



Commentary

Remote assessment strategies in the post-COVID era of blended learning: Do they have a role?

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ABSTRACT

Since the onset of the COVID-19 pandemic in 2020, students' right to education has been threatened globally, and medical colleges are not an exception to this. During COVID-19 induced lockdown, medical colleges had to resort to online classes instead of regular academic sessions. Medical colleges and other higher education institutions in India faced a challenge in determining on how to engage their students in the learning process and assess them using reliable, effective and acceptable methods. Now that the covid pandemic is nearly over, many medical colleges have already started regular sessions. At the same time, some continue to use online lectures and other tools for engaging their learners in addition to regular classes. Medical colleges also used different online tools for formative assessments. But the effectiveness of such online educational activities is yet to be established in India. This article discusses how unsupervised online tests can be used for formative and summative exams in post-covid medical education.

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1. Introduction

The COVID-19 pandemic had threatened students' right to education globally, and medical colleges were not an exception to this.¹ The academic year of any course ends with a high stake examination like the end of semester exams or university exams. Such high stake examination results decide students' eligibility for promotion to the next level of the course. In India, the MBBS curriculum has set norms and methods for formative and summative exams and a schedule for conducting those exams. In the scenario of COVID-19, there was uncertainty about the lockdown period and how long it would take for the medical colleges to resume their regular academic sessions. Medical schools

in India had a hard time deciding how to get their students involved in the learning process and measure them with reliable and valid methods.² This led to the adoption of online-based remote learning, where different online tools were used for content delivery and engaging remote learners. Though many technological tools are available, without proper training, teachers may not be able to use those tools effectively, as most teachers are accustomed to the traditional classroom teaching and assessment method.

Engaging learners via the online medium involves additional preparation on the side of teachers, including designing various types of online teaching-learning activities that promote learning effectively. While most medical colleges have already begun offering regular classes, a few others employ online lectures and other tools to effectively engage their students, combining the advantages of both traditional and online teaching

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approaches. These colleges are also using different online tools for formative assessments. But the effectiveness of such online educational activities is yet to be determined in India.

The Indian government had sent orders to educational bodies like Central Board of Secondary Education (CBSE), National Testing Agency (NTA) and National Institute of Open Schooling (NIOS) to postpone their examinations to avoid the gathering of large number of students and putting them at a risk of getting infected with the corona virus during the peak period of covid pandemic. Rarely examinations had been postponed earlier on a nationwide scale by the Universities or other bodies that also only under unavoidable circumstances. These postponement and subsequent cancellation of exams might have been a delight for some section of students as they would have expected to get more time for better preparation. But, it created mental tension and disturbance in some students' study routine, leading to confusion and disappointment as they had to wait for some more weeks or months to give their exams. It might also have been demotivating for some students who will tend to lose the momentum gained so far in preparing for the exam. These extraordinary circumstances created disappointment among students to give up their vacation travel plans to their native place and study plan during the vacation for appearing in future competitive exams. The concerns from the parents' side were for financing their wards for the extra period they would be spending in the college, and also the fear of uncertainty regarding the current situation, etc. Postponement of exams will also delay the award of degrees. Administrators of many colleges had to face the consequences of adjusting the academic calendar and managing resources like manpower, time, and space. The obvious choice for some colleges and universities was to conduct the exams in the scheduled period using an alternate mode. The COVID experience showed online exams as the most suitable alternate mode in similar situations of public health emergencies where the colleges have to close to avoid group gatherings and have to adhere to social distancing policy strictly. Though online exams have its own merits, educationists have raised concerns over the reliability of unsupervised online exams.³

Unsupervised online exams are more suitable for formative assessments and for assessment of self-directed learning. But, their reliability in summative assessments or exit examinations is not well established. Unsupervised online exams as a substitute for conventional summative university exams have their own challenges and shortcomings. The main challenge is the maintenance of academic integrity in unsupervised online exams. As unsupervised online exams are conducted in an uncontrolled environment (mostly at students' place of stay), students tend to show cheating behaviour. There is no assurance that students will be giving their tests without any assistance

from their books, computer, internet, friends and parents. The students' possession of gadgets like PC, laptops, tablets, and smartphones to give an online test is considered a primary challenge. Though there is no doubt about the availability of technologies for online education and online assessment, the accessibility and affordability remain a question among the downtrodden and disadvantaged learners. The compatibility issues like preferred browsers, operating systems, internet connectivity, speed, and suitable computer configuration are also potential challenges. The candidate's familiarity in effectively using an electronic gadget for online tests is also a valid concern among educationists. Before the COVID outbreak, students were tested using paper-pen methods. They were now expected to type electronically and submit their answers (in case of descriptive questions) on an online platform. Only students who are well versed in keyboard typing can perform well or do their best on time which is also a shortcoming for online test takers. Issues like motivation to attend the test, distraction in the place of stay, and lack of attitude/habit in giving online tests influenced the online exams. As an alternative to online typing, some colleges insisted on writing on answer sheets and posting the scanned copy to the concerned authorities.⁴ Unsupervised online exams have their demerits with regard to the validity and reliability (trustworthiness). Instead of holding one single exam for evaluation, exams can be improved by increasing the number of tests with changing difficulty levels of different possible questions on the same topic. The order of questions and the options to the questions can be shuffled to make them difficult to copy. There are many issues in online assessments cited in the literature, such as cheating by the students, substandard questions, multiple-choice questions, and substandard test designs that do not cater to the learners' individual differences.^{5,6} The main challenge is cheating by the students.⁷ In case of short answers, introducing varying time duration and disabling the copy and paste option may be used as anti-cheating mechanisms in an unsupervised online test environment.^{5,8} Such mechanisms include disabling right-click context menu, copy/paste, translate, autocomplete, spellcheck, printing, etc. Artificial Intelligence (AI) mechanisms include eye and body movement detection, auto cut-off time, etc. Selecting an online exam software with an inbuilt intelligence system to detect extra-human or machine intervention or detect suspicious movement or activity by the test-takers will help implement unsupervised online exams.⁹ To gain appropriate recognition for unsupervised online exams, more reliable foolproof mechanisms to foil cheating behaviour coupled with strategies to cross-check the integrity of students online performance need to be further devised.

In light of the recent return to pre-covid stages, and the fact that future breakouts are not fully ruled out,

institutes' readiness for online examinations remains a concern. Since online summative exams do not figure in the current curriculum, a policy decision and approval by the competent authority should be obtained for conducting formal authorised online exams to avoid litigations from the stakeholders. Looking into the success stories of such online exams conducted elsewhere in the world and anecdotal experiences from some institutes during the COVID period, would help the policymakers make necessary policy measures for better implementation, keeping in mind India's socio-cultural and educational dimensions. The COVID-19 pandemic presented us with an opportunity to venture into newer modes of assessment. It appears at the moment that blended modes of learning utilising both conventional and online learning strategies may be helpful to learners. Apart from orienting the students in using technological tools, it is also imperative to train our faculty in employing online tools effectively in their routine teaching, learning and assessment activities.

2. Conclusion

To conclude, this article explores online assessment systems as a tool. The study of their characteristics can assist educational administrators, decision-makers, educational researchers, and system developers in the future when selecting and/or constructing an online assessment system. However, because students are the ones who utilise online assessment systems, it is critical to understand their perspectives, as well as how online assessment systems reflect on and promote their learning. Thus, future research might examine the effects of online evaluation systems on various academic variables.

3. Source of Funding

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4. Conflict of Interest

The authors declare no conflict of interest.

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