



# Online assessment strategies: Insights from Recent Studies

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## Challenges and Opportunities: The COVID-19 Influence

In view of the outbreak of COVID-19, the University recommended teachers to facilitate and conduct online assessments and to avoid face-to-face examinations. Traditionally, tests and exams are key components in continuous assessment to assess and monitor students' learning and academic progress.

To assess our students based on the criteria recommended by the University, we have revised our assessment schemes for our course, SBMS1432 Human Anatomy and Physiology II, accordingly, and replaced all on-campus assessments with online assessments or e-assessments. It was a big challenge as changing the assessment format into an online mode involved a tremendous amount of work and effort putting together to ensure the academic integrity maintenance and success of the systemic computer technology approach when compared with the traditional written assessment.

## Objectives

We investigated on the feasibility and effectiveness of the revised assessment methods and how to maintain the academic integrity for the online assessments in the course, SBMS1432, Human Anatomy and Physiology II with a class size of about 70 students.

## Methodology

We set a total of two multiple-choice question online tests and one online exam in this course. We have analyzed and compared various formats for display and different combinations of invigilation methods in the online assessments as shown.

Formats of Multiple-Choice Question Setting	Invigilation Methods
1. Display all questions at a time	a. Blackboard with Zoom monitoring
2. Display questions one at a time (Trial only)	b. Lockdown Browser with Response Monitor
3. Display all questions at a time	c. Lockdown Browser with Response Monitor plus Zoom monitoring
4. Randomize the order of questions or answers	d. Lockdown Browser with Zoom monitoring



## Discussions

After having tested and analyzed the feasibility and the effectiveness of each of these formats and different combinations of invigilation methods of the online assessments, we found that there were pros and cons in any of these methods. Therefore, there is indeed no "magic" solutions to ensure the academic integrity of students. On the one hand, we trust our students. On the other hand, we ought to provide fair assessments and ensure academic integrity. We could only do our best to minimize the chance of cheating while ensuring that these online assessments could serve as appropriate assessments for our students and preventive measures against the potential spreading of COVID-19.



## Take Home Messages

To conclude, it is important to ensure a stable internet connection on both ends (examiners/invigilators and students), provide clear and detailed instructions and guidelines to both students and invigilators with test trials in advance, and a smooth systemic invigilation process. In the future, there is a need to promote academic integrity widely on campus. Both teachers and students should have mutual understanding about the standards and the consequences of the academic dishonesty and cheating.

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