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PRACTICES OF ACADEMIC DISHONESTY IN THE CONTEXT OF ONLINE ASSESSMENT DURING THE PANDEMIC

Abstract: *This paper delves into the practices of online assessment during the COVID pandemic worldwide and specifically in the Republic of Croatia. While at the time it was the only alternative, online assessment has raised the question of whether and in which measure online assessment can be offer a realistic picture of the students' knowledge and skills. In order to prevent cheating on online exams, some educational institutions have imposed very small time limits for solving online exams, which turned them into exams for quick solving skills. While acts of academic dishonesty have been present in both traditional as well as online environment, the focus of this paper is on the question of whether and in which measure online assessment opened a door for academic dishonesty.*

Keywords: *academic dishonesty; online assessment; pandemic*

1. Introduction

While there are many papers and researches which focused on the effectiveness and execution of online assessment, there are a few studies which also focused is some measure on the aspect of academic dishonesty as a consequence of the pandemic environment and online assessment, which at the time was the only the available tool for assessment. In further text the environment of online assessment will be explored through various studies but also this particular aspect of it, first in studies worldwide and then specifically in the Republic of Croatia.

1.1. Online assessment during the pandemic worldwide

In a study done in Indonesia, it has been found that many students did not do assignments well or on time (Perwitasari et al, 2021) and also that the assessments were not considered as a realistic measure of students' capabilities simply because the teachers had no control over the manner in which the students completed their assignment or could know whether they had been completed by someone else (Perwitasari et al, 2021). Munir and IT (2009) reported that distance learning had a negative impact on the teachers, since one of the teachers' doubts has been the quality and validity of students' assessment, over which they did not have as much control as they normally did in the classroom (Munir & IT, 2009).

In Turkey, during the academic year 2019/20, assessment has been done online and it entailed online tests, assignments and projects (Senel &

Senel, 2021). The question which arose was the quality of online assessment. Researchers conducted a study among 486 students from 61 universities and 69 departments on the assessment practices employed by the universities during the pandemic. Clarity in instructions in the context of assessment methods was high ($X = 3.56$, $S = 1.23$). Instant assessment and offering feedback were not found to be sufficient in order to enhance the quality of learning ($X = 2.94$, $S = 1.34$).

With regard to the online test security, 40,74% of the participants stated they did not take online exams. Time limitation was one of the frequently used measures (93,75%), whereas one of the difficulties listed by the participants was that there were too many questions in a too small a time frame. Scrambling questions and posing them to the students in a random order was another highly used method, whereas the least used method was preventing opening a new tab (13.54%). Furthermore, the participants stated that despite of their positive attitude toward online assessment and having no technical problems, they did not prefer online assessment over the assessment in a classroom. Interestingly, the participants' experience of the online assessment practices were found to be significantly different than their attendance of online exams ($t(484)=3.26$; $p<.01$). Those students who actually took online exams valued their quality more than those who did not (Senel & Senel, 2021).

Tools such as Canvas, Blackboard, Edmodo, Moodle, Google Classroom, Microsoft Teams, Zoom, Skype and Adobe Connect (Koh & Kan, 2020; Nyachwaya, 2020) have been used for online education. Some of the benefits of using



these tools for assessment were: offering instant feedback to students, editing assignments was easier in digital form and also that it was easy to submit an assignment if it has been written in digital form. Furthermore, it was easy to store and access students' work, statistics on students' participation. Digital tools had many options and possibilities which could enrich the end product and could also enhance students' motivation. Lastly, it was easy to re-use materials which were created digitally.

On the other hand, 'test security' was certainly an issue for online assessment and whether or not the results on an online test were reliable (Rovai, 2000). In order to prevent cheating, copying and plagiarism in the context of online assessment, technologies such as voice and retinal scans were developed (Jain et al., 2006). Their procurement and use brought up however many other issues. While such high technology prevention measures seemed impossible, techniques such as setting a time limit for online tests, presenting random questions to individual students, hindering new tab opening have been used (Arnold, 2016; Peterson, 2019). Another method was to create assignments which would be assessed in such a way as to make it impossible for students to copy from the Internet or some other resource. Tasks were created so that they were unique and required individual effort from the student (Rowe, 2004).

