UNIVERSITI MALAYA

FINAL ASSESSMENT CONDUCT USING SPeCTRUM QUIZ MODULE

This guideline is prepared to help educators run their final assessment using SPeCTRUM's Quiz module.

Final Assessment Sem.II, 2019/2020

As part of the university's response to the Covid-19 restrictions, all teaching and learning activities, have been instructed to be moved online. The university recommended for courses with Final Examinations to be replaced with alternative assessments. A guide was disseminated with a list of possible alternative assessments to use as final assessments to replace the Final Exam.

Three types of courses have been identified:

(1) **Courses converting the sit-in Final Examination in the form of online exams.**
To ensure a smooth-running and secure examination, it is imperative that course coordinators and course owners *pay close attention to the information supplied in this guide*.

(2) **Courses that have changed their final examination format into take-home, open-book, and/or higher order thinking (HOT) exams.**
To reduce traffic in the SPeCTRUM Quiz module, it is recommended that these flexible/open-format exams use other SPeCTRUM modules (e.g. Assignment) or other external non-SPeCTRUM platforms of submission. We also advice that these assessments are scheduled outside of the examination weeks.

(3) **Courses that have complied with the recommendations by replacing the Final Examination with alternative assessments conducted in the final weeks of the semester.**

However, it was noted that still a high number of courses have chosen to conduct their final assessment via online exam.

Recommended Platforms for Online Final Exams

SPeCTRUM remains the only system within the university application system for teaching and learning with secure connection to relevant university applications such as student and course registration, identification of course coordination and teaching, and sufficient security feature that enables exam online to conducted.

Outside of SPeCTRUM, Microsoft Teams and Google Classroom provides the required security, however their systems are not connected to the university application system neither comprehensive enough for final assessment purpose.

Educators who wish to use these alternatives will need to do so on their own accord and need to be able to satisfy both themselves and other stakeholders (faculty, department, students) on the viability and validity of the assessment that they conduct in these platforms.

The university is also looking at e-proctoring system that could be implemented to further provide better security and purpose-made secure assessment function. However, it is unlikely that such system could be procured and deployed within the timeframe of the semester II, 2019/2020 final examination period.

SPeCTRUM Quiz

The SPeCTRUM Quiz comprised of an activity that may contain one or more questions from your course's Question bank. The Quiz activity lets you administer a wide range of questions (https://adecum08.wordpress.com/2020/03/27/question-types-in-spectrum-quiz-module/) for explanation of available question types] within a specific layout and order, provide various kinds of feedback based on how a student performed on the quiz, and control the ways that students can access the quiz. The Question bank serves as an organised repository of all the questions in a course, separate from any quiz activities that might use them.

Conduct of final examination may be achievable using the Quiz module in SPeCTRUM due to its embedded features which are: -

1. **Timing control**
   The system allows the educator to set the opening and closing time for the quiz, as well as limiting time availability for student to answer. Submission of attempts at the end of the time allocation may also be customised by the educator.

2. **Grading**
   Grading function is built-in, especially for automated marking question types available in the Quiz module. The system can also be set for either single or multiple attempts by the students.

3. **Layout**
   The question layout may be customised to achieve the required purpose for the educators. Question may appear one by one or in series, and the navigation of those questions may be programme either sequentially or freely navigable.

4. **Question Behaviour**
   As part of the security feature available when using the Quiz module, shuffling of question may be set to deter copying and well as question behaviour setting that influences student interaction with the quiz.

5. **Question Review Options**
   The review behaviour is undoubtedly particularly important feature, especially to control question review in a high-stakes exam condition as this sets the feedback given to the students as they interact with the questions. Student marks, right answer, the ability to review attempts are programmable by the educator to ensure question fairness and security.

6. **Attempt Restriction**
   Browser security is a basic security function included within the Quiz module where this enable the quiz to appear in a full-screen popup window that covers all other window

and has no navigation controls. Additionally, this feature prevents to a certain extent, students from using the copy paste function.

Programming the Quiz module as final exam.

