Table of Contents

Introduction 3
Types of Assessments 3

Traditional Assessments 3
  What are traditional assessments? 3
  What tools can I use to create online tests/exams? 4
  What are the pros/cons of traditional assessments? 5
  How do I proctor students taking online tests? 5
    Technical Issues with Respondus LockDown Browser and Monitor 6
  How do I encourage academic integrity for exams without proctoring? 8

Alternatives to High-Stakes Tests and Exams 8
  Open-Book Examinations 8
    What are open-book examinations? 8
    How do I design an open-book exam? 8
    How do I convert my existing exam into an open-book exam? 9
    What strategies should I consider for open-book exam questions? 9
    What are the pros and cons of open-book exams? 9
  Authentic Assessments 10
    What are authentic assessments? 10
    What are some examples of authentic assessments? 10
      Student-Generated Media 10
      Case Studies 11
      Strategies for Creating an Authentic Assessment 11
    What are the pros and cons of authentic assessments? 13

Academic Integrity 13
  How do I prevent and detect plagiarism in assessment submissions? 13
  What are other ways I can encourage students to uphold academic integrity? 14

Resources 14
  Where can I find ideas for assessments? 14

References 15
Introduction

An assessment strategy that accurately determines the extent to which students have obtained the knowledge and skills we want them to acquire is a critical part of any course design. Accordingly, it is crucial for instructors to understand the different approaches available to them when considering major assessments in their courses. Each approach involves various strategies, as well as its own benefits and challenges. The goal of this guide is to provide guidance on approaches to traditional assessments, alternative assessments, and academic integrity.

Types of Assessments

Assessments are generally broken into two categories: formative and summative assessments. Formative assessments are assignments students complete to check and develop their learning in a course and give the instructor an indication as to their progress, while summative assessments are a culmination of a student’s learning at the end of a course (Bulunuz et al., 2014; Emanuel, Robinson, & Korczak, 2013).

<table>
<thead>
<tr>
<th>Formative assessment</th>
<th>Summative assessments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes (taken at the end of a unit or lesson)</td>
<td>Exams (e.g. finals)</td>
</tr>
<tr>
<td>Homework (sets of questions or problem sets)</td>
<td>Projects and papers (e.g. essays, videos, student presentations)</td>
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</table>

Traditional Assessments

What are traditional assessments?

Traditional assessments often refer to standard methods to evaluate students’ progress in the course, such as quizzes, tests, and examinations. Different question types in tests can be used to determine mastery of various types of skills in learning objectives.
<table>
<thead>
<tr>
<th>Type of Learning Objective</th>
<th>Completion</th>
<th>Short Answer</th>
<th>Matching</th>
<th>Multiple Choice</th>
<th>Essay</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Define</td>
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<tr>
<td>Identify</td>
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<td>Select</td>
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<tr>
<td>Locate</td>
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<tr>
<td>Evaluate</td>
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<tr>
<td>Solve</td>
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<tr>
<td>Discuss</td>
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<tr>
<td>Develop</td>
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<td>Construct</td>
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<td>Generate</td>
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</tr>
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</table>

Adapted from Dick, Carey & Carey (2005)

What tools can I use to create online tests/exams?

Blackboard has a feature called Tests, Pools and Surveys, where instructors can create quizzes and exams online. Here are some UM resources to get started navigating this tool:

- How to Create a Test, Exam, or Quiz
- Blackboard Learning Basics: Tests

Another option beyond Blackboard is to use a tool like Google Forms to create short tests for students to complete either synchronously (during class) or asynchronously (outside of class). Google Forms is a good option for low-stakes quizzes or homework assignments but not for larger exams. Note that Google products, such as Google Forms, may not be accessible to students taking courses remotely from China.
What are the pros/cons of traditional assessments?

<table>
<thead>
<tr>
<th>Pros of traditional assessments</th>
<th>Cons of traditional assessments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can easily be prepared, administered, and scored, thus making it more efficient.</td>
<td>Provides teachers only a snapshot of what students have truly learned or not learned.</td>
</tr>
<tr>
<td>Can reveal how well students can recall, organize, and clearly communicate previously learned information.</td>
<td>Limited options for students to demonstrate knowledge and concepts taught.</td>
</tr>
<tr>
<td>If using a textbook, instructors can include appropriate questions from sample tests/test banks that are included.</td>
<td>Could provoke feelings of stress or anxiety for students, especially if feeling pressured with timed or proctored exams.</td>
</tr>
<tr>
<td>Perceived degree of objectivity, usually only one right answer.</td>
<td>Typically involves students working in isolation and not in collaboration with other students.</td>
</tr>
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</table>

How do I proctor students taking online tests?

