

ALTERNATIVE ONLINE ASSESSMENTS

Suggestions and Options for WSU Unit Coordinators

WESTERN SYDNEY
UNIVERSITY



As WSU has moved to online learning and remote working, Unit Coordinators may be required to replace face-to-face assessments or examinations with online alternatives. This guide aims to provide suggestions to help transition assessments for online delivery.

When making changes to assessment tasks, please refer to the following WSU documentation:

- The [WSU Assessment Policy](#) should be consulted.
- Changes to assessments require approval as per the [Course and Unit Approvals Policy](#).
- Information regarding [Unit Approvals, Authorities and Delegations can be found here](#).
- Changes should be recorded and submitted through the [online Teaching Continuity Form](#).

There are also procedural guides relating Examinations and vUWS available for reference.

Contents



Guide

1. Review Learning Outcomes
2. Design alternatives
3. Check
4. Final review
5. Communicate



Design tips

- BlackBoard Quiz options
- Constructive alignment
- Multiple choice questions (MCQ)
- Open Book Assessments
- Online presentations
- Labs, workshops etc



Worksheets

- Unit Learning Outcomes
- Assessment Tasks Overview
- Assessment Tasks Review
- Assessment Tasks Checklist



STEP 1: REVIEW LEARNING OUTCOMES



Worksheet 1: Unit Learning Outcomes



Worksheet 2: Assessment Tasks Overview



Worksheet 3: Assessment Tasks Review



STEP 2: DESIGN ALTERNATIVES



Use Design Tips



STEP 3: CHECK



Worksheet 4: Checklist



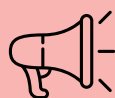
STEP 4: FINAL REVIEW



Worksheet 1: Unit Learning Outcomes



Worksheet 3: Assessment Tasks Review



STEP 5: COMMUNICATE



REVIEW

STEP 1: REVIEW the Unit LEARNING OUTCOMES and make adjustments to existing assessment tasks if possible

Before making any changes to a face-to-face assessment task or examination, look at the learning outcomes for the unit and review how effectively all the current assessment tasks address these outcomes.

Use Worksheet 1: Unit Learning Outcomes 

Create an overview of the existing assessment tasks. Include the current format of the tasks such as: take home task submitted in vUWS, in-class written task, invigilated examination, in-class oral presentation, practical or laboratory assessment, portfolio, mathematical calculations etc.

Use Worksheet 2: Assessment Tasks Overview 

1. Consider whether it would be possible to adjust the weightings and pacing of some existing tasks so that the face-to-face assessment task or examination could simply be removed. If possible, make the necessary changes to the weightings of existing assessment tasks and inform students as quickly as possible of all changes.
2. Consider whether the scope of existing tasks could be changed to include the learning outcomes that are currently addressed by the face-to-face assessment or examination. If possible, make the necessary changes to the scope of the tasks so that the face-to-face assessment or examination can be removed. Once again, it is imperative that students are informed of the changes as soon as possible.

At this point, a final review of the unit's assessment tasks can be made to ensure all learning outcomes are now being addressed.

Use Worksheet 3: Assessment Tasks Review 

If it is not possible to change the weightings or scope of existing tasks to remove the need for the face-to-face assessment or examination, it is necessary to find an equivalent online alternative. In the current context, advice is to choose a simple alternative that does not require technology beyond that provided in vUWS.



DESIGN

STEP 2: DESIGN online ALTERNATIVES to traditional invigilated examinations and face-to-face assessments

Online exam proctoring

Online proctoring allows students to take tests remotely. Students are required to provide their own device, camera, speakers and stable internet connection. The proctoring partner for WSU is ProctorU, it will sit on top of vUWS and additional integration will not be required. The WSU Examinations team has a [sharepoint site](#) for staff to view all resources in regards to online exam proctoring.