ADeC has published a blog post comprising video guideline on using Quiz for summative assessment. (https://adecum08.wordpress.com/2020/03/25/using-spectrum-quiz-for-summative-assessment/)

However, to replace a sit-in final exam where is it deemed online exam is absolutely necessary, this guideline is written to illustrate key considerations that educators need to consider when setting the Quiz module to replace final exam.

1. **Question type**
   Except for *Essay question*, all other question types are designed to be automatically marked. This is an advantage for courses with large numbers of students as it helps reduce marking burden of the examiner. However, examiners who uses *Short answer question* should review student answers manually as they may want to still award marks to student answers that may have been misspelled or contains right answers that was not programmed in the possible answers.
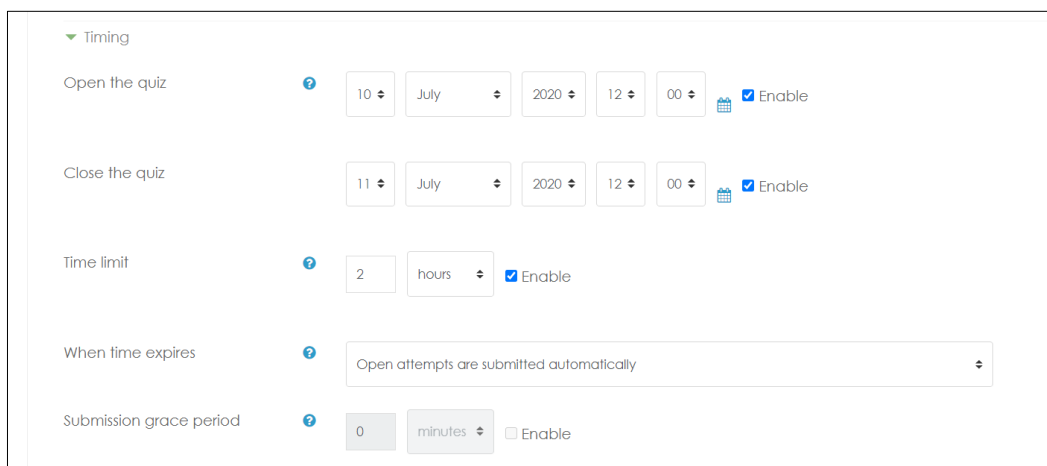
2. **Timing**
   Writing or typing answers online to replace sit-in examinations should allow for additional time allocation for uploading answers. Relatively, average human being hand-writes at between 20 – 30 words per minute while typing speed varies across proficiency level at between 10 – 50, or even more.

   Time allocation should also be considered for technical difficulties that students may encounter.
   Timing of the assessment should also be designed to minimise chances of cheating and/or copying among students.

   Examiners who choose to open the assessment time widely and then enable a time limit for students to start and complete answering (refer Figure 1) will have to satisfy themselves that there are no chance for cheating when students choose to delay starting the assessment.

Figure 1: Time limit set-up

3. **Layout**

   Question layout may be optimised to simulate sit-in exam experience. In this regard, examiners may allow for the Free navigation method, i.e. students may jump between question the wished to answer.

4. **Question review**

   The review options for the quiz determine how the question behaves while the students are doing the assessment. Therefore, it is very important to get this right or risk students being shown the correct answer automatically while the assessment is still running. It is suggested that for final assessments, all boxes for '*During the attempt*', '*Immediately after the attempt*' and '*Later, while the quiz is still open*' to be left unchecked (refer Figure 2).

Figure 2: Review option selection

Examiners may choose to allow/check the 'The attempt' box if they wished the students to be able to see their answers after they have completed them.

5. **Attempt restriction**

   It is a good idea to enable the Browser security option for the Quiz module to be used in final assessment. However please be advised that in some cases, even the examiner might not be able to preview the assessment if this feature is enabled while setting up the Quiz.

Figure 3: Browser security option

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Therefore, this feature should be selected only after the examiner is satisfied with the Quiz setup and all questions have been inserted for the assessment.

Important considerations
Apart from the above-mentioned settings to control the question behaviours, examiners should also consider the recommendations below.

