



CONCEPT OF e-EXAMINATION

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Abstract: In the recent decade, modern technology-assisted examination has firmly established itself inside the university and school systems. This article presents a summary of the experiences that occurred throughout the implementation of digital examination. Students will be exposed to a new technique of writing exams. This research looked into a new system based on Ubuntu and a modified version of open-source software. Blocking access to more sophisticated software tools. Students were split on whether to take their exams on computers/Tablets or on paper, although past experience with electronic-based exams was a major factor in choosing the computer/Tablet medium. Students found the sounds of computer keyboards distracting during e-Examinations and preferred fewer on-screen windows/tablet writing, based on their imaginations. The new approach allowed students to take e-Examinations on their own laptop computers and tablets while being monitored by invigilators who did not have particular knowledge of information technology. The article ends with several recommendations for making improvements in written exams.

IndexTerms - Digital examination; change; incentives; efficiency in education.

I. INTRODUCTION

According to the report, India's higher education system is under threat. Students are growing more competitive, with the proliferation of massive open online courses and demographic estimates indicating that the number of students entering colleges is at an all-time high. At the same time, government funding is dwindling, and universities are looking for new sources of revenue. To remain competitive, Indian universities are attempting to devise strategies for making the best use of these limited resources. The challenge is to strike a balance between educational quality and efficiency. Much progress has been made in terms of educational quality and innovation over the last ten years. The number of pedagogical courses available to teaching staff at the university has increased, and these courses are now required. Furthermore, when hiring new employees, the benefits of educational experience have been emphasized. Despite the fact that problem-based learning, constructive alignment, and peer instruction are now common in most courses, some aspects of education and learning remain unchanged. Written examinations are one example of a conservative trait.

As ICT (Information and Communications Technology)-mediated flexible and online learning becomes more prevalent, there is a growing need for educators to consider modes of Examination using similar tools. In higher education, the cost of examination is the fastest growing component of tuition fees, while open-content reduces the cost of tuition and learning materials. However, the growing disparity between teaching via blended or online delivery with a learning content management system and assessing via pen and paper is another reason to consider ways for candidates to validate their achievement while using computers/tablets. Online, computer-based examination, in our experience, is fraught with difficulties, which are discussed in this report. As a result, the research focuses on a new proctored, offline, computer-based Examination system.

Online examinations are now widely used in many Indian universities. Quizzes, forums, and digital examination drop boxes are the most common uses for the online Examination. In many cases, online exams are administered through an institutional learning management system (LMS) such as Blackboard, Webcasts, or a proprietary product. Online exams, on the other hand, have a number of advantages for both the institution and the education system. These include:

- Time analysis of responses to the question level to improve discrimination.
- Incorporating video into questions, especially for scenarios in authentic examination.
- Adaptive testing, in which the next question is determined by previous responses.
- To reduce cheating, use question banks and randomize question and response orders.
- Results from entire candidate cohorts are automatically analyzed.
- An immediate result can be provided.
- Reduce your use of paper

- Simple access.
- Rapid evaluation.
- Ideal for people with disabilities.

These benefits and the difficulties associated with various forms of online examination have been described. This suggests online Examination may not be effective for evaluating creativity, problem-solving ability, critical thinking, reflection, or authentic learning; collectively the characteristics of deep and effective learning. The delivery technology itself creates problems of inter-candidate interaction and is prone to technical malfunctions which can affect many students simultaneously. Should the whole network fail, the examination needs to be rescheduled. Online testing environments offer useful tools for conducting Examinations of knowledge. Automated marking is feasible for multiple-choice questions and for short answer questions where keywords/ stylus pens are sought in the response. Examination feedback requiring an understanding of an essay etc. is so far not widespread and responses which include diagrams might be difficult to mark automatically using vision recognition systems. Examination of student knowledge and skills within a web browser window or software.

Proctored or supervised testing can increase fairness by having all students under the watchful eye of an examiner as they take the Exam. Examiners cannot prevent collusion if applicants are utilizing computers. Mobile phone connections and wireless networking are all possible communication avenues that cannot be readily stopped. If summative tests, especially those with high stakes, are to be conducted in an ICT context, a different technological and pedagogical approach is necessary. Because few schools can deploy hundreds of computers for the limited portion of the year allocated to formal examination, a method that can leverage student-owned technology would be especially appropriate. So, a small number of students without computers or with defective equipment may be accommodated by the school, just as a student with pen problems would be given an extra pen.

