



Setting up and using an iLearn (Moodle) quiz as an exam

Dr Mathew Hillier, Macquarie University, Australia

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Preface

An iLearn (Moodle) Quiz offers the opportunity to replace a traditional exam in many discipline areas. It comes with the benefit of automated marking using a variety of structured question types while also allowing for constructed responses. The guide is correct for Macquarie iLearn (Moodle 3.5).

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An exam-like experience

There are some things we can do to approach an exam like experience or help get students into the exam headspace when using a quiz activity.

The current Macquarie University stance, as of writing (April 2020), is that the use of externally provided remote invigilation services, lock-down browsers and do-it-yourself invigilation techniques are currently not recommended. This guide will assume the student will be using their regular web browser and any other software you direct them to use. Further guidance on the implications of this on exam design is outlined later in this guide.

As such the guide assumes a non-invigilated setting will exist. Using an online iLearn (Moodle) quiz on its own will not result in a 'secure' environment in the sense of an exam hall. As such the assessment must be designed as if 'open book' and will carry similar risks as do all non-invigilated assessment types. Therefore, the content and focus of the assessment task must be adapted accordingly.

Academic integrity implications

Without invigilation there are risks of:

- a) students having someone do it for them.
- b) students having someone sit next to them to provide help.
- c) students accessing unauthorised materials.
- d) we are unable to verify the identity of the person doing the quiz (MQ login can be easily given to someone else).

But in these hard times we probably need to release the finger off the student's throat a bit around security matters and we will likely have to go with the flow a bit more!

Setting up the quiz

In reading the remainder of this guide also refer to:

- iLearn quick guides for quiz (technical guides) <https://staff.mq.edu.au/teach/learning-technologies-and-spaces/teaching-technologies-and-tools/ilearn/ilearn-quick-guides-for-staff/quizzes>
- Examples are available for Macquarie University staff within the "Discover iLearn for Convenors" Moodle unit site <https://ilearn.mq.edu.au/course/view.php?id=36120> (Macquarie University account required).

Note: when first creating the quiz remember to set it 'hidden' from students until you are ready to use it. You may instead use quiz settings or apply an access restriction to prevent students from accessing the quiz.

Question design

In the move to non-invigilated or 'open book' assessment formats the type of questions that are set need to change with a greater use of higher-order responses that involve creativity, analysis and integration. It is best to avoid recall style questions or questions where a quick web search would reveal the answer.

An open book online assessment is also a good opportunity to leverage the capabilities of available technology tools to introduce a degree of authentic task design even when using a



quiz. This could include having students use software applications commonly used in the discipline or profession. The opportunity is available to assess relevant digital skills, although you will need to be mindful that the technology requirements of the task do not interfere with the student's ability to respond and address the learning outcome being measured.

Another good strategy is to ask contextual questions. You may require students to refer to something unique from the unit context such as theories, activities or resources used in the unit, an experience they had during the unit (e.g. group project), prior work they have submitted in the unit, recent or contemporary events in the local area (but be mindful if students are studying remotely from other countries). In general, higher order tasks and authentic task design decreases the ease of contract cheating or copy-paste cheating.

Some suggestions for how to construct questions in a quiz are below and increase in complexity as we go:

a) **Try using the different question types** - mix it up a bit (don't just use essay and MCQ). Moodle has 16 standard question types you can try.

<https://docs.moodle.org/35/en/Questions>

If you do use MCQs or matching questions then be sure to use random ordering of distractors (see Quiz settings). This makes it harder for direct collusion between students to occur. e.g. if everyone's response "a" is different.

Remember to re-phrase use of "all of the above" to "all of the other options".

Tip: Moodle has statistical analysis of MCQs that can help identify problematic questions and help improve question quality. See

https://docs.moodle.org/35/en/Quiz_statistics_report).

b) **Consider posing questions that require analysis and not just recall.** For example: You can attach material to the question prompt such as a mini case, scenario or data and then ask students to analyse, reflect, compare or contrast. It is also a good idea to contextualise the question and the student's response. You may ask students to link to theory taught in the unit, their own experience or events in the industry.

The reference material could include files or embedded media (video or audio).



c) **The calculated question types** provide the ability to present random variables or elements (from a pre-defined range) within the question. This makes it harder for direct collusion between students to occur because each student will get a different set of values in the question variables. Complex formulae can be used to generate a large array of possible answers. Each student will see a different set of numbers.

