Tip sheet - Using FLO quizzes with large student numbers

Where the decision to have an exam or an online quiz is made rather than an alternate form of assessment, many staff are increasingly looking to perform a number of quizzes/tests/exams using the quiz tool in their LMS. There have been cases where the performance of the LMS and therefore the experience for students has been impacted when large number of students (>500) are engaging with the LMS in order to complete a high-stakes activity such as a quiz.

This tip sheet provides some recommendations for managing FLO quizzes with large numbers of students in order to minimise impact on load on FLO and to improve the experience for students.

Extend quiz availability

When dealing with large student numbers, the goal is to minimise the number of students accessing a quiz at the same time. One way to do this is to provide an availability window longer than the time limit. For example, a 2-hour quiz starting at 9am that opens at 8.55am and closes at 11.15am, or a 3-hour quiz that is available for student to complete within a 24-hour window. There are settings in quizzes that facilitate this; open the quiz, close the quiz and time-limit. Make sure your students are aware that the quiz will auto-submit when the *time-limit* is reached or the *close the quiz* time is reached, whichever comes first.

Create separate sessions

Another option is to put students into groups and then schedule the quiz to occur at different times throughout the day for each group. For example, for a topic with 600 students, you could run 3 sessions of a 2-hour quiz with 200 students per session, with sessions starting at 9am, 12noon and 3pm. Each session would conclude before the next begins, therefore at any one time there would only be a maximum of 200 students doing the quiz. Using this approach, setup the quiz once, then set the *open the quiz* and *close the quiz* times for the first session. Then using group overrides create different open and close times for the second and third sessions. Be aware that with this approach all students will see the start time for the first session in their My FLO home page, however once they are in the FLO topic site, they will see the right time for their group. Where the quiz is being used as an exam, a good way to ensure that students are clear about their start time is to schedule these sessions through Examination Services so it appears on their personal exam timetable. Some academic integrity solutions are indicated below for those of you who have concerns about students discussing questions.

Staggered start

Using a staggered start is similar to creating separate sessions, in that you need to put students into groups, but with this option sessions may overlap, ie. group two may commence before group one has concluded. To set this up one option is to use group overrides (as per above) with overlapping start times. Another option is to use the *restrict access* functionality in FLO. With this option the quiz needs to open from the start of the first session and close after the end of the last session (plus leeway if you choose to allow this – highly recommended). Instead of using overrides you would then restrict access by groups to the quiz link.

Taking the above example, for a topic with 600 students, you could run staggered starts for a 2-hour quiz with 200 students per group/start, with groups starting at 9am, 10am and 11am. With this example the load is still spread, as shown below:

	9-10	10-11	11-12	12-1
Group 1	200	200		
Group 2		200	200	
Group 3			200	200
Total	200	400	400	200

Again, with this option if the quiz is being used as an exam we highly recommend scheduling through [Examination Services](#) so start times appear on the students personal exam timetable.

Academic integrity

If you are concerned about academic integrity using these options, you may also want to use some of the randomisation measures outlined in [tip sheet: Designing online quizzes to minimise collusion](#), including shuffling the order of potential answers, shuffling the order of questions and allocating from a pool of questions.

Additional possible measures to address [academic integrity concerns](#):

- If using the quiz as an exam, make the exam open book; craft the questions such that whilst students may be able to use resources as a quick check, without good fundamental knowledge there is insufficient time to scan resources for the answer. In many cases this is reflective of professional practice.
- For each question, ask students to write down max 4 keywords relating to how s/he came to the right answer. Additional time may be required with this option and you should be aware that this will take more time to setup (additional 0 mark questions will be needed to capture the keywords) and potentially more time to review/mark. You will also need to give students an opportunity to practice this type of questioning before the quiz. Alternatively include questions with an emphasis on building an argument or justifying the approach rather than the answer itself.
- Consider running a random viva voce via Collaborate after the quiz as a follow up during which students are asked to explain how they arrived at their answers, using the keywords presented. Be aware that for large student numbers the logistics of running the viva voce may be resource intensive.

Provide a password to access the quiz

As per above, the goal with large student numbers is to spread the number of students accessing questions over time. By providing a password in order to access the quiz, students will commence the quiz at varying times, according to how long it takes them to locate the password and enter it correctly. This approach works well with a quiz run in a computer lab or similar physical space, as you can provide the password verbally or write it on the whiteboard. Facilitating this in the online space will require use of a [time-restricted](#) label or document, or you could post it in an [announcement](#), however note that this will be slightly less effective online as students will be able to locate and enter the password more quickly.

Avoid editing the topic

Editing a FLO topic should be avoided completely when a large quiz is set to occur - or in fact when any large number of users are expected to be active within the topic. Another example would be when an assignment is due - for some topics the busiest time is immediately prior to assignment due dates.

Editing a FLO topic is not just limited to editing activities and resources - it includes all actions that alter the topic when you have the editing mode turned on. This includes altering topic sections (toggling visibility, adding new ones, etc), simple renames of activities and particularly grading/marking.

How many students can take a quiz in my topic at the same time?

This is a common follow up question, and as you might imagine, there isn't any definitive number that can really be given - there are a lot of factors that come into play. The complexity of the quiz, the time limit and availability window, the number of concurrent users elsewhere in FLO (submitting assignments and other things) - all can affect what that number.

As far as general guidance goes - it comes down to balancing risk. For example, while we advise that staff not edit a topic during an active quiz - it could still happen. If one did, the more users in a quiz at the time - the worse the outcome would be.

As such, where practical, our general recommendation is to try to keep the number of takers of a given quiz to 500 or less. Ideally with no more than 2 or 3 such quizzes in other topics at the same time.

Spacing out large quizzes obviously helps reduce the risk of running into bad performance - and helps reduce the number of impacted users if something does go amiss. If using the quiz as a final exam, this will need to be scheduled via Examination Services. This will not only ensure minimal clashes for the students, but Examination Services will also be able to avoid scheduling exams using FLO quizzes with large student number at the same time.

Support and training

Access this self-paced quiz workshop or enrol in a synchronous workshop. For support please contact your local eLearning team.

Please consider approaches other than quizzes as replacements for exams – see Good practice guide – Designing assessment, also think about the question you ask in the quiz, consider Aligning quiz questions with Bloom's taxonomy and discuss these options with your Academic Developer.