Instructors can use the online proctoring tools, Respondus Lockdown Browser and Respondus Monitor if they wish to monitor students taking exams remotely. Both are only available to integrate with Blackboard tests.

**Respondus Lockdown Browser** is a locked browser for taking tests in Blackboard Learn. It prevents students from printing, copying, going into another URL, or accessing other applications during a test. If you request a student to take a test where LockdownBrowser is to be used, students will not be able to take that test with a standard web browser (e.g. Chrome or Safari).

**Respondus Monitor** is a companion application for LockDown Browser that uses the webcam to record students during an online exam. If students do not have access to a webcam, they will not be able to use this feature, but they can still use Lockdown Browser.
The University of Miami has a specific version of the LockDown browser; therefore students must download only using this link to download and install the software.

Here are some UM resources to get started with using Respondus Lockdown Browser and Respondus Monitor:

- How to Create a Test that Requires Respondus Lockdown Browser
- LPT: Respondus Lockdown Browser Playlist
- Student QuickStart Guide: Respondus Lockdown Browser and Respondus Monitor
- User Guides, Videos and Technical Support from Respondus

Alternatively, you can also proctor exams live using Zoom. This resource from the University of Iowa offers some guidelines and procedures to consider when proctoring an exam using Zoom.

Technical Issues with Respondus LockDown Browser and Monitor

Like all virtual proctoring platforms, the functionality provided by Respondus LockDown Browser and Monitor (shutting down the ability to access other programs, to access other web sites, to print, etc.) requires access to students' computers operating systems and is similar to how malware acts. The functionality of these tools can also depend on what type of computer a student is using, which operating system version, and any security patches that they have installed. Something that worked a week ago may stop working due to one of these changes. The University doesn't have control over when these types of changes will happen and we can't tell what impact they will have on exams.

Some of the common technical issues with Respondus tools include:

- Respondus does not work with Chromebooks.
- Sometimes the passwords set for Respondus exams don't work correctly and need to be removed or reset.
- Students get an "incorrect password" on an exam, even though no password is set.
- Multiple courses in one UM department had students locked into their exams when they needed to download a PDF during the exam and they were using an Apple computer. The majority of our students have Apple computers. The solution is to either not use PDF files or to install some security certificates on students' computers.
- Students with poor Internet connections may get a "Unable to connect to Respondus Server" message.
- Some students took exams and their video was not recorded. Respondus says that this is also due to a poor internet connection.
- Some students with disabilities will not be able to use assistive software with Respondus.
- Students get an error message saying "Downloads folder permissions required. You must allow Respondus to access the Downloads folder to proceed".
In order to mitigate these issues, consider having students go through practice runs to test out the software prior to the day of the exam. Also, it is highly recommended to create a backup plan if these proctoring tools do not work or cause errors during exam time. Also, What are the pros/cons of proctoring an exam?

<table>
<thead>
<tr>
<th><strong>Pros of proctoring exams</strong></th>
<th><strong>Cons of proctoring exams</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam security (e.g. restrict the sharing of exam information)</td>
<td>Increased anxiety and pressure for students which may be detrimental to test-taking and learning.</td>
</tr>
<tr>
<td>Video algorithms can detect open book/notes/browser activity, other people in the room, and unusual behaviors (e.g. looking off screen repeatedly).</td>
<td>Not foolproof. Students can still find ways to “game the system” and cheat/plagiarize.</td>
</tr>
<tr>
<td>Video recordings of all attempts so faculty can later review exam videos.</td>
<td>Students must have a webcam and compatible computer is using Respondus Lockdown Browser and Respondus Monitor.</td>
</tr>
<tr>
<td></td>
<td>Lack of a interaction for exam problems/questions</td>
</tr>
<tr>
<td></td>
<td>Not compatible with some hardware (e.g. Chromebooks) and accessibility software.</td>
</tr>
<tr>
<td></td>
<td>Likelihood of technical issues with passwords, Internet connectivity, and software updates</td>
</tr>
</tbody>
</table>
How do I encourage academic integrity for exams without proctoring?

Here are some recommendations on how to take steps to ensure academic integrity through simple Blackboard tests without using proctoring:

- Create a pool of test questions (e.g. bank) so that students can take multiple versions of the same exam and reduce chances of cheating.
- Create time restrictions using Test settings within Blackboard so students have less time to look up answers or ask for assistance.
- You can also enable the option to randomize question order within a test so students cannot follow along with each other on the same question.