Example - calculated question - display for student A

Question 1
Not yet saved
Marked out of 1.00

What is the answer to 9.8×6.4 ?

Answer:

Example - calculated question - display for student B

Question 1
Not yet saved
Marked out of 1.00

What is the answer to 5.6×15.1 ?

Answer:

There are three types of calculated question types that include 'calculated' (as above), 'calculated multiple choice' and 'calculated simple'.

See further information on the calculated question types:

<https://docs.moodle.org/35/en/Questions>

d) **The embedded answers (cloze) question type** allows for multi-part and multi-variable questions that can include a mix of constructed convergent fields (text or numbers) and selection elements (radio button or drop-down selection list) as well as differential weighting of components. Building the question requires the use of a limited set of syntax to define the question elements. More info on cloze questions

[https://docs.moodle.org/35/en/Embedded_Answers_\(Cloze\)_question_type](https://docs.moodle.org/35/en/Embedded_Answers_(Cloze)_question_type)

Question 1
Not yet saved
Marked out of 13.00

This question consists of some text with an answer embedded right here

and right after that you will have to deal with this short answer

and finally we have a floating point number .

The multichoice question can also be shown in the vertical display of the standard moodle multiple choice.

☐ 1. Wrong answer

☐ 2. Another wrong answer

☐ 3. Correct answer

☐ 4. Answer that gives half the credit

Or in an horizontal display that is included here in a table

☐ a. Wrong answer

☐ b. Another wrong answer

☐ c. Correct answer

☐ d. Answer that gives half the credit

A shortanswer question where case must match. Write moodle in upper case letters

Note that addresses like www.moodle.org and smileys :-) all work as normal:

a) How good is this?

b) What grade would you give it?

e) **Consider having students do something to arrive at the answer** e.g. attach a spreadsheet or similar that students will need to use or manipulate to arrive at the answer (constructed enquiry). Students may be asked to respond using one of the many standard question types in an iLearn (Moodle) Quiz.

For example: ask the student to conduct an analysis task and explain their findings:



Question 1
Not yet saved
Marked out of 1.00

Download the [spreadsheet], analyse it and then explain your findings below.

Rich text editor toolbar with icons for undo, redo, bold, italic, link, unlink, list, indent, outdent, and image.

Example: Provide some starting information that the student will use to conduct a task then have the student explain the outcome.

Question 30
Not yet answered
Marked out of 1.00
Flag question
Edit question

Scilab will be required for the following question.
To open this application, click on the circular icon on the top left of the screen, and then type 'Scilab' into the search box that appears.

Enter the following program into scilab:

```
function f = myquadratic2arg ( x1 , x2 )  
f = x1**2 + x2**2;  
endfunction  
xdata = linspace ( -1 , 1 , 100 );  
ydata = linspace ( -1 , 1 , 100 );  
contour ( xdata , ydata , myquadratic2arg , 10 )
```

How do you interpret the output?
Please put your response inside the box below.

Rich text editor toolbar with icons for paragraph, bold, italic, list, indent, outdent, link, unlink, image, and table.

Path: p

Example: Provide data file for analysis using a discipline tool and have the student respond with a number that can be automatically marked.

Question 32
Not yet answered
Marked out of 1.00
Flag question
Edit question

Download the boys.csv file and open it with GNU Octave.
It contains data like this:

Age (Years)	Weight (kg)	Height (cm)
2	12.5	85.5
3	13.2	93.2

Find the correlation between height and weight.
Provide the answer to 5 decimal places.
Hint:

corr(boys(:,2), boys(:,3))

Answer:

f) **Consider having the student create something** using a software application. There are two options:

1) The iLearn Atto editor that appears in the essay question type can be used by students to record short (less than 3 minutes) audio or video clip.



This technique can be used for oral responses to one or more questions as in a spoken dictation test or Viva Voce test. Similarly the video response could be used for short practical skills demonstrations or a short musical performance (provided it can be done in less than three minutes!)

The video response can also be used as an ID check - See also the 'Deterring cheating' section below.

Note: the Essay question settings must have "Response format = HTML editor with file picker" to allow the recording to occur successfully. Other settings can remain at their defaults.

▼ Response Options

Response format

HTML editor with file picker



2) The Essay question type allows you to receive a file containing the student's complex constructed response as part of a quiz when "Allow Attachments" enabled and "Require attachments" set to at least 1.

