develop a system of education based on academic integrity, the prevalence of plagiarism among students and student attitudes toward breaches of academic and scientific integrity should be investigated. Studies on prevalence, causes and attitudes toward plagiarism have been conducted at several European universities and their results are of critical importance for improving education on academic honesty and establishing the proper academic environment. Comparison of the results of these studies performed in different societies may provide a deeper insight into the level of academic integrity in the emerging multicultural European community, which needs to harmonize its standards of education.
In this paper we present and discuss the results of the studies on prevalence, causes and attitudes towards plagiarism in the academic and scientific community in four European countries.

**Prevalence and attitudes toward plagiarism in four European countries**

The studies were performed at different universities in four European countries, namely, Spain, the United Kingdom, Bulgaria and Croatia. The studies were conducted independently except those in the UK and Bulgaria, which used the same research tool. The results from Spain, the UK and Bulgaria are preliminary, whereas the results from the Croatian study have been published previously (Bilić-Zulle, 2005, 2008).

The study conducted at Spanish universities used a self-reported questionnaire to determine the prevalence of plagiarism. The questionnaire was administered to 727 undergraduate students at the Balearic Islands University (UIB) and 560 undergraduate students at other Spanish universities. A high percentage of plagiarism prevalence was detected. At UIB, 77% of students admitted committing cyberplagiarism at least once during their university studies and 66% admitted plagiarizing non-digital sources (books, magazines, journals, etc). Students from other Spanish universities reported committing cyberplagiarism at least once during their university studies in 59% of the cases and plagiarizing non-digital resources in 47% of the cases. Over 70% of students reported that they used the internet as the main source of plagiarism and that the main reasons for committing plagiarism were easy and anonymous access to the internet, severe time constraints, procrastination, ineffective work management and work overload (many essays to deliver in a short period of time).

Questionnaire studies conducted in the UK and Bulgaria measured students’ attitudes toward plagiarism, determined academic practice in higher education institutions and identified the causes and prevalence of plagiarism. The participation was entirely voluntary and anonymous. The studies included 92 students from the UK and 94 students from Bulgaria. The most common form of plagiarism at UK universities was self-plagiarism (35% of students committed self-plagiarism at least once), whereas copying from another student during a test was the rarest form of academic misconduct and considered highly unacceptable. In students’ opinion, there was nothing wrong with self-plagiarism (49%) or plagiarizing from informal sources, such as internet forums and discussion groups (38%). Also, students who committed plagiarism were rarely reported (68% never reported other students who committed plagiarism).

In Bulgaria, self-plagiarism and plagiarizing from the internet (research resources in the public domain) were found acceptable by 40% of students. The plagiarism rate was higher than in the UK. Almost half of Bulgarian students (47%) committed self-plagiarism at least once during their university studies and three-quarters of them (75% vs. 68% in the UK) were aware of another student committing plagiarism, but did not report it. The majority of Bulgarian students believed that plagiarism was largely undetected by tutors (85% Bulgarian students vs. 47% UK students agreed with the statement).

The Croatian study included 295 students. The aim was to determine the prevalence of plagiarism and to measure student attitudes toward plagiarism. The prevalence of plagiarism was measured using plagiarism detection software, which compared student essays with the source articles and calculated the percentage of plagiarized text. Student attitudes toward plagiarism were investigated using fictitious scenarios describing cases of self-plagiarism, cheating on exams, different sorts of plagiarism and data falsification. The objective software-based method of measuring the prevalence of plagiarism revealed that 82% of students plagiarized to some degree, whereas 52% of them copied at least 10% of the source text. Warning against plagiarism was not enough to discourage students from plagiarizing. The plagiarism rate was lower only among students who were told that the essays would be analyzed with plagiarism detection software and that those found to have plagiarized would suffer consequences. Results on attitudes toward plagiarism were consistent with those obtained in other countries. Self-plagiarism was considered justified and acceptable by 65% of Croatian students and reporting other students who committed plagiarism was considered unacceptable by 76% of Croatian students. As opposed to only 7% of UK students, 20% of Croatian and 18% Bulgarian students found cheating on exams acceptable.