Hiding the quiz until time to assess
To make sure that the Quiz module is not visible to students before they are supposed to see it, select Hide from students in the Availability option while you are setting up the quiz. Refer Figure 4.
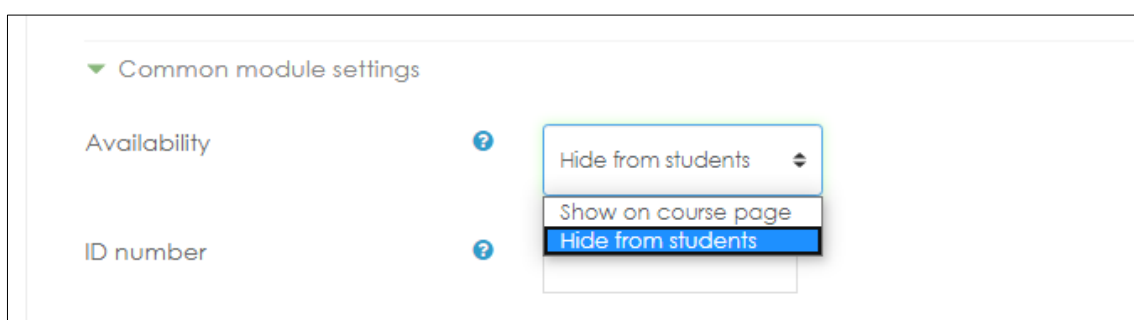

Figure 4: Availability in the common module settings

Be sure to change the settings to have it shown on the course page while students are taking the exam.

Alternatively, examiners could enable access restriction to students until the scheduled start time using the Restrict access function (Figure 5).
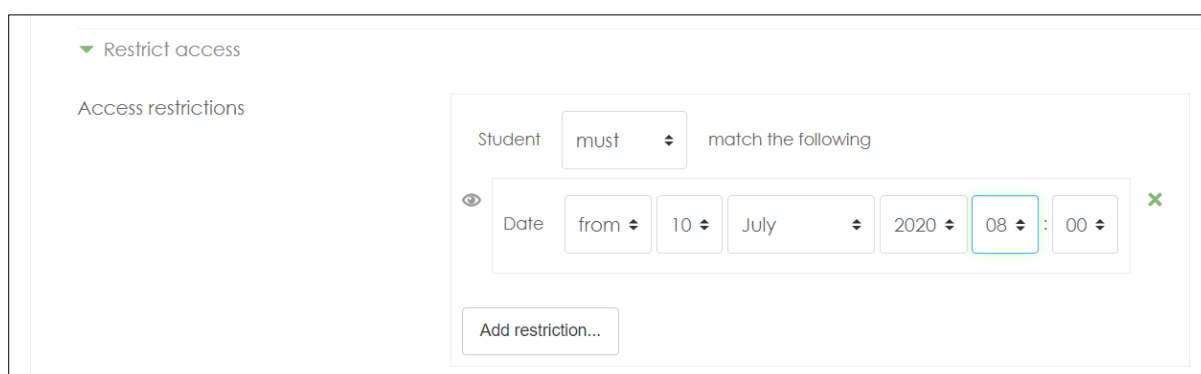

Figure 5: Restrict Access

Scheduling
To ensure SPeCTRUM running smoothly during the exam period, faculties are required to plan the scheduling for the final assessment and all courses using the SPeCTRUM Quiz module during the final exam period (29th June 2020 – 12th July 2020) must complete the set-up (creating the Quiz and set the final Quiz time) inside SPeCTRUM by 19th June 2020.

Testing the set-up

It is highly advisable for the educators and examiners to test any features they wish to set and customise for the final assessment in a mock Quiz, before deploying the real Quiz to the student as a high-stakes online exam. This will ensure the Quiz module behaves and responds exactly as how the examiners designed the assessment and to allow adjustment to be made before the actual online exam.

Randomising using question categories

If the examiner has a large question bank and wishes to randomise some of the questions given to students, please make sure that the question bank is categorised according to: -

    a. Similar CLO (course learning outcome), and
    b. Similar question difficulty

This will ensure fair assessment for the students and makes it easier for the examiner to analyse student outcome.

Further reading

1. Technical documentation for the Quiz module may be referred to from https://docs.moodle.org/34/en/Quiz_settings

2. Please refer to section 3: Quiz security and cheating in this link for more information. https://docs.moodle.org/38/en/Effective_quiz_practices