THE IMPACT OF DIGITALIZATION ON STUDENT ASSESSMENT

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Abstract: In recent years, digital technologies have rapidly changed the way of education which is delivered and assessed. The integration of digital tools in the evaluation of students has become increasingly relevant and it is seen as a way to overcome the limitations of traditional evaluation methods. This study aims to evaluate the use of digital technologies in the assessment of students and to examine the advantages and challenges of this approach. The study will review existing research on the application of digital technologies in student assessment and analyze the results of these studies. The study will also identify future perspectives and challenges for the development of digital assessment in education. The findings of this study will provide valuable insights for educators, policy makers, and researchers on the effective use of digital technologies in student assessment and its impact on the education system. **Keywords:** Education system, digital technologies, management, assessment.

1. INTRODUCTION

The use of digital technologies in education has been growing rapidly in recent years and has brought about significant changes in the way where students are taught and assessed. Digital technologies have the potential to improve the accuracy and efficiency of student assessment and provide more meaningful and timely feedback to students (Smith, J., & Johnson, A. 2019). This makes the evaluation of students through digital means a topic of great importance and relevance.

The aim of this study is to examine the use of digital technologies in student assessment and to assess the advantages and challenges of this approach. The study will focus on the current state of research in this field and will analyze the results of studies that have been conducted in various countries and educational settings. The study will also identify future perspectives and challenges for the development of digital assessment in education.

The importance of this study lies in the fact that digital technologies have the potential to revolutionize the way students are assessed, providing a more efficient and accurate evaluation process. The findings of this study will provide valuable insights for educators, policy makers, and researchers on the effective use of digital technologies in student assessment and its impact on the education system. By understanding the advantages and challenges of digital assessment, educators and policy makers can make informed decisions about the implementation and development of digital assessment in their respective educational systems.

2. THE IMPORTANCE OF THE TOPIC AND THE OBTAINED RESULTS

This research will include an analysis of the current state of using digital technologies in student assessment and will examine several studies conducted in different educational settings and contexts. The anticipated results of this study are as follows:

Improvement of accuracy and efficiency in student assessment: The expected results indicate that digital technologies can enhance the accuracy and efficiency of student assessment by providing more in-depth and timely feedback.

Enhancement of personalized assessment: The anticipated results suggest that digital technologies can personalize student assessment by offering individualized treatment based on each student's needs and progress.

Improvement of learning effectiveness: The expected results suggest that assessing students through digital technologies can improve learning effectiveness by providing accurate and timely feedback on student progress and motivating them to achieve better performance.

Identification of challenges and perspectives in digital assessment: The anticipated results will identify the challenges faced and perspectives for the future development of digital assessment in education.

This research will provide valuable insights for teachers, policymakers, and researchers regarding the effective use of digital technologies in student assessment and its impact.

3. DIGITALIZATION AND STUDENT ASSESSMENT

Description of Traditional Assessment Methods

In this section, a description of traditional methods of student assessment will be provided. These methods include written exams, verbal assessments by the teacher, group work, individual projects, etc.

Analysis of the limitations of traditional assessment methods: Traditional methods of student assessment have several significant limitations that need to be considered in the search for a more effective and objective assessment approach. These limitations include:

Teacher subjectivity: In methods such as verbal assessments by the teacher and assessment of group work, in some cases, the teacher may be influenced by factors such as personal preferences, relationships with students, etc., which can impact the assessment outcome.

Dependency on memory: Written exams are a traditional method of assessment, but they rely on the student's memory. In some cases, the student may have constructed knowledge in a topic but may not be able to recall it during the exam.

Difficulty in assessing practical knowledge and skills: Traditional assessment methods such as written exams and assessment of group work are weak in assessing practical knowledge and skills of students. These knowledge and skills are important to understand how effective a student is in applying knowledge in real-life situations.

These are some of the key limitations of traditional methods of student assessment. This summary of limitations will help understand the importance of developing new digital assessment methods that address these limitations and provide a more objective and fair assessment of students.

Description of Available Digitalization Technologies for Student Assessment

The impact of digitalization technology has influenced many aspects of life, including the way students are assessed. The available digitalization technologies for student assessment include:

Online exams: Online exams are an efficient and objective way to assess students' knowledge. They are personalized for each student and allow teachers to monitor their progress in real-time.

Learning portals: Learning portals are platforms designed to assist students in learning and being assessed simultaneously. They utilize a combination of video-based learning, online exams, and student progress tracking to provide a more holistic assessment.

Educational applications: Educational applications are an effective way to assess students' knowledge. They offer a wide range of interactive exams and activities that help students learn and be assessed at the same time.

Gamification assessment: Gamification assessment uses game elements to motivate students and assess their knowledge. This type of assessment combines interactive exams and activities to provide an enjoyable and motivating experience for students.

Overall, these digitalization technologies have revolutionized the way students are assessed, providing more personalized, interactive, and engaging assessment methods.

Methodology

The methodology used in this study involves a combination of qualitative and quantitative data collection. To gather data, a combination of interviews with teachers, surveys for students, and review of relevant documents was employed. Interviews and surveys were conducted with a selected group of teachers and students to understand their experiences and perspectives regarding the use of digital technologies in assessment.

In order to collect data on the attitudes and opinions of the students of the Regional schools of the Republic of Kosovo, a research study procedure was chosen, within which a student questionnaire was used.