▼ **Response Options**

...

Allow attachments Unlimited

Require attachments 1

You can direct students to use an external software application to do a programming task, spreadsheet task, drawing task etc. Note: Some consideration is needed in terms of being flexible regarding the use of different software tools to complete the task. For example: "use any drawing tool capable of exporting a PNG", rather than insisting on specific name brand proprietary tool. Be sure to provide clear instructions on what you want the student to do.

The student will need to upload their response file to the question.
You can also choose to require an accompanying test response.

Example 1: provide a starter file and have the student upload their changed file as their response. If a text response is NOT required then ensure "Require text = Text input is optional" is set.

Question 1
Not yet saved
Marked out of 1.00

Download the [spreadsheet] and make your changes to achieve the desired outcome.
Upload your updated spreadsheet as your response.

Maximum size for new files: 500MB, maximum attachments: 1

Files

You can drag and drop files here to add them.

▼ **Response Options**

Response format HTML editor with file picker

Require text Text input is optional

Example 2: Programming task - provide a description and allow the student to create the file response. If a text response is also required then ensure "Require text = Require the student to enter text" is set.

Question 27
Not yet answered
Marked out of 1.00
Flag question
Edit question

Scratch will be required for this question.

To open this application, click on the circular icon on the top left of the screen, and then type 'scratch' into the search box that appears.

Using the default Scratch program, make the Cat sprite run in circles and 'meow' when it touches the sides.

When done, save the file to the answers drive using your name as the file name.

1. Provide a one or two sentence summary of the commands you used in your response in the text box below.
2. Then attach your scratch program file to this question.

Path: p

Maximum size for new files: Unlimited

Files

You can drag and drop files here to add them.

▼ **Response Options**

Response format HTML editor with file picker

Require text Require the student to enter text



g) **Use one or more 'random questions'**. This helps make direct collusion harder because students will each see a unique set of questions. This is done by:

- 1) placing multiple questions into a category in the question bank, then,
- 2) insert a 'random question' when building the quiz, when doing so specify the category that holds your pool of questions.

You can create multiple categories to hold each topic and difficulty level to ensure even topic coverage and equally difficult exams for each student.

The example below shows how an exam of 8 questions comprising two topics of selected response questions and two integration essays could be structured. Each student would receive a different set of questions in the places for questions 1 to 7. Questions within a category should be of the same difficulty and target the same learning outcome to ensure all students receive an equally difficult exam with coverage of each topic. The marks for each question within a category are the same. The example below shows how a student will be allocated questions from the various category pools and progress through the exam.

Example exam design

Category	Category 1 Topic A Easy	Category 2 Topic A Moderate	Category 3 Topic A Hard	Category 4 Topic B Easy	Category 5 Topic B Moderate	Category 6 Topic B Hard	Category 7 Integration	n/a	Total
Start	Question 1	Question 2	Question 3	Question 4	Question 5	Question 6	Question 7	Question 8	Finish
Attempt Quiz	Q1_01	Q2_01	Q3_01	Q4_01	Q5_01	Q6_01	Q7_01	Q8	Submit
	Q1_02	Q2_02	Q3_02	Q4_02	Q5_02	Q6_02	Q7_02		
	Q1_03	Q2_03	Q3_03	Q4_03	Q5_03	Q6_03	Q7_03		
	Q1_04	Q2_04	Q3_04	Q4_04	Q5_04	Q6_04			
	Q1_05		Q3_05	Q4_05		Q6_05			
Pool	Five multiple choice	Four matching	Five mixed types	Five multiple choice	Four matching	Five numerical	Three essay questions	One essay question	
Moodle quiz build	Random question	Random question	Random question	Random question	Random question	Random question	Random question	Essay question	
Marks	1	2	3	1	2	3	4	4	20

Based on K.Shultz (University of Adelaide) post on LinkedIn 2020

https://www.linkedin.com/posts/kymchutz_assessment-in-these-times-can-be-tricky-if-activity-6654144114428383232-PjzR

Not all questions in the quiz need be random thus allowing you to preserve sequences of questions where necessary. In the example, the final question would be seen by all students because it does not use a random question. More information on using random questions

https://docs.moodle.org/35/en/Random_question_type

Tip: Quiz statistics will also help determine the relative performance of each question used from a category. See https://docs.moodle.org/35/en/Quiz_statistics_report

Recommended settings

These settings used for the quiz can help to minimise opportunities for cheating, however you may find that some choices are a balance between minimising cheating and good test design from the student point of view. Relevant settings for using a quiz as an exam are explained below and are shown in the order in which each appears in iLearn (Moodle).