Alternatives to High-Stakes Tests and Exams

Open-Book Examinations

What are open-book examinations?

Open-book examinations allow students to reference class notes, textbooks, and any other resources during the exam. Students are typically given a time frame within which to complete the exam and may be asked to complete as a take-home exam or be provided with the questions prior to the formal exam session.

How do I design an open-book exam?

When designing your questions for open-book exams, the key is to have your students do something with the information provided. The focus should be on conceptual understanding and application of knowledge. Here are a few suggestions:

**Case studies:** You can provide your students with a case study and ask them questions related to it.

**Analysis of data:** Provide your students with quantitative or qualitative data and ask questions that require interpretation, application and analytical skills.

**Predict the outcome:** For science-based courses, provide your students with a description of a physical/chemical interaction and ask students to predict the outcome.
Explore a concept or principle: Provide your students with a concept and ask them to identify an example along with their reasoning.

How do I convert my existing exam into an open-book exam?

Professor Michael Seery from the University of Edinburgh documented the entire process of transitioning to open book exams, this past Spring, focusing on written submissions and use of mobile phones to submit assignments. Here is an example process of how a three-hour chemistry exam was moved to an open-book exam, with a time frame of 48 hours to complete and how they structured this process. The tutorial linked below demonstrates how Seery and colleagues used Blackboard Assignments to collect student submissions. They also provided students a guide of expectations for the exam, and an overview video, detailed in his blog post.

- Managing the open-book exam process blog post
- Video tutorial

What strategies should I consider for open-book exam questions?

1. Focus on learning goals and objectives.
2. Decide on the type of open-book exam, restricted or unrestricted. If restricted, you may want to consider providing students with a list of acceptable materials.
3. Decide whether all or part of the exam will be open-book.
4. Structure questions that take full advantage of the open-book format by designing problems that are real-world focused and would require integration of information from various aspects of the course material.
5. Create questions that will require students to use thinking skills such as analysis and interpretation instead of knowledge and recall.
6. Create questions that are clear and unambiguous.

What are the pros and cons of open-book exams?

<table>
<thead>
<tr>
<th>Pros of Open-Book Exams</th>
<th>Cons of Open-Book Exams</th>
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</thead>
<tbody>
<tr>
<td>Requires students to use higher-order thinking skills</td>
<td>Study efforts may be reduced</td>
</tr>
<tr>
<td>Less stress on memory to recall facts</td>
<td>Efforts to learn sufficiently to achieve full understanding may be discouraged</td>
</tr>
<tr>
<td>Enhances knowledge retention</td>
<td>Cheating is less obvious</td>
</tr>
<tr>
<td>High validity</td>
<td>More superficial knowledge is encouraged</td>
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</tbody>
</table>
Authentic Assessments

What are authentic assessments?

An authentic assessment focuses on students performing “real-world tasks that demonstrate meaningful application of essential knowledge and skills” (Broadbent et al 2017, Mueller 2005). They often involve students completing “messy, real world tasks with multiple acceptable solutions, rather than fabricated problems for which there is only one correct answer” (Suskie, 2018). Authentic assessments allow students to know the content of the disciplines when they graduate, but also apply the acquired knowledge in the real world. These types of assessments can therefore tell us if students can apply when they have learned in authentic situations (Mueller, 2005).

What are some examples of authentic assessments?

There are a number of authentic assessment opportunities beyond essays, semester papers and research reports. For example, nursing, medical or psychology students may engage in case studies or role-playing activities to simulate the experience of working with patients, business majors may develop marketing or sales plans for a real-world organization, computer science students may develop applications according to client need, or troubleshoot problematic ethical scenarios, biology or chemistry students may engage in a group-based debate and presentation.

Student-Generated Media

This type of project usually involves students creating original media related to the course content and often aim to simulate real world contexts. Types of projects may include a podcast submission, for instance, where students create a short public service announcement, or a documentary that provides the public with guidance about newly evolved policy. Other types of projects may include creating a website or Wikipedia page to amplify resources and perspectives around hidden figures within a discipline. While some learning goals for these projects are to produce high-quality productions - a lot of the time, these projects provide students the opportunity to practice, fail and improve written, oral communication and critical thinking skills.