**Discussion and conclusions**

The studies revealed that plagiarism is deeply rooted in the academic environment of some European universities. Students are generally aware that plagiarism is a form of dishonest behaviour, but they still commit it, especially if they have a tight deadline or too much work to do and not enough time. In such circumstances, most students exploit the benefits of information and communication technology (ICT) and commit cyberplagiarism. Easily accessible information on the internet, the development of IT and the simple copy/paste command facilitate plagiarism. Websites that sell student essays, master’s theses and doctoral dissertations as ready-made commodities are a new and increasingly worrying problem (Burnard, 2002; Chase, 2004).

Most students believe that plagiarism will not be detected by their tutors, so they resort to it despite warnings and rules against it. According to the results of the Croatian study, only an objective plagiarism detection method and penalty for perpetrators will deter
students from plagiarizing. This finding is consistent with the results of another study conducted among students in the USA (Bilic-Zulle, 2008; Braumoeller, 2001). Although it is easier to plagiarize in the age of ICT, it is also easier to detect and measure plagiarism (Lyon, 2006). Plagiarism detection software (eg, WCopypfind) and internet-based search engines (eg, iTechnicate or EVE) can be used effectively in anti-plagiarism strategies in the academic environment. Faced with the obvious limitations of internet-based search engines in non-English contexts, there are tools that can reveal blatant plagiarism by comparing two or more texts, such as WCopypfind (Grover, 2003). Translated plagiarism is also a growing problem. There are no computer tools that can detect plagiarism between different languages (Sowden, 2005); however, collaboration of faculty from different universities in Europe, in addition to research on academic behaviour and promotion of the highest standards of academic honesty, can significantly contribute to the reduction of academic misconduct.

One of the important findings of the presented was that more than three quarters of students would not report plagiarism to their tutors, even if they witnessed it. Some of the students probably feel that plagiarism is not “a big deal” and others do not want to be whistleblowers. In an academic and scientific context, the question of reporting unethical and immoral behaviour to tutors is especially sensitive. Whistleblowers are often scorned by other students (Elzuber, 2003; Rennie, 2002). Tutors and teachers should find methods to deter students from plagiarizing. Allowing or ignoring plagiarism among students does not contribute to better knowledge or education; on the contrary, it allows students to find the “easy way out”. Once this kind of behaviour is encouraged, it cannot be expected that those who plagiarized become honourable members of scientific and academic society (Harding, 2004; Kenny, 2007; Hrabak, 2004; Rozance, 1991; Glick, 2001). Plagiarized data are misleading and allow the perpetrator to gain undeserved benefit. This type of behaviour should be recognized and strongly discouraged (Parrish, 2000; Das, 2003).

According to the study on academic misconduct in Croatia, significant predictors of misconduct include attitude toward cheating, behaviour of the group that the student belongs to and the year of studies. Senior students tend to cheat more often than junior students (Hrabak, 2004). Cultural environment and attitudes within wider society have a great influence on the prevalence and attitudes toward plagiarism. The results of the studies presented, revealing that almost 20% of students in Bulgaria and Croatia vs. 7% in the UK find cheating on exams acceptable behaviour, are consistent with findings of a study on attitudes toward plagiarism and reporting plagiarism in Russia, the USA, the Netherlands and Israel, which indicated that the tolerance toward academic misconduct was more pronounced in post-communist countries (Magnus, 2002). The cultural environment of post-communist countries, with a high rate of corruption, is characterized by a high level of tolerance toward cheating, which in turn creates inappropriate attitudes toward academic and scientific integrity (Hrabak, 2004). One of the characteristics of an authoritarian regime is the lack of individual responsibility – one is allowed to do anything that society or leaders tolerate; maturity, independence and responsibility are not encouraged; and individuals do not do wrong not because of their inner beliefs, but because of fear of punishment or authority.

Considering that Europe as a multilingual and multicultural community strives to create the best possible education and scientific practice in all European countries, it is important to ensure a solid basis for such a development. Attempts at eradicating academic misconduct and rewarding creativity and real acquisition of knowledge in universities and schools will undoubtedly contribute to achieving this goal. Due to the vast cultural diversity in Europe, it will not be easy to harmonize academic standards and attitudes among different countries. However, the results of research such as that presented in this paper may provide a valuable contribution in the development of proper education policies.

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