Use of the system for authenticity verification at the Tourism and Communication Sciences of the University of Zadar

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Summary - Development of information and communication technology and Internet gave education an additional incentive and opened new possibilities in education. Today the importance of education, improvement of the educational process and education as initial capital are increasingly highlighted, and the word combination "society of knowledge" is frequently mentioned. The Internet has made information more accessible, but it has also enabled unauthorized taking up and plagiarism of someone else's content, sometimes unintentionally, out of pure ignorance, and sometimes intentionally. It is therefore not surprising that today the discussion on academic integrity and safeguarding of academic integrity is increasing. In this endeavour, the academic world increasingly uses anti-plagiarism software, i.e. verification systems for authenticity of academic papers, as a means for dealing with non-academic actions. On the basis of a conducted survey the attitudes of students of undergraduate and graduate studies on the Tourism and Communication Sciences Section of the University of Zadar were analysed on the use of Turnitin system, the mode of approach, benefits and disadvantages of the system, self-evaluation of students on the contribution of Turnitin to the quality of academic papers, and thus education as a whole. The paper gives particular attention to understanding of the notion of academic integrity, quotation, paraphrasing and plagiarism. Method of descriptive statistics was used for presentation and interpretation of research results.

Keywords: Turnitin, plagiarism, authenticity, verification

I. INTRODUCTION

The development of the Internet and information and communication technology has influenced all segments of social development, including education, giving it additional incentive and opening up new opportunities in the educational process. At present time, education is, when viewed in a broader spectrum, a topic that is inexhaustible, so there is often talk about the importance of education, education as a core capital and the need to improve the education i.e. the educational process. Today, the highly used syntagma in the field of upbringing and education, the "knowledge society", according to the Oxford Dictionary, is defined as a society based on the acquisition, dissemination and use of information, especially by exploiting technological advances; a society with a knowledge economy [1]. In view of the changes that have occurred in the information and communication society, according to Miljković and Sitarica, education takes on new forms and new priorities emerge in the knowledge society: "the readiness of an individual to learn and improve himself throughout the whole life, choosing and acquiring of right information, applying acquired knowledge in new situations, developing curiosity, critical awareness, creativity, communication, independence, social skills and managing its own learning process"[2]. An individual realizes the mentioned priorities in the knowledge society today by using new information and communication technologies in the education process.

II. THEORETICAL BACKGROUND

The development of technology and the Internet, besides providing users with easier and faster access to information and the acquisition of new knowledge, opened up space and the possibility of unauthorized appropriation and use of the same. This problem is particularly relevant in the field of academic community where, unfortunately, there is frequent talk about violation of academic honesty and academic integrity. The notion of academic dishonesty is often associated with the notion of plagiarism. According to Rumbold, violation of academic honesty occurs due to "inventing of non-existent or "adjustment" of obtained data in order to mislead the scientific community and deceitful presentation of own results, disclosing or presenting other person’s texts or data as own (plagiarism, i.e. theft or robbery) for the purpose of acquiring false scientific reputation or academic advancement; and due to false authorship, i.e. adding persons who did not substantially contribute to the realization of a certain paper among the authors in order to achieve intellectual, social and often also material gain"[3].

Academic honesty in Croatia was discussed at the Round Table "Academic honesty" in 2013, which gathered experts who focused their work exactly on the research of academic honesty in Croatia. They discussed the situation related to unethical behaviour within the Croatian academic community and issued "recommendations for policy improvement of ethical behaviour in academic life and work" [4]. Among the many discussions that took
place at this round table, one of the last conclusions was that higher education institutions (universities) should have special expert services which would deal with academic honesty [5].