Offering remotely proctored digital examinations is expensive and complex to service and implement at scale, so it is not necessarily a straightforward or feasible option. Also according to recent surveys of Australian university students and staff, cheating on heavily-weighted, high stakes exams occurs more often than cheating on other types of assessment tasks ([Bretag et al., 2018](#); [Harper et al., 2018](#)).

Online proctoring will only be available for WSU units with external accreditation requirements. Therefore most Unit Coordinators need to consider alternative assessment types that can meet the requirements of their units and students.

Alternative assessment types

Alternative assessments provide online tasks that are equivalent to the existing face-to-face tasks. One option is replacing a heavily weighted examination (e.g. 60%) with 2 or 3 smaller assessments (each worth 20% or 30%) conducted over a few weeks.

The vUWS quiz tool can be utilised to provide randomised and timed questions that limit the opportunity for students to collude with others or refer to resources.

Use the Design Tips section for assistance 



CHECK

STEP 3: CHECK the changed assessment task is ready for implementation

Once the face-to-face assessment task or examination has been changed onto an online alternative, use the following checklist to ensure it is ready to communicate to the students.

Use Worksheet 4: Checklist 



REVIEW

STEP 4: Complete a FINAL REVIEW of all the unit's assessment tasks

Use Worksheet 1: Unit Learning Outcomes 

Use Worksheet 3: Assessment Tasks Review 



COMMUNICATE

STEP 5: COMMUNICATE assessment changes to the students in a timely way

At a time when students are experiencing much uncertainty, it is essential that changes to their assessment tasks are explained as soon as possible and students are provided with the opportunity to ask questions and seek clarification so that they can prepare for their assessments and succeed.



BLACKBOARD QUIZ OPTIONS

Type of Questions	Description	Automatic or Manual Grading
Multiple Choice	Multiple Choice questions allow students to select one correct answer from several choices.	Automatic
Multiple Answer	Multiple Answer questions allow students to choose more than one answer. Use this type of question when more than one answer is correct.	Automatic
Fill in the Blanks	A Fill in the Blank question consists of a phrase, sentence, or paragraph with a blank space where a student provides the missing word or words. The maximum number of answers you can provide for a blank is 100.	Automatic. You choose the evaluation method for answers: Exact match, Contains part of the correct answer, Matches a pattern that you specify, if answers are case-sensitive.
Fill in Multiple Blanks	For Fill in Multiple Blanks questions, students view text that can contain up to 10 blanks. You can add a maximum of 100 answers for each blank. Students type the appropriate word or phrase for each blank. For questions with a single blank, use Fill in the Blank Questions.	Automatic. You choose the evaluation method for answers: Exact match, Contains part of the correct answer, Matches a pattern that you specify, if answers are case-sensitive.
Hot Spot	Hot Spot questions are questions where students are presented with an image and select a particular area as the answer.	Automatic
Ordering	Ordering questions allow students to select the correct order of a series of items.	Automatic
Calculated Formula	Calculated Formula questions present students with a question that requires them to make a calculation and respond with a numeric answer. The numbers in the question change with each student and are pulled from a range that you set. The correct answer is a specific value or a range of values.	Automatic
Calculated Numeric	With Calculated Numeric questions, students are presented with a question that requires a numeric answer. The question doesn't need to be a mathematical formula. You can provide a text question that requires a numeric answer.	Automatic