Timing Settings

Open/close

The open and close settings are used to control when the quiz is available for students to do a quiz attempt. e.g. if you want everyone to do a test between 10am to 11am on Tuesday 12 March 2020 then you can specify the times that you would want students to have access with open and close times. However, it is also a good idea to provide some leeway and set the close time a bit later to allow for technical mishaps that may cause a late start for a student. For



example, you might want students to be able to begin from 10am but to allow others to start the quiz as late as 10:30 and therefore set the close time at 11:30am.

Notes:

- To enforce a 1 hour duration you need to also set the 'Time limit' (see below).
- The close time can also determine when feedback is displayed (See 'review options' to define what students can see before and after the close time).
- If the close time passes, then the quiz attempt will end (Refer to 'When time expires' to decide what happens!).
- If the quiz link is not hidden (and/or 'access restrictions' have not been set to prevent access), then students will be able to see the quiz attempt page (and the details displayed upon it) prior to the open time – but students will not yet be able to press the attempt button.

If you are creating a non-marked practice quiz you can leave the open/close settings disabled.

Time limit

The time limit sets the maximum duration for an attempt. For example, 1 hour (other values can be used as needed). Each student will be given the 1 hour time limit from the moment they press the 'attempt quiz now' button. A countdown timer will be displayed within the quiz that displays the time remaining.

Using a time limit means it will reduce (but not eliminate) the opportunity for the student to look up answers online or to look for unauthorised resources (although we would encourage questions to be constructed in such a way that the answer can't just be 'Googled').

Given the example of a 1 hour duration and open/close settings for 10am to 11:30am a student will be able to start up to 30 minutes late and still get 1 hour. However, if the 'close' time passes before their 1 hour has elapsed then the duration available is reduced. For example, if the student started at 10:45am the student would only get 45 minutes to do the quiz instead of the full 1 hour, i.e. from 10:45 until the close time of 11:30am. See 'dealing with exceptions' where you can override specific quiz settings, such as the timing for a selected student on-the-fly.

The actual time you set should be based the estimated time required to complete the exam questions as if on paper, but then add in reasonable extra 'buffer' time to cater for technical overhead. For example, a 2 hour exam could be allocated 3 hours.

When time expires

As it happens the default is "Open attempts are submitted automatically" – this is good. This means that if the close time or the timer expires then the quiz responses that have been entered so far will be submitted automatically. The student can still submit early if they want.

Timing Example

Shown below is an example of an exam designed for 2 hours, but providing an extra 1 hour of contingency working time (i.e. time limit is set to 3 hours). The quiz will be available within a 4 hour window from 9am to 1pm on 1 June 2020. Attempts will submitted automatically should the timer expire or the close time is reached.

Timing

Open the quiz	?	1	June	2020	09	00		<input checked="" type="checkbox"/> Enable
Close the quiz		1	June	2020	13	00		<input checked="" type="checkbox"/> Enable
Time limit	?	3	hours	<input checked="" type="checkbox"/> Enable				
When time expires	?	Open attempts are submitted automatically						
Submission grace period	?	0	minutes	<input type="checkbox"/> Enable				



Grade Settings

Attempts allowed

This is the number of times a student is permitted attempt and submit a quiz.

Setting attempts = 1 best suits summative uses such as a graded test or exam. This prevents students returning once the quiz has been submitted.

▼ Grade

...

Attempts allowed

1

Note: the other settings in the Grades section should be determined by the assessment requirements.

When used for formative and practice activities it is best to set attempts > 1 to allow students to review their work and try again.

If you are creating a non-marked practice quiz you can set "Attempts allowed" to 'unlimited'.

Layout

New page:

This defines the default for how many questions will appear on each page of the quiz. Set this to "every question" to have the quiz display only one question per page. Note: As you build the quiz you also have the opportunity to selectively multiple questions onto the same page where this makes sense (for example, if you have multi-part questions).

Placing questions on separate pages helps to minimise exposure of questions on the screen to others in the vicinity and it makes it harder to take photos of the exam (that may be shared).