Numerous scientific and professional papers were written about plagiarism within the academic community in which the authors jointly state that plagiarism represents the destruction of academic honesty and integrity. Scientists from the field of medicine in Croatia have published numerous papers on the topic of plagiarism i.e. plagiarism. Therefore, a group of authors Baždarić, Pupovac, Bilić-Zulle and Petrovečki in their paper entitled "Plagiarism as a violation of scientific and academic honesty" define plagiarism as "unauthorized taking of other person’s ideas, procedures or text without the appropriate indication, with the intention of presenting them as their own" [6]. Rumboldt, in his brief statement "About plagiarism in science," states that plagiarism is "opportunistic taking of essential components of other person's paper for false representation as its own concept" [7]. Cerjan Letica and Letica replace the notion of academic honesty with the notion of scientific indecency. In their paper "Scientific indecency: How to deal with it in Croatia?" they emphasize the necessity of dealing with the phenomenon of plagiarism i.e. academic indecency in the Croatian academic community [8].

According to Marcelić, plagiarisms are divided into seven forms: complete plagiarism; auto-plagiarism (when the author does not indicate himself as a reference when writing the paper, considering it unnecessary since he is the author of both papers); plagiarism by translation (taking a translation of foreign text without stating the reference); co(authorship) (when the person is not the author of the text, rather someone else wrote the paper on behalf of that author); copy and paste plagiarism (the author takes parts of other person’s text, without stating the reference) and paraphrasing without reference and quotation outside of context (when the author literally takes or paraphrases particular text and at the same time does not quote it correctly) [9]. Unlike plagiarism, paraphrasing represents retelling in own words parts of other person’s text [10]. But in paraphrasing there are also possibilities of plagiarism, and Oraić Tolić lists them as "paraphrasing sins": stealing other person’s text, simulation of paraphrasing and stealing ideas and methods [11]. Therefore, it is not disputable that members of the academic community cannot take other person’s knowledge, either literally or by paraphrasing certain parts of this knowledge, but it is extremely important that they do so by properly stating that this is the knowledge of other people and not theirs.

Members of the academic community are not just professors and researchers, rather the community also includes student population i.e. students. Within the academic community, unfortunately, students themselves often commit unethical behaviour. This is most evident in writing of their academic papers: seminar, final, graduate and other. Students plagiarise their papers for a number of reasons: due to lack of time, neglect, so they write their papers at the last minute, lack of will or even because of ignorance. The last example is one of the most severe forms of plagiarism, which refers to the fact that student's seminar, final or graduate papers are written by other people who receive money. Apart from great advantages that the Internet and information and communication technology have offered to students, among other things, faster, easier and more accessible obtaining of information which they need for their academic papers, the biggest disadvantage is that students often resort to unauthorized taking of other person’s texts from the Internet, i.e. plagiarism. Kim and Wise in their paper titled "Measuring College Students' Perceptions and Attitudes toward AntiPlagiarism Detection Tools and Their Behaviors, Beliefs, and Moral Judgments on Plagiarism" state an example of one research (McCabe 2015) about plagiarism among the student population. The research was carried out between 2002 and 2005 among American students, and the results of the research were devastating: 38% of students stated that they cut & paste from the Internet, 25% of graduated students stated that they used one form of plagiarism, and as much as 80% of them used faculty observed plagiarism [12]. Fjorović conducted survey research on ethical/unethical behaviour of students of the University of Dubrovnik at the end of 2011. The student ethicality was viewed from the teachers’ perception. The basic hypothesis of the research was that the University of Dubrovnik needed a Code of Ethics for students. The results of the research have shown that students of the University of Dubrovnik frequently violate moral and ethical principles in order to complete their study programme faster and better [13]. With the aim of preventing plagiarism or reducing the plagiarism procedures i.e. unauthorized taking of other person’s texts, the academic communities in the world, and therefore also in Croatia, have resorted to the use of software or computer programs that detect plagiarism. According to Tokdemir Demirel and Gulogl, the basic purpose of any antiplagiarism software is to find similarities between two texts written by two different authors [14]. They state that anti-plagiarism software has a lot of advantages, and also a few disadvantages. They point out that student plagiarism sometimes also happens unconsciously, due to lack of knowledge to properly quote, so this software can help them to check their own paper and at the same time learn to quote properly. [15] One of the anti-plagiarism software currently offered on the domestic and international market is Turnitin, text authentication system, which was also purchased in 2016 by the University of Zadar. Turnitin "compares student papers with papers published in publicly available and commercial databases, currently available and archived websites, and with database of already reviewed student works within the Turnitin system" [16]. It is important to emphasize that this antiplagiarism software does not determine whether the paper is plagiary or not, rather it points to the similarity or the identicalness of the already existing text, the percentage of such similarities found in the text and which sources were used. Qualities of this system are simplicity in application and the fact that apart from the teachers, students themselves can check their academic papers before submitting them for grading [17]. This software allows teachers to check student papers in terms of plagiarism, but it also points to the insufficient knowledge of students regarding proper quotation and paraphrasing of
works, and thus providing guidelines about which segments of teaching process are necessary to be further upgraded in order to improve the quality of teaching, and thus preserving academic honesty and integrity.