The statistical group included students in years 10, 11 and 12 of Regional Schools;

The research was conducted in a representative sample of students of all years of study in Regional Schools. This election "quota" ensured satisfactory representation, as well as a sufficient number of respondents to apply the anticipated statistical procedures. The sample included a total of 94 students, out of 1200 enrolled in Regional schools.

The research was conducted in teaching and educational facilities (centers) in Skenderaj, Vushtrri and Mitrovica.

Center	Number of respondents	Percentage
Vushtrri	30	31.91
Skenderaj	25	26.60
Mitrovice	39	41.49
Total:	94	100.00

Table 1. Education center where students are surveyed

4. RESULTS AND ANALYSIS

The results indicate that the use of digital technologies in student assessment has provided significant benefits, including increased objectivity, improved accuracy and efficiency, and the creation of a more suitable and acceptable approach for students.

In the question "Have you ever taken an online test", all of them said yes (100%), 9.57% said 1 time, 52.13% said 1 to 5 times, and 38.30% said more than 5 times. It is important that all students have taken an online test at least once.

Iable 2: Taking the online test						
	Have you ever taken an online test					
City	1 to 5 online tests	More than 5 online tests	Once	never	Total	
Mitrovica	21	13	5	0	39	
Skenderaj	10	14	1	0	25	
Vushtrria	18	9	3	0	30	
Total	49	36	9	0	94	
Percentage	52.13	38.30	9.57	0	100.00	

Table 7. Taking the online test

In the question "Which devices did you use for online testing, 11.7% used a laptop, 12.8% used a PC, 2.1% of students used a tablet, and 73.4% used a smartphone." Smartphones are devices that are mostly used by students and they are familiar with them.

	What device did you use for online test?				
Devices	Mitrovica	Skenderaj	Vushtrria	Total	Percentage
Loptop	2	2	7	11	11.7
PC	3	7	2	12	12.8
Tablet	0	1	1	2	2.1
Phone (smartphone)	34	15	20	69	73.40
Total	39	25	30	94	100.00

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In the question addressed to the students, "Which test do you prefer more", we got this result in online tests, we have 71.3%, while in physical tests we have 28.7%. Based on these results, students prefer online tests more than traditional or physical ones.

Which test do you prefer?					
Grade	10	11	12	Total	Percentage
Online tests	19	22	26	67	71.3
Physical tests	2	15	10	27	28.7
Total	21	37	36	94	100

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Percentage	22.3	39.4	38.3	100	

In the question of "Which online testing platforms have you used", most of them used the Testmoz platform with 41.5%, Zoom with 28.7%, Kahoot 14.9% and other platforms 14.9%.

Which online platform have you used?					
	Testmoz	Zoom	Kahoot	Another	Total
Mitrovica	13	20	3	3	39
Vushtrria	15	7	6	2	30
Skenderaj	11	0	5	9	25
Total	39	27	14	14	94
Percentage	41.5	28.7	14.9	14.9	100

In the question of "in which test do you feel more stressed", we have this result of 11.7% in online tests and 88.3% in physical tests. Students feel themselves stressed in physical tests, while those online feel less stressed. Stress negatively affects student results.

Based on this, the expression that students want to learn while playing can also be found.

In which test do you feel more stressed?					
	Totali	Percentage			
Testet online	11	11.70			
Mitrovica	6	6.38			
Vushtrria	5	5.32			
Testet fizike	83	88.30			
Mitrovica	33	35.11			
Skenderaj	25	26.60			
Vushtrria	25	26.60			
Totali	94	100.0			

5. CONCLUSIONS

In this study, student assessment through digitalization has been analyzed, and traditional assessment methods have been compared to available digital technologies. The findings highlight that the use of digital technologies in student assessment provides several advantages compared to traditional methods. It improves the accuracy, efficiency, and personalization of assessment, enhances learning effectiveness, and identifies opportunities for gamification assessment. However, there are challenges that need to be addressed, such as technical barriers, privacy concerns, ensuring objectivity, and value education.

The advantages of applying digitalization in student assessment are numerous. For example, digital technologies can help in creating a more reliable and objective assessment process by reducing the influence of subjective factors on assessment outcomes. Additionally, digital technologies can make assessment more efficient and faster, easing the assessment process and ensuring that all students are assessed fairly and reliably.

However, there are also some disadvantages to implement digitalization in student assessment. For instance, one of these challenges is the difficulty in addressing students who do not have access in technology or they are not proficient in using digital technologies. If a group of students lacks access to technology or is unable to use digital technologies, they may be disadvantaged in their assessment, rendering it invalid and unfair. Additionally, if a digital assessment system is not properly designed or reliable, the assessment results may be compromised.

In general, the prospects for the future development of digitalization in student assessment are promising and expected to impact a more effective and fair assessment process.

In the development of the digitalization process in student assessment, there are several challenges that need to be addressed to ensure its success and effectiveness.

Technical barriers: The use of digitalization technologies in student assessment may face technical barriers, such as weak technology infrastructure, lack of internet access, and a lack of technical expertise in schools and decision-making levels.

Privacy issues: The use of technology for student assessment may raise privacy concerns, such as data security and the use of data for purposes outside the assessment context.

Lack of objectivity: Assessing students through technology may present challenges in terms of objectivity, such as the lack of personal interaction and the influence of external factors on assessment outcomes.

Care in value education: The use of technology for student assessment may pose challenges in value education, such as the lack of personal attention to moral and ethical value education.

These challenges need to be addressed in various ways to ensure that the process of digitalization in student assessment is successful and effective, and helps achieve learning and assessment goals.

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