Number 7

Designing Take Home Examinations



Associated Academic Enhancement Framework (Hybrid) Matrix Principles:

Student Success: Course-wide emphasis on assessment for learning providing information about student achievement through active and student-led approaches.

Associated Assessment and Feedback Principles:

- AD1: Assessments are explicitly aligned to learning outcomes and set at an appropriate academic level.
- ❖ AD3: Course-wide assessment practices are designed to ensure all students have equal opportunities to demonstrate achievement.
- AS2: Assessment processes and tasks promote academic integrity.



What do we know? Contemporary perspectives

Recent events have revealed high-stakes (summative) end-of-year examinations to be an often inflexible and not altogether accessible means of assessing for student attainment. Exams, as traditionally deployed, are often inperson, closed-book, invigilated and timed. Whilst possible, replicating such exam conditions in an online environment raises concerns regarding their limited value as an authentic assessment methodology — especially when there are a range of ways that a traditional exam could be adapted for an online context. One such approach is to consider adopting an exam as a 'take home' assessment.

It is important to note that the term 'take home assessment' describes the conditions under which an assessment will take place, not the method by which the students will be assessed. Assessment conditions establish the 'parameters of assessment' and within each of these assessment conditions we are able to deploy different assessment methods. It is important, therefore, to reflect on the purpose, timing and assessment mix when making decisions regarding assessment conditions.

In the case of a take home exam, the overall condition of assessment involves students working unsupervised, with a time limit. This can include various methods of assessment such as case studies or comparative analyses. Assessment tasks, and time limits, can be flexibly devised to serve the course requirements/learning outcomes.

Take home exams are an established assessment format in their own right (Bengtsson, 2019) and have a number of benefits over traditional exams:

Take home exam formats are often used to **reduce student anxiety around examinations** owing to the fact they typically have longer to complete the exam and are able to do so in their own space.

This exam format also allows for the **inclusion of more authentic and analytical tasks and questions**. A take home exam, where students are permitted an extended period of time within which to find relevant material, evaluate its usefulness and reliability, and synthesise a variety of different sources of information to construct a final product, can be more authentic to the kinds of work students might be expected to do as graduates.

By design, take home and associated 'open' exam formats (i.e. Open Book) place less emphasis on student memory and recall of information, and thus are generally better placed to assess more complex learning, such as the ability to evaluate information, compare perspectives, or to apply knowledge to new or across different situations.

More pragmatically, with students able to use wordprocessing software, **marking can become easier and more efficient** as it avoids challenges with the legibility of handwritten and disorganised scripts.

A digital take home exam format can still present challenges for students with specific learning needs, as well as those with hectic home lives, or with poor internet access or limited (or low spec) IT equipment. Appropriate technical and learning support needs to be carefully built in to assessment processes and clearly communicated to students.

What can we do? Reviewing practice

There are a variety of ways that a traditional exam could be adapted for a more blended learning context. The options presented below describe different modifications of a 'take home exam' – taken here to mean an assessment where students have a period of time (e.g. typically between 24-48 hours) to download an exam paper, answer the questions, and then submit their answers online. Students are permitted access to their notes, course materials, and online resources when completing the exam.

Designing an 'alternative' question paper

Taking care to design questions that reward students' deeper thinking rather than memory or recall of information can ensure that the exam paper is suitable for a take home format. This can be achieved by providing questions that require students to engage and apply such higher-level learning skills as critique, synthesis, analysis or prediction.

It is worth bearing in mind that even when questions are designed to assess students' ability to engage in more complex tasks and deeper learning, this will, in practice, inevitably lead students to draw upon their ability to recall certain information. For a take home exam, it is necessary, therefore, to try and develop questions that not only reward a deeper understanding, but require it by aligning questions with complex problems or authentic tasks – i.e. using a short case study, problem scenario or dataset.

Another important consideration when developing question papers for take home exams is to ensure that questions differ sufficiently in focus and intent compared to any past exam papers/questions students may have access to. Questions should also remain broadly in line with students' expectations with regards to how they have been prepared for the assessment. This means giving careful thought to the extent to which formative opportunities afforded to students prepare them for the types of question format and tasks they will be faced with in the final exam. If we intend to assess students' deeper learning in response to complex problems, it is important that our teaching strategies are designed and aligned accordingly.