III. METHODOLOGY

The aim of the research is to expand knowledge about the student views on Turnitin plagiarism prevention system during study. The research was conducted by random sampling of students of undergraduate study programme Culture and Tourism and students of graduate study programme Journalism and public relations, Entrepreneurship in culture and tourism and Cultural and natural heritage in tourism at the University of Zadar. Students could complete the survey via Merlin e-Learning system. The survey research was conducted with the aim of answering the following questions: what students consider under the notion of academic honesty, how much they are acquainted with and what they consider under the notion of plagiarism, to what extent they mastered the skill and technique of academic writing, what sources they use and to what extent in writing of academic papers, to what extent are they acquainted with the possibilities of the Turnitin text authentication system, where they learned about the Turnitin system, how often they personally use Turnitin, how often their teachers check their papers in Turnitin, to what extent did the Turnitin system help them to improve the quality of writing papers and respecting the academic writing rules, whether they consider and to what extent that the Turnitin system is useful for checking the authenticity and as a system for education and their view about whether the use of the Turnitin system has contributed to the quality of education.

IV. RESEARCH RESULTS

A total of 122 respondents participated in the research, students of undergraduate and three graduate study programmes. The research involved 37 students, 29.6% of all first year students. The share in the research corps is 30.3%. 19 students of the second year participated in the research, 22.1% of the total number of students of the second year. The share in the research corps is 15.6%. 45% of the students of the third year participated in the research. The share in the research corps is 29.5%. 20.5% of all students from the first years of graduate study programmes participated in the research. The share in the research corps is 7.4%. Also, 24.1% of the total number of all students of second years of graduate study programmes participated in the research. The share in the research corps is 17.2%. Of the total number of respondents, 85 (69.7%) are in the status of full-time students and 37 (30.3%) are in the status of part-time students. Most of the respondents belong to the age group of 20 to 24 (60.7%). In the research participated 20.5% of the respondents under the age of 20, 10.7% of age 25 to 29 and 8.2% of age 30 and older.

Under the notion of academic honesty, students of the Department of tourism and communication science mostly consider honesty in the use of other person’s sources, 68%, and respect of copyrights, 68%. Follows the correct quotation, paraphrasing and summarizing of other person’s words, 63.9%, respect for the legal framework of the higher education institution, 55.7%, independent writing of academic papers, 50%, scientific honesty, 31.1%. 4.9% of respondents answered that they do not know, while 1.6% of respondents answered that they consider something else under the notion of “academic honesty”.

From the above mentioned it is visible that the respondents have recognized and associated the notion of plagiarism with one or more offered answers, what can also be the indicator of the acquired degree of knowledge of academic writing, which is necessary for a correct and quality academic paper.

When asked what they consider under the notion of plagiarism with the response options, not at all, very little, to some extent, quite and very much, the respondents in the vast majority answered that they were quite acquainted, 46.7%. 17.2% of respondents answered that they are very much acquainted with the notion of plagiarism. Around 30.3% answered that they were acquainted very little 4.9% and one respondent answered not at all, 0.8%.

