

Designing Effective Take Home Exams

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Session Outcomes

By the end of this session, you will be able to:

- Explain when to use take home exams
- Describe their strengths & limitations
- Discuss different forms they may take
- Employ guidelines for developing, administering, & grading them



Poll #1

- Have you had any prior experience with take-home exams before, either as a student or instructor?

When should I use take-home exams?

When it works well for your students to...

- Complete the exam asynchronously
- Have access to notes, texts, other information during exam
- Use knowledge and resources to solve problems or case studies or create something new (i.e. processes, policies, technology, media, etc)
- Work in groups to collaboratively access & apply information

Strengths of take-home exams

- **Great for assessing higher-order learning**, because questions often are presented as problems or cases where students apply knowledge, analyze and/or evaluate information, or create something.
- **Develops information literacy skills**
- **Provide real-world application of knowledge** by mimicking professional activities or situations
- **Provide opportunity for collaborative problem-solving and thinking**
- Can **decrease anxiety** for some students
- Is often a **more authentic form of assessment**

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What do Take-Home Exams Look Like?

Essays

Case studies

Analysis & Interpretation of data

Wicked Problems

Group Projects

Research Design

Concept Maps



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Examples of Take-Home Exams



Example 1: Essay

- 5 questions
- max. 300 words per question
- answers formulated from lectures
- apply CER framework
- answer in clear, concise, full sentences
- individual responses

Campbell (2020)

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Examples of Take-Home Exams

Example 1: Essay

“A recent article titled “Type 2 diabetes research held back by animal models” highlighted that animals might not be an appropriate model to research diabetes. Based on what we know about animal and human islet biology and type 1 versus type 2 diabetes, was/is there merit in using animal models to study both types of the disease?”

Campbell (2020, p. 6)



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Examples of Take-Home Exams

Example 2: Case Study

You have been asked to design a 30-minute learning module on how to change a flat tire for adult learners. What might this learning experience look like if you had to incorporate behaviorist, cognitivist, and constructivist elements to your design?



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Examples of Take-Home Exams

Example 3: Research Design

- 30% of final grade
- 2 weeks to complete
- 5 questions
- draw from course materials
- max. 8 double spaced pages, not including references
- APA format
- individual responses
- grading guidelines provided



(Nelson & Gaab, 2017)

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Examples of Take-Home Exams

Example 3: Research Design

- “Romeo School District is interested in examining whether their new curriculum is improving executive functioning skills in their preschool cohort (ages 3-5). They ask you to design a study to examine...whether the new curriculum was effective or not in improving executive functioning, and whether the brain changed in response to the new curriculum...
- How would you design the experiment...? ...[P]lease include:
 1. Which imaging method(s) you would choose; 2. Which behavioral method(s) you would choose; 3. The experimental design of the study (e.g., how often you would test the children;...experimental and control conditions if appropriate, etc.)”

(Nelson & Gaab, 2017, p. 2)



Examples of Take-Home Exams

Example 4: Concept Map



- 5 days to complete (?)
- 11 questions
- conceptual questions (e.g., physics reasoning, equations, sketches)
- no particular format required
- individual responses
- based on course materials, including links on course website

(Max, 2016, p. 2)



Examples of Take-Home Exams

Example 4: Concept Map

“I would like you each to make your own concept map that pulls together the adaptive optics [AO] concepts you’ve learned in this course....I’m looking for a concept map that goes into a fair amount of depth about AO. You should go down at least one or two levels below each AO subsystem...to show what other factors influence these subsystems and how the subsystems are related to other parts of the AO system. In these concept maps the relationships are just as important as the specific subsystems”. (Max, 2016, p. 2)



Examples of Take-Home Exams

Example 5: Group Project



Working with your group, create a case study describing a patient, a health-related incident they went through, and the care provided by each profession represented in your group. Be sure to include:

- Patient’s medical history
- Clinical and medical findings as appropriate
- Diagnoses
- Care and treatment plans
- How the professionals in your group would communicate and coordinate care for the patient among one another



Poll #2

- Having learned about different types of Take-Home Exams, which form might you utilize in your course?

Activity

Using the Google Doc link provided in chat, please answer the following question:

“What will be your single biggest challenge in doing take home exams?”

(5 mins)

Challenges with Take-Home Exams

- Writing good questions takes time and practice.
- Students may be unfamiliar with take home exams
- Grading can be time consuming



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Tips for Success in Set-Up



- **Aim big:** Assess higher-order thinking skills and tackle big problems.
- **Give adequate time:** Students need enough time to complete these more complex tasks.
- **Be clear:** Ensure that both your instructions for the exam and the questions are very clear.
- **Be transparent:** Tell students why they are being assessed this way and give them plenty of warning.
- **Provide structure:** Set guidelines (word/page limits, requirements for citations, how groups should work together, due date, etc).
- **Utilize scaffolding:** Give students example questions, exemplary answers, rubric, low-stakes practice.