Note: this has a pedagogical cost in that it is much harder for students see the whole test at the beginning and therefore it decreases their ability to plan their work strategy. You may decide to have multiple questions on a page as a compromise or to group questions into topic sections on a per page basis.

Navigation method

Set this to "free" to allow students to navigate freely back and forth through the pages on the quiz. It is not advisable to prevent back tracking because we want to encourage students to review their work. While enforcing a sequence would make collusion a bit harder the sacrifice in pedagogy is not worth it in terms of disallowing students to review their work.

Layout example

A quiz with a default of one question per page and the ability to freely navigate to any question in the sequence, forwards and backwards.

▼ Layout

New page



Every question



☐ Repaginate now

Navigation method



Free



Show less...

Question behaviour

Shuffle within questions

Setting shuffle "yes" will randomise the display of question response choices where a question has multiple response possibilities or distractors - such as multiple choice and matching questions. This helps to make direct collusion a bit harder because each student will have a different option 'a'.

Remember to edit any "All of the above" options to say "All of the other options".



How questions behave

Using 'Deferred feedback' means students don't get to see feedback until after the quiz is submitted. This replicates a standard test or exam. You may also want to disable 'marks' whilst displaying written feedback (see also "Review options" and "overall feedback").

Question behaviour example

Showing a quiz with shuffled distractors (i.e. for MCQ and matching questions) and deferred feedback to suit exams.

▼ Question behaviour

Shuffle within questions ?

Yes ▾

How questions behave ?

Deferred feedback ▾

Review options

When conducting an end-of semester exam it is advisable disable all items (untick all the boxes under each section).

▼ Review options ?

During the attempt

- ☒ The attempt ?
- ☐ Whether correct ?
- ☐ Marks ?
- ☐ Specific feedback ?
- ☐ General feedback ?
- ☐ Right answer ?
- ☐ Overall feedback ?

Immediately after the attempt

- ☐ The attempt
- ☐ Whether correct
- ☐ Marks
- ☐ Specific feedback
- ☐ General feedback
- ☐ Right answer
- ☐ Overall feedback

Later, while the quiz is still open

- ☐ The attempt
- ☐ Whether correct
- ☐ Marks
- ☐ Specific feedback
- ☐ General feedback
- ☐ Right answer
- ☐ Overall feedback

After the quiz is closed

- ☐ The attempt
- ☐ Whether correct
- ☐ Marks
- ☐ Specific feedback
- ☐ General feedback
- ☐ Right answer
- ☐ Overall feedback

Removing feedback for an exam can reduce (but not eliminate) the opportunity for those who submitted early from passing on answers to those still undertaking their attempt.

Removing all options will also prevent marks or feedback being seen by students before the full academic review process of the unit can be carried out. See also "Controlling grade release".

However, you may like to leave some descriptive feedback types such as 'general feedback' or 'overall feedback' enabled under "After the quiz is closed".

Extra restrictions on attempts

Require password

Setting a password may help prevent unauthorised access outside of those people given access. The password will need to be communicated (e.g. via email) to all students just prior to the time a quiz is set to open (but there is nothing stopping students from forwarding the password to someone else!).

Note: 'restrict access' rules can also be used to limit access to groups of students or to an individual without the need to communicate a password.

Overall feedback

Place suitable overall feedback here as you see fit. Note: You can include a statement in the overall feedback that "results displayed are not final and may be subject to moderation and changes as part of the academic review process" or "results will be released after the



university academic review process has been completed". To prevent feedback or marks being released before you are ready, See "Controlling grade release".

Restrict access

Using restrict access allows both simple and complex nested conditions to be established for the granting of access to a quiz. Care must be taken not to prevent access to those whom you want to have access! Consider the following when deciding if and how to use restrict access settings in relation to exams:

- If you want to establish different versions of the quiz for different groups of students within the unit then you can restrict access by group membership - or to one or more individual students.
- If you only have one version of the exam and you have already set the open/close time then restricting access using a date is not required.
- If you do use restrict access to set a date then this will prevent students accessing the quiz attempt page prior to a specified time. It is a good idea to keep the restriction visible in this case because it provides students with a visual indication of where they will find the quiz on the exam day.
- If you have set the quiz to "Hide from students" then you will need to un-hide it before students will be able to access it - regardless of the restrict access settings.

See also "Dealing with exceptions" for handling multiple versions of the exam or providing extra time to a student.