BLACKBOARD QUIZ OPTIONS

Type of Questions	Description	Automatic or Manual Grading
Essay	Essay questions require students to type an answer as an essay in a text box	Manual. you can set options for feedback for individual questions.
Short Answer	Short Answer questions are similar to Essay questions. Student responses aren't limited in length, but the number of rows you set for the text box help students know your expectations. The maximum number of rows is six.	Manual
Either/Or	In Either/Or questions, students are presented with a statement and asked to respond from two-choice answers	Automatic. Choose from: Yes/No; Agree/Disagree; Right/Wrong; True/False
True/False	True/False questions allow students to only choose either true or false in response to a question.	Automatic
File Response	For File Response questions, students upload a file from their computers or the Content Collection as the answer to the question. Students can create work before a test and submit the file with their submissions, particularly if it requires a large amount of text	Manual
Jumbled Sentence	Jumbled Sentence questions require students to select words or phrases from a menu to complete a sentence. The same menu appears for all blanks and can include both correct answers and distractors. You can add a maximum of 100 answers in the menu	Automatic
Opinion Scale and Likert	You can use Opinion Scale/Likert questions to measure students' attitudes or reactions with a comparable scale. By default, five answer choices appear that range from Strongly Agree to Strongly Disagree. A sixth option lets students select Not Applicable. You can change the text of the answer choices and adjust the number of answers from 2 to 100	Automatic
Quiz Bowl	With Quiz Bowl questions, students are presented with an answer and they provide the question. Student responses must be in the form of a question that begins with an interrogative, such as who, what, or where	Automatic



CONSTRUCTIVE ALIGNMENT

When designing a quiz, it is important to include all relevant content and ensure that the questions align with the level of learning required in the unit learning outcomes. Use the following strategy to design quizzes with varying levels of difficulty.

1. Group the unit content (eg. Topic A-D).
2. List the levels of learning (this should directly relate to the unit learning outcomes and can range from knowledge to evaluation).
3. Determine the number of questions for each topic and align these with the levels of learning. In the example below, the Knowledge row indicates that there are 5 questions aligned to each topic area. The table indicates that in this example there is an emphasis on application (15 questions) and analysis (10 questions).

Cognitive domains (Bloom's Taxonomy)	Topic A	Topic B	Topic C	Topic D	Total items	Percentage of total
Knowledge	1	2	1	1	5	12.5
Comprehension	2	1	2	2	7	17.5
Application	4	4	3	4	15	37.5
Analysis	3	2	3	2	10	25.0
Synthesis		1		1	2	5.0
Evaluation			1		1	2.5
TOTAL	10	10	10	10	40	100.0

Design blueprint for multiple choice test design (from the Instructional Assessment Resources at the University of Texas at Austin). Source: Assessing by Multiple Choice Questions <https://teaching.unsw.edu.au/assessing-multiple-choice-questions>

MULTIPLE CHOICE QUESTIONS (MCQ)

MCQs are often associated with lower levels of learning. The questions can be flawed or ambiguous which compromises the integrity of learning and the principle of validity (Costello, Holland, & Kirwan, 2018).

Common mistakes writing multiple choice questions include:

- Writing trick questions
- Making the correct answer obvious
- Using negative wording: not, no, doesn't, can't, etc
- Having implausible distractors
- Writing unclear instructions

Academic honesty is a concern for assessments that focus on knowledge recall or have a single correct answer, such as multiple-choice questions, so it is important to shuffle answers, randomise the order of questions, set good time limits, and develop a pool of questions to draw from. The question pool/bank can be used to build the quiz/test and to categorise questions according to topics.

It may be preferred to consider changing MCQs to short or long answer questions. Here are some examples of MCQs that have been re-designed to require the students to provide more explanations and in depth reasoning.



MULTIPLE CHOICE QUESTIONS (MCQ)