Tips for designing a student-generated media project

1. Identify the learning goals for the project and make sure that they match with the course goals.
2. Break it down into parts with due dates. This will serve as a guide through the process for students. For example if you would like your students to create a webpage, identify 4-5 major tasks you would like your students to complete which may include a proposal, draft of content, a first draft of the product and final version of the product. It will also provide you with many opportunities to provide feedback and opportunities for your students to make adjustments or improvements.
3. Provide students with the tools that are available for them to use for their projects. For example, at UM students have access to the adobe suite of products. We often suggest tools like Adobe Spark, Canva and Adobe Premiere Rush that provide guided tutorials, are fairly easy to use and produce quality results. In addition, the University of Miami’s Creative Studio is available for consultations, and instructional sessions within your classroom.

4. Create a rubric for grading that aligns with your learning goals.

Case Studies
Case studies provide real-world examples for students to ponder, research, discuss and summarize. Cases provide an opportunity for learners to preview situations they can expect to encounter and apply theory to practice. Often, case studies also may include open-ended problems. Open-ended problems challenge students by forcing them to identify what they know in relation to a problem, allowing the group to then focus on the aspects of the problem they do not understand. Other opportunities for case studies allow educators to introduce role-playing scenarios. Role-playing is an activity-based learning environments where students approach complex, real-life issues from different perspectives and collaborate to find evidence-driven solutions.

**Tips for designing a case study analysis assignment:**
1. Identify the learning goals for the project and make sure that they align with your course goals.
2. Provide students with options for cases. Identify 3-4 case studies that are relevant to the topic or course that your students can choose from that will align with their interests, knowledge and cultural background.
3. Alternatively, you could create your own case studies or ask your students to create their own.
4. Break it down into parts with due dates. Identify 3-4 major tasks you would like your students to complete. For example this might include an introduction, background information, proposed solutions or recommendations.
5. Create a rubric for grading.

Strategies for Creating an Authentic Assessment
There are a number of ways to approach designing an authentic assessment. Here’s some guiding steps to help you think about the process.

**Step 1: Establish clear, observable expected goals for student learning (Suskie, 2018).**
What do you ultimately want students to learn from the assessment?

**Step 2: Identify and select learner-orientated assignments (Carless, 2015) to assess student learning.** Some examples may include written assignments, oral presentation or performance, creative projects, reports, and portfolios of work. Carless (2015) highlights that our
choice of assessment methods often involves "a complex interplay between what has gone on before, contextual issues, the nature of the discipline, and staff (and student) preferences." Consider what evidence of student learning do these assignments produce and that you may need to share with your program.

**Step 3: Draft the rubric, criteria, or instrument to be used to assess completed assignments (Suskie, 2018) or student performance (Fink, 2013).** What will you use to determine student achievement towards goals and outcomes? A rubric can bring transparency to the assessment process, clarify intended learning outcomes, and state clearly what an instructor expects of students (Carless, 2015).

**Step 4: Craft clear, guidelines and instructions related to any assignments (Suskie, 2018).** In addition to details about the purpose, deadlines, guidelines may include a reference to rubrics, criteria, and exemplars to help define assessment (Carless, 2015).

**Step 5: Design and create teaching and learning activities that will shape the learning experience for students (Fink, 2013).** Ensure students have sufficient opportunities to achieve the learning goals (Suskie, 2018). This may include creating activities that allow students to prepare for assessments, like writing multiple drafts of a research paper and engaging in peer and self-assessment activities using criteria.

**Step 6: Establish how you will gather, analyze, and interpret evidence of how well student learning meets those goals (Suskie, 2018).** Consider how you will gather evidence that demonstrates what learning has taken place. This may involve using embedded assessments within a course like an observation of student performances, or collection of digital submissions. Other evidence may include exit tickets, mid-semester surveys that provide perceptions and attitudes related to questions about student learning.

**Step 7: Establish a feedback strategy that is frequent, immediate, discriminating (Suskie, 2018).** Carless (2015) also argues that the key role of an educator is to develop students' expertise and literacy to engage with feedback and evaluate ways to use it to inform future performance. Creating opportunities through group work, peer assessment, and reflective exercises to respond to and use feedback to improve their learning are key.

**Step 8: Use the resulting information to understand and improve student learning (Suskie, 2018).** Once assessment evidence is complete, part of the role of the educator is to explore what improvements need to be made to the assessments to improve student learning. For instance, if students are having difficulty meeting the criteria outlined in an assessment, you may need to consider activities and feedback strategies to help students meet those criteria, or revise the assessment.
What are the pros and cons of authentic assessments?