When asked what they consider under the notion of plagiarism, respondents had the possibility of multiple responses. Nearly all respondents (95.9%) under the notion of plagiarism consider taking of other person’s text/paper or part of other person’s text/paper without quoting the source, 60.7% of respondents consider stealing of other person’s ideas and methods, 41.8% of respondents chose simulation of paraphrasing, when the source is stated, and the text or part of the text/paper is literally taken, 27% of them replied that they consider taking their own previously written text/paper or part of the text/paper without quoting sources. 1.6% of respondents answered that they consider something else under the notion of plagiarism, and one respondent answered that he does not know, 0.8%.

Most of the respondents encountered the notion of plagiarism at the faculty, 55.7%, and 38.5% in high school. 5.7% of respondents answered that they do not know, while 0.8%.

When asked what sources they use and how much when
writing academic papers, answers offered to students were books, proceedings, scientific journals, encyclopaedias and lexicons, newspaper articles, texts from the Internet and the option other. The majority of respondents answered that in writing of their academic papers they very much use texts from the Internet, 53.28% and books 41.80%, then newspaper articles 12.30%, other sources which were not proposed 11.48%, scientific journals 8.20%, encyclopaedias and lexicons 7.38%, and proceedings 5.74%.

Most of the respondents in the writing of their academic papers quite use texts from the Internet, 28.69% and newspaper articles, 27.05%, then books 27.05%, and encyclopaedias and collections by 13.11%, proceedings 12.30% and other 11.48%. 29.51% of them to some extent use sources which were not proposed, then newspaper articles 21.31%, proceedings 22.95%, encyclopaedias, lexicons 21.13% and scientific journals, 21.13%, books 15.57% and texts from the Internet 13.11 %. Given the percentage of respondents who answered other, list of proposed sources should be expanded in the future researches in order to get more detailed information. 34.43% of respondents answered that they use very little proceedings, 31.97%, scientific journals 33.33%, newspaper articles 19.67 and other sources 19.67%, books 12.30%, and texts from the Internet 4.92%.

Of all the proposed sources, only for texts from the Internet all respondents stated that they use them in their papers. 3.28% of respondents do not use books to write academic papers, scientific journals do not use 18.85% of respondents,19.67 of respondents do not use proceedings, 24.59% of respondents do not use encyclopaedias and lexicons, and unlisted sources do not use 27.05% of students.

**CHART 1. TYPES AND INTENSITY OF USE OF RESOURCES IN WRITING OF ACADEMIC PAPER (AVERAGE AND STDEV)**

With regard to the use of literature in the writing of academic papers during the study, the respondents mostly used (quite and very much) texts from the Internet (average=4.30, stdev=0.88) which can be explained by faster and easier access. The average value for use of books in writing papers is 3.92 (stdev=1.17); for proceedings is 2.40(stdev=1.15); scientific journals 2.69 (stdev= 1.23); encyclopaedias and lexicons 2.46 (stdev=1.21) newspaper articles 2.93 (stdev=1.32),other 2.59 (stdev=1.32)

When asked to what extent they have mastered the skills and the technique of academic writing and with the response options, not at all, very little, to some extent, quite and very much, the respondents mostly estimated that they quite mastered the skills and techniques, 58.2%. 27.9% of them considered that they mastered the skills and techniques of academic writing to some extent. 4.1% of respondents answered that they mastered very little, and 0.8% answered not at all. 9% of respondents estimated that they very much mastered the skills and techniques of academic writing.

Considering the importance of authenticity verification of papers, the research demonstrated that over one third of respondents, in total, are very little (23.8%) or not at all (13.9%) acquainted with the possibilities of Turnitin. Also, over one third of respondents consider that they are to some extent (36.1%) acquainted with the possibilities of Turnitin, less than one third of respondents, in total, considers that they are quite (18.9%) and very much (7.4%) acquainted with the possibilities of Turnitin.

Most of them got acquainted with the Turnitin system, by teachers, 59%, 34.4% of respondents got acquainted by the institution where they study and 6.6% by other students.