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Tips for Success in Grading



- **Use a Rubric:** This can help with transparency and make grading easier
- **Use Turnitin:** For written answers this makes it easy to assess for plagiarism
https://owlhelp.uwo.ca/instructors/tools/assignments/add_assignments/index.html#turnitin
- **Provide Feedback on Submissions**
 - Implement a gateway requirement
 - Prioritize feedback – focus feedback on the big issues
 - Utilize light grading as appropriate



Tips for Success in Grading



- **Provide Feedback on Submissions (cont.)**
 - Have boilerplate typed comments, common comment sheet, and/or short-hand comments w/ legend
 - Consider audio/video feedback
 - Integrate self-reflection/assessment
 - Build in time within class for group presentations if needed
- **Addressing Grade Questions**
 - Have a formal process
 - Ask for questions submitted in writing
 - Have a 24-hour rule

Questions??

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References & Resources

- Academic Skills, Trent University (n.d.). *Preparing for and writing a take home exam*.
<https://www.trentu.ca/academicskills/how-guides/how-study/prepare-and-write-exams/preparing-and-writing-take-home-exam>
- Bengtsson, L. (2019). Take-home exams in higher education: A systematic review. *Education Sciences*, 9(4), 267. <https://doi.org/10.3390/educsci9040267>
- Boye, A. P. (2019). *Writing better essay exams*. IDEA Paper# 76. IDEA Center. https://www.ideaedu.org/idea_papers/writing-better-essay-exams/
- Campbell, N. (2020, March). *Take home exams*.
<https://teaching.uwo.ca/elearning/presentations/Take%20home%20exam%20overview%20and%20example.pdf>
- Centre for Teaching and Learning, Queen's University (n.d.). *Case-based learning*.
<https://www.queensu.ca/ctl/teaching-support/instructional-strategies/case-based-learning>
- Centre for Teaching and Learning, Queen's University (n.d.). *Problem-based learning*.
<https://www.queensu.ca/ctl/teaching-support/instructional-strategies/problem-based-learning>
- Centre for Teaching and Learning, University of Newcastle (n.d.). *A guide for academics: Open book exams*.
 University of Newcastle, Australia.
https://www.newcastle.edu.au/_data/assets/pdf_file/0006/268980/Open-Book-Exams.pdf
- Centre for Teaching and Learning, Western University (n.d.). *Grading strategies*.
<https://teaching.uwo.ca/teaching/assessing/grading-strategies.html>



References & Resources

- Centre for Teaching and Learning, Western University (n.d.). *Grading with rubrics*.
<https://teaching.uwo.ca/teaching/assessing/grading-rubrics.html>
- Centre for Teaching and Learning, Western University (n.d.). *Open book exams or take home tests*.
https://teaching.uwo.ca/elearning/student_assessment/alt-assessment-ideas.html#take-home
- Johnson, C. M., Green, K. A., Galbraith, B. J., & Anelli, C. M. (2015). *Assessing and refining group take-home exams as authentic, effective learning experiences*. *Journal of College Science Teaching*, 44(5), 61-71. https://doi.org/10.2505/4/jcst15_044_05_61
- Max, C. E. (2016). *Take home final exam*.
https://www.ucolick.org/~max/289/Final%20Exam/Final_exam_March2016_v2.pdf
- Nelson, C. A., & Gaab, N. (2017). *H126: take home exam*.
<https://utlhelpdesk.tlgateway.edu.my/images/aa/Take-Home-Exam.pdf>
- Parkes, J., & Zimmaro, D. (2018). *The college classroom assessment compendium: A practical guide to the college instructor's daily assessment life*. Routledge.
- Public Service Commission of Canada (2015). *Best practices for unsupervised testing*.
<https://www.canada.ca/content/dam/canada/public-service-commission/migration/plcy-pltq/guides/tools-outils/pdf/pract-prat-eng.pdf>
- Selke, M. J. G. (2013). *Rubric assessment goes to college: Objective, comprehensive evaluation of student work*. R&L Education.

References & Resources

- Teaching at USNW-Sydney (2018, October). *Assessment by case studies and scenarios*.
<https://teaching.unsw.edu.au/assessment-case-studies-and-scenarios>
- Williams, J. B. (2004). *Creating authentic assessments: A method for the authoring of open book open web examinations*. In R. Atkinson, C. McBeath, D. Jonas-Dwyer & R. Phillips (Eds), *Beyond the comfort zone: Proceedings of the 21st ASCILITE Conference* (pp. 934-937). Perth, 5-8 December.
<https://eprints.qut.edu.au/13072/1/13072.pdf>
- Walvoord, B.E. & Anderson, V.J. (2010). *Effective grading: A tool for learning and assessment in college* (2nd ed.). Jossey-Bass.