

THE ADVANTAGES & DISADVANTAGES OF USING AUTOMATION TEST MAKING TOOLS IN THE EDUCATIONAL SYSTEM, ALTERNATIVE STRATEGIES TO MITIGATE THE DRAWBACKS

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Abstract: *The advantages and disadvantages of adopting automation test-making tools in the educational system are examined in this observation. The benefits include data-driven decision making, consistency and objectivity, personalization and adaptation, and time and resource efficiency. Some negatives, however, include a focus on quantitative evaluation that is excessive, technical problems and reliability, expense and accessibility challenges, and a break in interpersonal relationships. The essay suggests various alternatives to address these issues and maximize the advantages of automated testing in education, including the adoption of a balanced assessment approach, regular maintenance and quality assurance, strategic funding and resource allocation, and human-centered automation.*

Key words: *Automation test making tools, Educational system, Time and resource efficiency, Consistency and objectivity, Personalization and adaptability, Data-driven decision making*

INTRODUCTION

Several facets of our existence, including manufacturing and healthcare, have been gradually automated. Automation is being used in the educational system in the form of tools for creating tests to simplify and enhance assessment procedures. Although the use of these tools has the potential to completely alter how we evaluate student learning, it is crucial to weigh both the benefits and risks of doing so. The goal of this essay is to weigh the benefits and drawbacks of employing automated test-creation software in the educational system.

ADVANTAGES

Time and Resource Efficiency - the time and resource efficiency that automated test creation systems offer is one of their most important advantages in the educational system. Teachers must balance lesson planning, grading, and other responsibilities with the time-consuming effort of creating assessments. By automating the test-creation process, educators can save time that would be better spent on other activities, thereby increasing their productivity.

Consistency and Objectivity - tools for creating automated tests can increase the reliability and objectivity of evaluations. Conventional test-creation techniques are sensitive to subjectivity, bias, and human error. By using algorithms and pre-established

criteria to generate tests that are impartial, accurate, and objective, automation lowers these risks. This may result in assessments that are more fair and trustworthy, which is advantageous for both students and teachers.

Personalization and Adaptability - automation can help students have a more individualized and flexible learning experience. Automatic test creation technologies may examine the data of individual students and provide assessments that are specific to their needs and performance. Through possibilities for personalized assistance and the identification of areas where a student may be underperforming, this targeted approach can aid improve learning.

Data-Driven Decision Making - the potential of automated test creation tools to produce data-driven insights is a key additional benefit. Large volumes of data on student performance can be collected and analyzed by these systems, which aids instructors in identifying trends, patterns, and areas for development. Making decisions concerning the creation of curricula, the use of instructional techniques, and the distribution of resources can be improved with the use of this information.

Disadvantages

Overemphasis on Quantitative Assessment - Although automated test creation tools can offer insightful data, there is a chance that they will place too much emphasis on quantitative evaluations. Education is a complex process that goes beyond grades and test results. By depending too largely on automated methods, we risk overlooking the significance of qualitative measures, like essays, presentations, and group projects, which can reveal important details about a student's capacity for collaboration, critical thinking, and creativity.

Technical Issues and Reliability - Automated test creation technologies are not exempt from technological problems and hiccups, as with any other technology. It can be upsetting for both students and teachers when these issues result in erroneous test results or test failures. The quality of the algorithms and data utilized to make the evaluations also affects how reliable these tools are; this quality can range between various tools and platforms.

Cost and Accessibility - It can be expensive to implement automated test-making systems in the educational system, especially for institutions with low funding. For certain schools, the cost of obtaining software, maintaining licensing, and hiring employees may be prohibitive. However, the use of technology may make already existing imbalances between pupils worse, especially for those who don't have access to computers or reliable internet connections.

Loss of Human Connection - The use of automated test-creation software may also result in a decline in interpersonal interaction within the educational system. Assessment involves more than just judging a student's knowledge and abilities; it also entails identifying their unique needs and offering comments that encourages improvement. Relying on automated systems puts us at risk of missing out on the

chance for genuine interactions between teachers and students, which are crucial for fostering a supportive and interesting learning environment.

What are the alternative solutions for the given disadvantages mentioned?

Addressing the cons of using automation test making tools in the educational system requires the implementation of strategies that minimize potential drawbacks while maximizing the benefits of these tools. The following alternative solutions can help mitigate the identified cons:

Balanced Assessment Approach: To counter the overemphasis on quantitative assessment, educators can adopt a balanced assessment approach that combines automated testing with other qualitative assessment methods, such as essays, presentations, and group projects. This approach ensures that students are evaluated holistically, taking into account various aspects of their learning and development.

Regular Maintenance and Quality Assurance: To tackle technical issues and reliability concerns, educational institutions should invest in regular maintenance and quality assurance processes for their automated test making tools. This may include software updates, bug fixes, and the continuous evaluation of algorithms and data sources. By doing so, institutions can ensure that their tools remain accurate and reliable.

Funding and Resource Allocation: To address the cost and accessibility issues associated with automated test making tools, governments, and educational institutions can explore various funding opportunities and allocate resources strategically. This may include grants, partnerships with technology providers, and cost-sharing programs. Additionally, schools can implement device-sharing initiatives or low-cost technology programs to ensure that all students have access to the necessary tools and resources.

Human-Centered Automation: To preserve the human connection in the educational system, it is essential to adopt a human-centered approach to automation. Educators should use automated test making tools as a support mechanism rather than a replacement for their expertise and judgment. They should continue to engage with students, provide personalized feedback, and foster meaningful relationships. By doing so, they can maintain a supportive and engaging learning environment, even with the integration of automation.

Conclusion

While adopting automated test-making tools in the educational system may have some disadvantages, these can be overcome by combining balanced assessment strategies, consistent upkeep and quality assurance, strategic funding and resource allocation, and human-centered automation. Educators and institutions can leverage the advantages of automation while limiting any potential drawbacks by implementing these tactics.

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