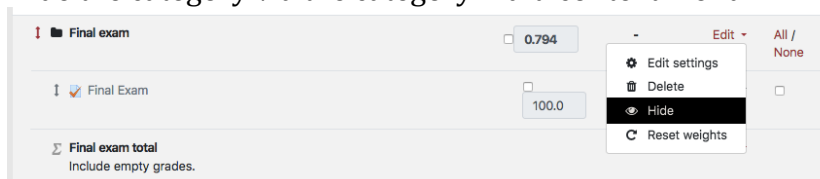
Advanced users can also refer to the Moodle docs

https://docs.moodle.org/35/en/Using_restrict_access

Controlling grade release for exams

When using a quiz to run a final exam you may need to prevent the release of grades until all marking has been completed and the full academic review process has been completed for the unit. You will need to:

- Disable all review options pertaining to marks or detailed feedback within quiz settings – see "Review options".
- Hide the quiz in the grade book. Unlike a TurnItIn or assignment activity, you cannot directly hide a quiz within the grade book. To do so you will need to:
 1. Create a new category in the grade book.
 2. Move the quiz into the category.
 3. Hide the category via the category 'Edit' context menu.



- Hide the unit total in the grade book. See 'Hide and show grades to Students' within the iLearn Quick guide: <https://staff.mq.edu.au/teach/learning-technologies-and-spaces/teaching-technologies-and-tools/ilearn/ilearn-quick-guides-for-staff/gradebook>

Deterring and detecting cheating

Some additional measures below are worth considering. While these steps won't eliminate cheating it will increase the amount of effort required to do so. i.e. it will be much harder to outsource to someone beyond their immediate geographic area.

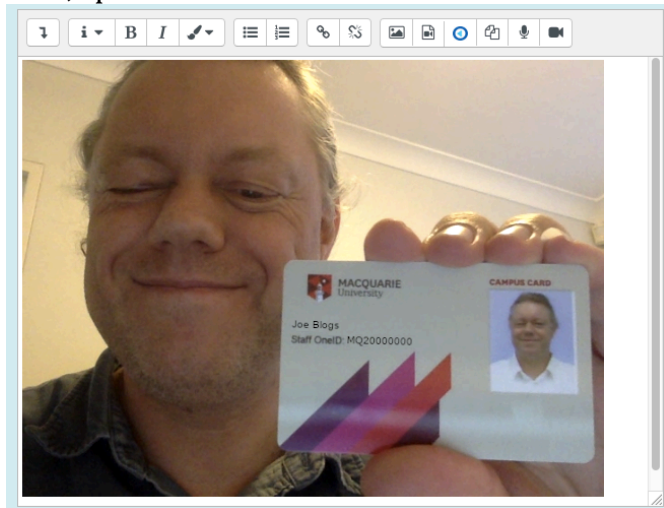


Add video or audio checks in the quiz. The Moodle Atto rich text editor has a 3-minute recording feature that is available as part of an essay question in a quiz. This requires a web cam, microphone and Firefox or Chrome to work so is best when using a laptop (No additional plugins are required. But it does NOT work on iOS devices such as iPad or iPhone or Safari on Mac).

The audio recording feature can be used as a comparatively lower bandwidth option for oral responses to some questions in the quiz or as simple Viva Voce style test.

The video recording feature can be used for an identity check and spatial context check. Video will use a bit more bandwidth for the upload.

As an ID check, have the student use their webcam to video record their face and ID card, speak their name and the unit title as their response to a question.



As spatial context check, use another question to have the student record a 360 sweep of the room including under their desk. Of course this won't stop them inviting someone else into the room or contacting someone online afterwards!

It is recommended that if the video or audio techniques are to be used:

- Set up the 'check' questions on the first 'page' in the quiz and separate from the content questions.
- Be sure to add extra time to allow the student to do these tasks without unduly taking away from their 'writing' time.
- Be sure to warn students well in advance that they will need to do this and provide an opportunity to practice these steps prior to the exam.
- Consider how to provide alternative for students without a suitable device or adequate bandwidth.

You will need to make a judgement if the additional complexity for the students and yourself is worth the relatively small increases deterrence of these measures.