A very comprehensive study conducted in the US in 1964 among 5000 students has shown that almost 75% of the students were involved in some form of academic dishonesty (Chace, 2012; according to Meccawy et al, 2021). With regard to the opinions of the teachers, 412 teachers in Canada felt that the academic dishonesty among their students increased and that the universities' policy was one of the reasons behind this increase (MacLeod & Eaton, 2020). The use of technology has been reported as one of the main methods for academic dishonesty in higher education by Bajinath and Singh (2019) whereas King et al (2009, p.7) reported that students felt that online assessment offered more opportunities for cheating when compared to the assessment in the classroom environment (Bajinath & Singh, 2019; King et al, 2009). When the traditional methods of assessment such as quizzes and exams were translated into the online environment, Kayed (2013) felt that they were no longer a measure of students' real capabilities. (Kayed, 2013, p.20). A study done in the US among 30 graduate students

has shown that the students felt it was easier to cheat on online exams. They stated they were informed about the concept and meaning of plagiarism. However, they felt that copy pasting from the Internet was entirely within the domain of allowed (Larkin et al, 2017).

On the other hand, with regard to teachers, Olt (2002) reported that many teachers needed more training in order to be able to detect academic dishonesty in an online environment (Olt, 2002). Teachers' attitude when faced with cases of academic dishonesty has also been shown to play a role. In a study done by McCabe (1993), 39% of the teachers stated that if they encountered a case of cheating, their reaction would be to fail the student in question (McCabe, 1993).

In a study done by Meccawy et al in 2021 in Saudi Arabia it has been shown that the students felt the change in the form of assessment which was from face-to-face to online was visible in their grades (88,5%). Although it increased their workload, the students felt the change was favourable for them and that it would contribute to higher grade average in the end (45.5%). 33,8% of the students felt assessment methods in an online environment were more strict, 30,8% less strict and 45,2% experienced less exam anxiety since it was conducted remotely from their homes. 48,1% felt that were not a lot of opportunities for cheating on their online exams and assignments, whereas of the 34,5% of the students who reported cheating, the majority has given the reason for doing so being unable to understand the lesson content, with other reasons being the ease of cheating in an online environment. With regard to the teachers, 87,8% felt that the students engaged in academic dishonesty because of the lack of control over it on the side of the teacher and had for a consequence higher grades (77.4%). 59,6% of the teachers felt that online assessment was not a realistic picture of the students' knowledge and capabilities (Meccawy et al, 2021).

Choirunnisa and Mandasari (2021) conducted a study in Indonesia of high school students' perception of Google classroom as an assessment tool in the online environment. The majority of the students stated that they liked to use Google classroom to do their online assignments (91,2%). 76,5% of the students felt that doing online assignments has helped them to get a better grade. With regard to cheating, 85.3 % of the students felt that the features of Google classroom helped reduce cheating (Choirunnisa & Mandasari, 2021).

1.2. Online assessment during the pandemic in the Republic of Croatia

In a study conducted at the Faculty for Teacher Education, Drokán (2021) found that 27,56% of the students felt they were being given a lot more assignments and work as compared to classes in the classroom. 25,33% felt that online classes were not organised very well and also that the teachers were not well prepared for online classes (21,78%). Only 15,11% stated they were under no stress during the online classes and exams (Drokán, 2021).

Similarly, Mrak (2021) conducted a research at the Faculty for Medicine and with regard to online exams, 49,3% of the students felt less anxious about their online exams, as compared to exams in classrooms whereas 26,7% felt just as anxious about online exams as they were about exams in the classroom. 55,3% stated that the results they achieved on online exams were the same as the results achieved on exams in the classroom, whereas 33,3% stated that results on online exams were better than the results in the classroom. Given the conditions under which online exams were being conducted (cameras directed at the students, small groups, no possibility to go back to a question) 52,7% of the students stated that conditions were worse during online exams as compared to exams conducted in the classroom (Mrak, 2021).