When asked how often their teachers check their papers in Turnitin, the majority of respondents responded occasionally, 33.6%. That they often check their work answered 24.1% and always 13.1% of respondents. 22.1% of respondents answered that their teachers rarely check their works in Turnitin, and 6.6% answered never.

When asked how often they personally use Turnitin, have their own account and check the papers, most respondents answered never (66.4%). 15.6% of respondents use it very little, and 17.2% of respondents use it occasionally. Only one respondent uses it frequently, 0.8%. No one has answered that it always uses it.

Regarding the assessment of help in the quality of making the paper and respecting the academic rules, 11.5% of respondents answered that Turnitin system helped very much. 25.4% of respondents think that it quite helped and 23% of respondents consider that it helped to some extent. 9% of respondents stated that it helped very little and 31.1% of students who participated in the research said that the system did not help them by choosing the answer not at all.

We also wanted to know to what extent the respondents thought that Turnitin system was useful for checking the authentication of the papers. The largest number of respondents felt that Turnitin system quite helped them, 45.9%. 29.5% of respondents thought that the system helped them very much, 17.2% of respondents thought that it helped them to some extent, while 3.3% consider that it helped them very little. 4.1% of respondents answered not at all.

**TABLE2. THE VIEW OF THE RESPONDENTS ABOUT THE CONTRIBUTION OF TURNITIN TO THE QUALITY OF EDUCATION (VALUES IN %)**

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<tr>
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<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>avg.</th>
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</tr>
</thead>
<tbody>
<tr>
<td>The first year of</td>
<td>1.64</td>
<td>1.64</td>
<td>9.02</td>
<td>14.75</td>
<td>3.28</td>
<td>3.54</td>
<td>0.96</td>
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<tr>
<td>undergraduate study</td>
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Table: The second year of undergraduate study

| Year of Study | 0.82 | 0.82 | 4.92 | 7.38 | 1.64 | 3.53 | 0.96 |

| Year of Study | 4.1 | 0.82 | 13.93 | 8.20 | 2.46 | 3.14 | 1.10 |

| Year of Study | 0.82 | 0.00 | 3.28 | 3.28 | 0.00 | 3.22 | 0.97 |

| Year of Study | 4.10 | 0.82 | 2.46 | 8.20 | 1.64 | 3.14 | 1.39 |

Total: 11.48, 4.10, 33.61, 41.80, 9.02

Description: (1-not at all, 2-very little, 3-to some extent, 4-quite, 5-very much)

Regarding the assessment of the respondents, whether and to what extent the Turnitin system contributed to the quality of education, 41.80% responded that they felt that it quite contributed. That is contributed to some extent considers 33.61% of respondents, and that it very much contributed 9.02% of respondents. 4.10% of respondents believe that the Turnitin system contributed very little to the quality of education, and 11.48% of respondents consider that it did not contribute at all.

V. CONCLUSION

The development of the Internet and information-communication technology has influenced all segments of society, as well as education. Knowledge reaches a much wider dimension than it once did, so today we are talking about knowledge society and lifelong learning. Members of the academic community in their learning and work use new tools that enable them to obtain faster and easier information and knowledge. In this work and learning, academic integrity and honesty can be easily violated, i.e. unauthorized taking of other person’s texts or knowledge. This opens up space for plagiarism that is increasingly common among student population. In order to prevent plagiarism, but also to give the opportunity for students to properly quote and paraphrase their papers antiplagiarism software are offered on the market, including the Turnitin software, which is the subject of this research.

Given the importance of academic honesty in the academic world and the prevention of plagiarism, any action in terms of improving the quality of academic paper can be considered as positive. In that direction, it is necessary to continue to take action in order to achieve the highest level of knowledge of academic honesty and academic integrity, and with regard to the Turnitin system, make additional efforts, primarily by the teachers, with the aim of extending the student knowledge about the possibilities of the system and thus possible broader and more intense use.

V. LITERATURE


[5] Ibid.


[15] Ibid.

[16] Lanterna, Glasnik Sveučilišta u Zadru, god. 1, br. 2, 2016, p. 2

[17] Ibid.