<p>Example 1 Original MCQ</p>	<p>The strongest and most resilient connective tissue is:</p> <p>A. adipose tissue B. reticular connective tissue C. fibrocartilage tissue (single correct answer) D. elastic connective tissue E. areolar connective tissue</p>
<p>Alternative questions, focussing on explanation</p>	<p>Why is fibrocartilage tissue the strongest and most resilient connective tissue? Comparing adipose tissue and fibrocartilage tissue, discuss reasons for relative strength and resilience of these connective tissues.</p>
<p>Example 2 Original MCQ</p>	<p>In a study aimed at identifying factors associated with risk of developing dementia, a group of elderly people with a formal diagnosis of dementia were compared with a group of elderly people without dementia for a range of factors related to health, lifestyle and occupation. The patients with dementia were matched with those without dementia by age, sex and area of residence. Data collection was by interview. For the patients with severe dementia, where the dementia interfered with data collection, surrogates (usually a family member) assisted with data collection.</p> <p>This study is a:</p> <p>a) Case-control study (single correct answer) b) Cohort study c) Cross-sectional survey d) Field study</p>
<p>Alternative questions focussing on explanation</p>	<p>What type of study is this? Why do you think this?</p> <p>OR:</p> <p>In a case-control study aimed at identifying factors associated with risk of developing dementia, a group of elderly people with a formal diagnosis of dementia were compared with a group of elderly people without dementia for a range of factors related to health, lifestyle and occupation. The patients with dementia were matched with those without dementia by age, sex and area of residence. Data collection was by interview. For the patients with severe dementia, where the dementia interfered with data collection, surrogates (usually a family member) assisted with data collection.</p> <p>What makes this a case control study?</p>

Acknowledgement for original multiple choice questions: Jennifer Lindley, Monash University

Source: Centre for Research in Assessment and Digital Learning. (n.d.). [Ensuring academic integrity and assessment security with redesigned online delivery, Deakin University.](#)



DESIGNING OPEN BOOK ASSESSMENTS THAT ARE COMPLETED UNDER TIME CONSTRAINTS AND SUBMITTED ELECTRONICALLY

In open book/open web assessments students have access to materials so the questions need to be re-designed to test students on the reasoning informing their response and/or the application of their knowledge in more challenging contexts. Case-based or application questions require deeper learning from students.

Essays or reports with heavy assessment weighting can be structured as a series of two or three graded tasks such as a proposal, a draft and a final submission. Each stage provides an opportunity for feedback and improvement (Weleschuk, Dyjur, & Kelly 2019).

Students can also be required to submit workings, calculations, proofs or justifications for their answers. If there is a requirement for the drawing or handwriting of any diagrams/symbols, additional measures can be taken to include this in the online submission. There are procedural guides available to support this type of electronic submission in vUWS.

To protect against contract cheating, the students can be asked to include examples discussed in the unit. Questions that encourage self-reflection can also discourage cheating. All open book submissions must undergo Turnitin checks and all students will be required to complete an honesty declaration before they can access their exam.

Here some additional strategies to reduce contract cheating in your online assessments

1. Provide a strong teacher presence and get to know your students (and their writing).
2. Be clear about your expectations and be available to assist.
3. Provide opportunities for practice and give constructive feedback.
4. Consider assessment design – see tips at cheatingandassessment.edu.au/educator/
5. Use the [Retention Centre tools in vUWS](#) to identify and follow up with students at risk.
6. Direct students to [WSU academic integrity resources](#) and support through [PASSOnline](#) and [Study Smart](#).
7. Embed learning activities that educate students on academic integrity – [see examples](#)
8. Consider including the [student academic integrity module](#) in your unit.
9. Be aware of contract cheating when marking and recognise indicators of contract cheating.
10. [Take action](#) if you suspect academic integrity breaches.

Sources: [Dawson and Sutherland-Smith \(2018\)](#); [Bretag et al./TEQSA workshop slides \(2019/20\)](#), [Bretag and Harper \(2018\)](#)



DESIGNING ONLINE ALTERNATIVES TO IN-CLASS PRESENTATIONS

Students can be asked (individually or in groups) to submit a narrated presentation in electronic form which can then be tutor-marked and peer-reviewed. PowerPoint is familiar to most students, and offers a slide-by-slide voice-narration recording facility. Markers will need to consider that given the recorded presentation format, students can have multiple opportunities to prepare the item they are submitting, rather than having to manage a live presentation. Assessment criteria should be edited accordingly.

As a follow up activity, students could be set up in groups to watch and discuss each other's presentations in discussion forums or in zoom/Blackboard Collaborate breakout rooms.

SUGGESTIONS FOR ADAPTING LABORATORIES/WORKSHOPS/ FIELD TRIPS UNITS FOR ONLINE DELIVERY.