II. THE DESIGN OF E-EXAMINATION

The design of the examination pattern will be conducted by the by the structural implement of questions as the norms of educational committee. The first was a take home examination for practice in which students explored new learning content by creating a new learning outcome for pupils, which can only realistically be achieved



Fig: The diagram drawing

Through their use of ICT. It needs to be stressed that the Examination was of understandings gained in the course, not of operational computer skills. This type of examination will be helpful for the disability people they can use speak to test software for analyzing there examination. This pilot research offered preliminary evidence that formal examinations with students might be performed using computers rather than pen and paper. The pedagogical innovations that such a new method may permit were only tangentially investigated. During a practice lesson, they were shown how to utilize it to verify they could use the programme. Students were taught the fundamentals of the Ubuntu operating system, how to use Open Office Writer for word processing, and how to make drawings using the Gimp software throughout the lesson. The exam method entailed inserting the CD into a computer and turning it on. The machine subsequently booted (started working) using the Ubuntu-Linux operating system from the CD. On the desktop, an exam folder appeared. Because the exam questions in the folder were written in Microsoft Word, students double-clicked on the test document to open it in Open Office Writer.



Fig: The security of the system.

III. EVALUATION According to the viewpoints we examined in this study, students are likely to be the most optimistic about the transition from paper and pen to digital examination. The trend emerges from an examination of the remarks in the course assessments. So far, the few unfavorable comments on the digital test have been positive ideas for software development. When the developers got the proposal, they pledged to put it into action. Some concerns came from kids who were using the system for the first time and were concerned about trusting it. The benefits of the new approach have been underlined not just in comments on course evaluations, but also in discussions with representatives from student organizations.

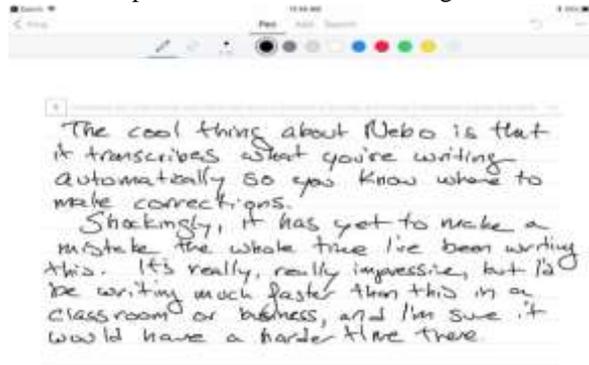


Fig: Analyzing the handwriting

The evaluation will be directed by the online correction in which the staff in charges can enter the precise descriptions scripts online. The answers scripts will be multiple as per their particular knowledge, the script will be get matched as per the candidate written script and get analyzes by the help of proofreaders. The data enters by the management faculty will be considered as the original script of answers, but in the meanwhile, the Google will also be considered. The candidate script and the management script is matched by each other up to 60% of the judgment. The evaluation will be quick and secure, for the safety factor the management had to go through the script manually. The results will fair and liable as per the candidate's knowledge. The survey showed the chances of fair changes of misevaluation due to the irrespective knowledge of the staff.

In short, the major advantages of the digital examination are the following:

- Quicker grading and feedback. Grading time was cut in half on average, which meant that students received more timely feedback on their exams. Other researchers have emphasized the importance of immediate feedback in learning.
- There is less stress. Because the students were able to edit their answers using software rather than a pen and eraser, they were less stressed during the exams. Hand cramps and wrist pains are quite common during traditional examinations.
- Anonymity. A number of students believed that the inability of teachers to identify students by name or handwriting made the exams fairer.
- A more rapid grading process. Most teachers estimated that using digital examination saved them at least half of the time they had previously spent grading. The time saved could be put to better use, such as course development.
- A more equitable grading system. Because the time required to grade examinations is reduced, fatigue is reduced, increasing the likelihood of fair grading. In addition, many teachers stated that students could no longer hide behind poor handwriting, which is also important for fair grading.

Less chance of losing exam papers. Exams have occasionally been misplaced or mixed up. Because there are no physical copies of the exams to lose with digital exams, this risk is reduced.

IV. CONCLUSION:

This study contains a number of significant findings that could be applied in other contexts. First and foremost, we recommend that other teachers look for alternatives to the traditional paper and pen examination, which is used in the majority of countries around the world. The advantages are enormous, both pedagogically and economically. Given the importance of sustainability, there are clear and significant advantages to using digital examinations instead of traditional examinations. Every year, universities and schools around the world spend a lot of money on exams. Digital examinations will effectively eliminate a significant amount of spending. The main impediment to the implementation of digital examinations is found at the level of central administration. Our recommendation is to find ways to engage them early in the process, as well as to find incentives that they perceive as rewarding and aligned with their knowledge.

V. ACKNOWLEDGMENT

I sincerely express gratitude to my supervisor Asst. Prof. A. Nagaraju for his guidance, invaluable input, generous help, suggestions and inspiration in all stages of my work. I was introduced about very interesting topic of Digital Examination, which is of high practical importance in Indian education field. His intellectual abilities have always rescued me in the difficult situations. It would not have been possible for me to complete this thesis without the guidance and support of him.

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