<table>
<thead>
<tr>
<th>Pros of Authentic Assessments</th>
<th>Cons of Authentic Assessments</th>
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<tbody>
<tr>
<td>More closely reflects real-world thinking and skills</td>
<td>Significant initial upfront development</td>
</tr>
<tr>
<td>Can promote intrinsic motivation</td>
<td>Larger courses can require additional instructional support and training of assessors</td>
</tr>
<tr>
<td>Creates opportunities for collaborative learning</td>
<td>Unfamiliar techniques can overwhelm students</td>
</tr>
<tr>
<td>Promotes academic integrity through authenticity and creativity</td>
<td>Can take longer to grade for larger classes</td>
</tr>
<tr>
<td>Great match for different types of learning objectives</td>
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</tbody>
</table>

Academic Integrity

Academic integrity is honest and responsible scholarship, where students engage in academic work, attributing their sources and development of knowledge. Instructors and students review University of Miami’s Honor Code to review our institutional policies on academic integrity.

How do I prevent and detect plagiarism in assessment submissions?

You can use Safe Assign for Blackboard Assignments such as a research paper. SafeAssign is a plagiarism prevention tool that checks the originality of students’ written submissions. SafeAssign automatically conducts these checks by comparing submissions assignment against a database of other assignment submissions and academic articles. SafeAssign originality reports provide detailed information about the matches found between a student’s submitted paper and existing sources. Both instructors and students can use the report to review assignment submissions for originality and create opportunities to identify how to properly attribute sources. SafeAssign is only available for Blackboard assignments, and not other tools such as Journals or Blogs. Here are some UM resources to get started with Safe Assign:

- Using SafeAssign (video)
- Create an assignment with SafeAssign enabled
- Grade with SafeAssign in Blackboard Learn
- Finding and interpreting SafeAssign Originality Reports
What are other ways I can encourage students to uphold academic integrity?

Here are recommendations on how to encourage academic integrity in the classroom and discourse plagiarism/cheating.

- Communicate to students that if they are struggling in your course, to contact you during virtual office hours.
- Guide students to resources such as the Camner Center for tutoring and accommodations through the Office of Disability services.
- Have you and your students co-collaborate on an academic honesty statement where you list expectations for academic integrity.
- Offer practice, low-stakes assessments to give students the opportunity to receive feedback and prepare for high-stakes assessments.
- Offer check-in appointments with students working on large assignments or group projects to make sure they are on track.
- Create authentic assessments as they discourage academic integrity (e.g. students less likely to cheat on a project versus an exam).

Resources

Where can I find ideas for assessments?

**Open Educational Resources:** Open educational resources (OERs) are instructional materials that are published and licensed to be freely used, adapted, and distributed. OER course materials and assignments are available via a collection of repositories: the OER Commons, MERLOT, AMSER, Open Course Library, and Language Panda. Other places may include the Adobe Education Exchange and a great resource guide, searchable by disciplines, by Humboldt State University.

**University of North Carolina at Chapel Hill:** UNC offers several exercises related to writing assignments. For instance, you may wish to break down a larger writing assignment into annotated bibliographies, concept maps, outlines or presentation of resources.

**The University of New South Wales** provides various examples and resources about different types of assessment methods, including pros and cons. View exemplars of digital assessments they have shared from faculty.

**The University of Central Florida’s (UCF) Center for Distributed Learning (CDL)** offers the Teaching Online Pedagogical Repository (TOPR) as a public resource for faculty and instructional designers interested in online and blended teaching strategies.
The Chronicle of Higher Education’s Teaching and Learning Newsletter: Teaching-and-learning experts give you insights on what works in the classroom from University educators.

Vanderbilt’s Center for Teaching and Learning: Vanderbilt shares a wealth of guides on different assessment strategies, including classroom assessment techniques.

References


Evans, R. (2020, October 7). Exploring Alternatives to High-Stakes Proctored Tests. https://docs.google.com/presentation/d/14KjiFLr_gzVkJ4KeW32q94_7mEVdsgqfrf-20K5BnA_5o
https://josheyler.wordpress.com/2020/10/02/the-science-of-learning-vs-proctoring-software/


Kurz, L. (2020). *Handling Exams When Your Course Unexpectedly Moves Online – Center for Innovative Teaching and Learning @IUB.*
https://blogs.iu.edu/citl/2020/03/13/exams-online/#.X3eSVFkpCTb


Tips for Creating Open Book Exams – Center for Innovative Teaching and Learning @IUB.


The Authentic Assessment Toolbox http://jfmueller.faculty.noctrl.edu/toolbox/


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