Practical assessments could be replaced with electronically submitted reports based on the following types of online learning experiences:

- Video recording or live streaming of the practical learning activities typically undertaken by the students during a teaching session or while out on field trips. Technical Support Services (TSS) staff may be able to help facilitate the set-up of the demonstrated activity and/or participate in the video demonstration for students online.
- Simulated data can be provided to replace real data that would be generated during practical classes. Technical Support Services (TSS) staff could assist in synthesis of this data.
- Students can be engaged with virtual labs and simulations – there are several free online resources available.

References

Bretag, T., Harper, R., Burton, M., Ellis, C., Newton, P., Saddiqui, S., Rozenberg, P & van Haeringen, K. (2018). Contract cheating: A survey of Australian university students, *Studies in Higher Education*, 1-20

Centre for Research in Assessment and Digital Learning (CRADLE) & Deakin Learning Futures (DLF), Ensuring academic integrity and assessment security with redesigned online delivery, n.d. accessed 30 March 2020, <http://dteach.deakin.edu.au/wpcontent/uploads/sites/103/2020/03/DigitalExamsAssessmentGuide1.pdf>

Costello, E., Holland, J., & Kirwan, C. (2018). The future of online testing and assessment: question quality in MOOCs. *International Journal of Educational Technology in Higher Education* 15(42). <https://doi.org/10.1186/s41239-018-0124-z>

Dawson, P., & Sutherland-Smith, W. (2018). Can markers detect contract cheating? Results from a pilot study. *Assessment & Evaluation in Higher Education*, 43(2), 286-293. doi:10.1

Harper, R., Bretag, T., Ellis, C., Newton, P., Rozenberg, P., Saddiqui, S., & van Haeringen, K. (2018). Contract cheating: a survey of Australian university staff. *Studies in Higher Education*, 1-17.

TEQSA, Academic Integrity, n.d. accessed 27 March 2020, <https://www.teqsa.gov.au/academic-integrity>

Weleschuk, A., Dyjur, P., & Kelly, P. (2019). *Online Assessment in Higher Education*. Taylor Institute for Teaching and Learning Guide Series. Calgary, AB: Taylor Institute for Teaching and Learning at the Un

UNSW, Assessing by Multiple Choice Questions, n.d. accessed 4 April 2020, [https://teaching.unsw.edu.au/assessing-multiple-choice-questionsiversity of Calgary](https://teaching.unsw.edu.au/assessing-multiple-choice-questionsiversity%20of%20Calgary). Retrieved from <https://taylorinstitute.ucalgary.ca/resources/guides>



UNIT LEARNING OUTCOMES WORKSHEET

Unit Learning Outcomes	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	



ASSESSMENT TASKS OVERVIEW WORKSHEET

Existing Assessment Tasks	ULOs addressed	Weighting	Current format	Assessment Instrument (eg Rubric, automated answer key in vUWS)	Accreditation Requirements (if any)



ASSESSMENT TASKS REVIEW WORKSHEET

Revised Assessment Tasks	ULO's addressed	Weighting	Current or new format	Assessment Instrument (eg Rubric, automated answer key in vUWS)	Accreditation Requirements (if any)



CHECKLIST

Assessment design

- Does the assessment task assess the relevant learning outcomes?
- Does the unit provide content and learning activities that help the students to prepare and succeed in the task?
- Is there a practice opportunity planned so that students are familiar with the new format. This will help build the confidence of students to perform at their best.

Rubrics

- Are the assessment criteria appropriate to the task?
- Are the criteria and standards clear and differentiated?

Set up in vUWS

- Is the assessment task built and the functionality checked in vUWS?

Guidelines & Submission instructions

- Is the brief and/or assessment guidelines clear to the students? Make sure clear information regarding the new format are provided.
- Are there clear submission instructions in vUWS?

Feedback

- How will feedback be provided to students?