Open Book or 'Seen' Exam Format

In addition to changing the questions on the exam paper, another option is to alter the format of the assessment itself to take advantage of take home assessment conditions. For instance, a take home format that opens-up the possibility for students to access supplementary information as part of the assessment – also known as an 'open book' exam.

A key design feature of an open book exam format permits students the opportunity to consult reference material when they are completing the exam. This could include setting students the task of accessing specific publicly available data and performing a set of calculations or statistical analyses. Data, calculations and statistical analyses might be randomly assigned to students to minimise the opportunity for collusion.

Another option is to test students' ability to search, find, understand, and critique certain data sources (i.e. articles, reports) on a set topic. Again, topics might be randomly assigned to students to reduce the opportunity for students to compare responses. One further option might be to design material that is aligned to either hypothetical or true-to-life problems or scenarios, tasking students with offering potential solutions or recommendations from the perspective of key stakeholders.

A 'Seen' exam is a further possible modification of the take home assessment format wherein it is possible to provide the questions in advance of the assessment period. This might involve providing students with information in advance about the specific topics covered in the exam, giving them the opportunity to prepare reference notes and other supportive material. Adopting such a format means we can require more from students in terms of developing and communicating their answers – i.e. demonstrating their ability to perform more complex calculations and/or creating better-developed and more widely referenced arguments in their responses.

Key considerations when designing and implementing these different formats of take home exams include:

 When scheduling take-home assessments, we need to be aware of specific requirements for accessible assessment and consider the proximity to other submission deadlines (i.e. assessment groupings and student workload).

- For students who require help with typing or transcribing work they produce in the exam, appropriate support will need to be made available during the accepted time-period set for the exam.
- A further inclusive option could be to consider accepting submissions from students in a different format – for example, an audio recording or even an individual online viva. Any such alternative arrangements would need to be agreed in advance with the student.
- Designs need to ensure that there is sufficient time provided for the exam to be completed given open book exam questions particularly will take longer than closed book exams questions.
- Steps need to be taken to set up appropriate marking criteria with associated weightings placed on knowledge, comprehension, and critical thinking, and not just recall.
- It is important to ensure that assessment design decisions are always guided by the approved learning outcomes. How does the planned exam format align with these outcomes – is it possible for students to demonstrate such outcomes via a take home exam format?

Assessment Securing and Integrity

There are legitimate concerns around the academic integrity and security of take-home exam formats with the possibility for students to collaborate with peers, receive external assistance, or plagiarise the work of others. That said, the literature tells us that students are very keen for assessments to be fair and equitable (Bretag et al., 2019). With this in mind, there are a some relatively straightforward steps to minimising plagiarism that can be put in place to lower the risk of academic misconduct, with the added value of being more engaging and so motivating for students. For examples, designing exam questions or tasks that are reflective of how students might use disciplinary knowledge, i.e. responding to authentic problem scenarios.

The Centre for Research in Assessment and Digital Learning (CRADLE) offer several useful considerations when designing for academic integrity and assessment security in digital assessment.

Reconsider the need to assess low-level outcomes and tasks with 'one right answer' or 'closed' questions. Such assessment designs, when applied to online examinations, raise the potential collusion opportunities. Instead, shifting the emphasis onto high-level outcomes (i.e. critique) may be vulnerable to fewer types of cheating.

Consistent and equitable enforcement of assessment conditions is critical to the perceived fairness of the assessment experience, but these can be potentially more easily bypassed in take home or digital exams. It might sound counterintuitive, but in instances where it may not be feasible to uphold assessment conditions consistently and equitably, relaxing these restrictions might be fairer and more authentic to expectations of integrity in professional practice.

Following on from this last point, whilst the potential for cheating is ever-present in digital assessment, and should certainly never be ignored, for many lower-stakes assessments it is perhaps more important to focus on building cultures of integrity and trust in relation to the assessment process by engaging learners with criteria to help clarify learning expectations, as well as how such criteria are used to make judgements on assessed work (see LTE Bites No. 4 'Assessment Literacy').

Useful Resources

Linked LTE Bites Resources:

LTE Bites, No. 3: Inclusive Assessment.

LTE Bites, No. 5: Designing Formative Assessment.

Other Sources:

Williams, J. and Wong, A. (2009) The efficacy of final examinations: A comparative study of closed book, invigilated exams and open-book, open-web exams.

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