Olujčić et al (2022) conducted a study among 308 students studying at various universities in Zagreb. 59% of the participants stated that they studied more for an exam knowing it was going to be held in a classroom as compared to studying for online exams. Interestingly, students expressed their concern about the gained skills (62%) and knowledge (71,5%) during online classes. 61% of the students stated they preferred classes in the classroom as compared to online classes (Olujčić et al, 2022).

At the University for Medicine, one of the methods employed for monitoring written online exams has been small time limit given to the students for solving the exams, which aimed at minimising the chance that the student searched through the materials or tried to contact other students during the exam, which however led to the exams evolving into tests for fast solving skills, rather than tools for assessing students' knowledge (Babić et al, 2022). The University has suggested to the teachers to use such exams as selection tools in the sense that after passing such an exam the students gained access to the oral part of the exam. Partial solution to the problem of monitoring the

students during online exams has been found in the use of the students' smartphones cameras. With regard to the subject Physics and Geophysics, during the academic year 2020/21 the students' passing rate was 85% on the written and 92% on the oral exams. The researchers noted a rising trend in the passing rate during the academic year 2020/21 as compared to the 2019/20 (75% written and 83% oral exams) and 2018/19 (62% written and 77% oral exams). In the academic year 2021/22 the classes and exams have been conducted in a hybrid mode, which could explain the slight drop in the passing rate (75% on the written and 89% on the oral exams) (Babić et al, 2022).

The subject of cheating on online exams among secondary school students in Zagreb has been the topic of research by Bosnar (2023), which included 400 students as participants in the research. Compared to the studies which researched cheating on exams held in a traditional environment (Anderman & Midgley (2004), Pavlin-Bernardić et al (2017), Putarek et al (2022); according to Bosnar, 2023) the obtained mean value for cheating on online exams was higher than the average value for cheating on exams in a classroom environment. The average value for the factor of context, i.e. what were the circumstances and situations which contributed to cheating in an online environment, has also been reported by the author as higher than the results obtained by previous researches which focused on the exams in a classroom. A statistically negative significant difference has been found between the students' motivation for acquiring knowledge and cheating: students whose goal was to assimilate knowledge are less likely to cheat on online exams. Similarly, a statistically positive correlation has been found between students' avoidance of work and cheating on online exams: those students who endeavour to work as little as possible will probably use their opportunity to cheat on online exams (Bosnar, 2023).

2. Discussion

Has online assessment during the pandemic been used by the students for acts of academic dishonesty more than the assessment in classroom?

Various researches point in this direction. King et al (2009) reported that the participants in his research felt that online assessment offered more opportunities for cheating when compared to the assessment in a classroom. The participants in the study done by Larkin et al (2017) also felt



it was easier to cheat on online exams. Additionally, even though they stated they were informed about plagiarism, they felt it was within the domain of allowed to copy paste from the internet. However, in a study conducted by Meccawy et al (2021) 48,1% of the participants stated there were not a lot of opportunities for cheating during online exams. Bosnar (2023) compared research results with the studies which focused on cheating in a traditional environment and found that the obtained mean value for cheating on online exams was higher than the mean for cheating in a traditional environment.

3. Conclusion

While there have been reports of academic dishonesty worldwide, the teachers tried to develop methods in order to prevent cheating in any form. Naturally, the quality of online lectures and classes needs to be viewed through the prism of the teachers' digital abilities, which were not equally distributed. With the question whether the results of online assessment during the pandemic paint a realistic picture of the knowledge and skills the students gained, the implication is what are the consequences of studying and taking exams in an online environment years later, when classes and exams returned to their traditional and normal form – in the classroom. This is a question which will need to be a subject for further research and analysis.

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