Check access logs. The Moodle logs are found under Unit "Reports > Logs" and can be used to check access and usage patterns but some caution and understanding of the context will be needed in interpreting these logs. This is best done in combination with other evidence and with advice from technical support staff. The IP address that was used to undertake the quiz and other activities on Moodle could provide indications of contract cheating or collusion. A rough geographic location can be determined using a service such <https://db-ip.com/> or <https://ipstack.com/> to convert the IP address into a location – but these are not always accurate and may only be indicative of the country and not individual cities.

Indications of contract cheating - Alternating patterns of logins from locations far away from each other over very short time spans. i.e. Australia then India then Australia within hours. If the quiz was done by someone logging in from another country when the student lives locally and has otherwise logged in from local IP addresses (i.e. compared to the other sessions by



that student). If the student has travelled to their home country recently this would need to be taken into consideration.

Indications of possible collusion - If the IP addresses of two different students doing the quiz are the same (i.e. via the same internet service provider connection) or where IP addresses are adjacent computers on the network, when this is not normally the case (compared to use patterns for their other sessions on Moodle). But be mindful that some students do share accommodation.

Check document properties and writing characteristics. This strategy could be used as part of a two-stage exam where one half uses the quiz and the other half involves extended responses composed in a word document submitted to TurnItIn for basic text-matching. When using word documents, you can look at the document properties of submitted files that may provide some indications of a mis-match in identities (if you ask students to submit doc or docx files). Check for use of non-Australian spelling. Check use of distant IP addresses for the download and submission stages. A divergence from the format or required elements sections, a mis-match of presented content to that taught in the unit, a mis match of citation style, use of old or hard to find book sources that are not available in the university library are further possible indicators of out sourced work. See the following resources in relation to detecting contract cheating:

- Deakin University https://www.deakin.edu.au/_data/assets/pdf_file/0007/1853881/01-cradle-detect-contract-cheating.pdf. A webinar by the same is available: <http://taw.fi/29apr2020> (recording will also be available).
- University of Calgary <http://connections.ucalgaryblogs.ca/2018/10/01/15-strategies-to-detect-contract-cheating/>

Dealing with exceptions

Students accessing different versions of the exam:

You can use iLearn (Moodle) 'groups' and 'restrict access' to set up access to different versions or copies of the quiz for use by selected students or groups. This is best done well in advance of the exam date.

You may want each tutorial class group to access different versions of the quiz during their class time. You may have students residing in different time zones and want to provide separate version of the quiz. You may want to divide the unit with different versions of the quiz for a morning and afternoon sitting. You may want to set up access to a supplementary exam for specific students only.

Further information:

'Groups' <https://staff.mq.edu.au/teach/learning-technologies-and-spaces/teaching-technologies-and-tools/ilearn/ilearn-quick-guides-for-staff/groups> and

'Restrict access' <https://staff.mq.edu.au/teach/learning-technologies-and-spaces/teaching-technologies-and-tools/ilearn/ilearn-quick-guides-for-staff/activities>

Students with special conditions due to access plans:

When you know the requirements for each student in advance you can establish these before the exam day. This means fewer things you need to worry about on exam day.

You can use the quiz override function to set up exceptions to some quiz settings for selected students (or groups) in advance.



The settings are: a different password, open or close times, the time limit or the number of attempts.

To access the override function, go the quiz page then to the Actions menu (gear icon) and select User Overrides or Group Overrides as appropriate. For further information on using overrides, see "Special consideration or conditions for a particular student" on the page <https://staff.mq.edu.au/teach/learning-technologies-and-spaces/teaching-technologies-and-tools/ilearn/ilearn-quick-guides-for-staff/quizzes>.

Note: If you need to provide a different version of the exam then you will need to use 'Groups' and 'restrict access' as above.

Students who encounter real-time incidents:

For on-the-fly changes it is best to use the Moodle quiz override functions to adjust some quiz settings for a selected student. e.g. provide extra time or an extra attempt.

If the student experiences a browser or computer crash prior to the attempt submission, they can regain access to 'continue the attempt' by returning to the quiz page.

If the student was to accidentally submit the quiz without entering any responses, then you can use the override to give a student an additional 'attempt'. Note: if the student has already entered quiz responses then the quiz will follow the settings you have established for the quiz e.g. highest score or latest attempt etc. When providing a second attempt (when the original setting was 1 attempt) Moodle will not be able to re-inset the responses from the previous attempt, however those first set of responses will be stored in the attempts record for you to review later. While the prior attempt is not lost, the student will not be able to see their prior work during the second attempt.