

# Best-Practices Guide to Evaluating Students in a Distance-Learning Setting

## Taskforce to Evaluate Assessment Tools Appropriate for Distance Education

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#### Introduction

Much like its on-campus counterparts, planning and delivering distance-learning courses focuses the educator's attention and efforts on the dynamics involved in the effective dissemination and the accurate assessment of knowledge. Unlike on-campus courses, on-line educators need to carefully consider the delivery methods and the evaluation tools they plan to use--often undertaking substantial planning and preparation efforts prior to the commencement of the semester. This advance work is done in order to help ensure that the teaching methods and tools used are optimally aligned with the learning outcomes of the course and the program.

However, under extraordinary circumstances, such as the ones we are currently experiencing, situational and/or technological limitations may require that educators make well-informed and proactive changes to their preferred teaching and/or assessment methods. This document outlines several suggested on-line-appropriate alternatives to traditional on-campus methods of student evaluation and assessment that can be used in the midterm or final exams. It is also possible for faculty members to use any other assessment tool they deem appropriate for the course they teach.

This best-practices guide contains nine evaluation techniques that can be used to assess student learning in a distance-learning environment. For each method, there is an accompanying description of its advantages and disadvantages, and how it can be applied. It is strongly recommended that faculty members carefully consider the range of tools available to them and start planning for the final exam as soon as possible.

#### 1. Open-book Examinations

#### **Definition:**

Open-book examinations attempt to assess higher-level thinking and learning skills in students. It frees them from the notion that learning is simply memorizing books, notes, or slides and then recalling that information on a test. Open-book examinations evaluate students' abilities to actively apply their knowledge and skills to more detailed questions and problems via the ability to freely access their notes, texts, or any other print or digital resource officially permitted by the instructor, during the test.

#### Advantages:

If properly constructed, open-book evaluations can encourage students to engage in higher-order thinking and learning tasks that require critical thinking, analysis, and problem-solving as opposed to more simplistic, closed-book tests that often focus on memorization skills. If students are adequately prepared in advance, open-book tests can include significantly more detailed and challenging questions than their closed-book counterparts.

Upon learning that tests will be "open book", students might wrongly believe that little or no preparation or studying is actually required. In order to overcome this potential misconception, professors should give students clear examples of the types of questions (and skills) that the exams will feature in the form of a preliminary "sample" test featuring questions similar in difficulty and expectations to the actual evaluations.

#### How it can be applied in a Distance Learning setting:

Open-book evaluations can be distributed and collected via Blackboard (preferably also using Turnitin to help minimize possible plagiarism). Exams could be delivered synchronously (where all students start and end the exam at the same time) or asynchronously (where students are given several hours to complete the exam on a variable schedule). In case Blackboard experiences technical issues, email can be considered as an alternative.

#### 2. Essay Questions

#### **Definition:**

Essay questions require substantial amounts of original, creative written work form the students. They are often either open-ended, where students are encouraged to formulate and express their own opinions on broad course topics, or are tightly focused on a specific topic determined by the instructor. Examples of more narrowly focused essay questions are so-called document-based questions where students are given one or more documents (articles, passages of text, poems, images, etc.), and asked to analyze and interpret them according to criteria detailed by the instructor. Essay questions are usually weighted more heavily (i.e., one question is worth many points) than individual multiple-choice questions which typically carry very low weights.

#### Advantages:

Essay questions can explore almost any topic (or combination of topics) across a wide-range of academic areas. They are best suited to courses where discussion and critical thinking are common and well-practiced elements of normal class sessions. They generally emphasize the application of higher-level thinking skills much more effectively than memory-oriented testing techniques (multiple-choice, matching, fill in the blank, etc.). Essay questions are also generally far easier for a faculty member to create than an equivalently-weighted number of multiple-choice questions.

Essay questions take substantial amounts of time, effort, and planning to grade fairly and consistently. Importantly, they are not well suited for students with no prior experience answering such questions. Essay questions also require the instructor to develop and adhere to clear, detailed grading rubrics. These rubrics are essential to ensure that students perceive the grading process to be objective.

#### How it can be applied in a Distance Learning setting:

Essay questions can be distributed and collected via Blackboard (preferably also using Turnitin to help minimize possible plagiarism). In case Blackboard experiences technical issues, email can be considered as an alternative.

#### 3. Blackboard "Automated" Tests and Quizzes

#### **Definition:**

"Automated" tests and quizzes are evaluations that are given using a Learning Management System (LMS) like Blackboard. The instructor creates individual questions and groups them into tests using the LMS, which then displays them for students to answer. Questions that can be categorized as right/wrong and multiple-choice can be graded automatically. However, complex questions requiring written responses (essays, short answers, etc.) generally require faculty to review and score them by hand through Blackboard.

#### Advantages:

Automated testing can save educators tremendous amounts of time, especially in large classes. Grading of answers is unbiased and error free. Test questions can be created in large amounts and added to "test banks" for specific units, chapters or courses. When a test or quiz is given, question order can be fully randomized. Faculty members could also save time by not having to print or proctor exams, grade individual papers and upload the grades to Blackboard.

#### **Disadvantages:**

Automated testing also requires <u>significant set-up time</u>. This entails learning the Blackboard testcreation system and developing all of the questions needed for the test. Be advised that it is generally always best to create 4 to 5 times the total number of questions that will actually appear on the test so that Blackboard can draw from a large "pool" or "bank" of questions and thereby create more unique/individualized tests for all students. Exclusive use of automated testing can inappropriately overemphasize knowledge-level learning where students use simple recall-oriented memory skills to answer multiple-choice (or similar) questions. Instructors must take care to integrate more challenging questions and skills in on-line evaluations. This typically means essay and short-answer questions which will require individual grading by hand.

#### How it can be applied in a Distance Learning setting:

Obviously, students can take online tests from any location with an available internet connection. Online tests are also best taken via a desktop or laptop computer. Students should not use phones and tablets to take online tests because technical problems may result which could severely interfere with their ability to concentrate on the tests or even to complete the test itself.

Faculty members that are planning to use Blackboard "automated" tests are advised to consider early planning and training as this method requires considerable preparation time. They also should familiarize students with how the on-line testing system operates by given their students one or more sample tests or quizzes prior to the final exam.

#### 4. Publisher-Provided Automated Tests and Quizzes

#### **Definition:**

Publishers often create libraries of questions (or even entire tests) to supplement their textbooks. Instructors can use these questions to help develop their own online tests. Prepared questions can be individually selected (or omitted) and edited by the instructor to better align with their teaching style. This may not be applicable to courses which do not use e-books or books from publishers with online resources.

#### Advantages:

Publisher-endorsed test materials are generally strongly connected to the textbook. If students are encouraged to engage with the end-of-chapter questions that are generally featured in textbooks, then publisher-provided test questions will often seem very familiar to them and that can help students make a smoother transition to on-line tests. Publisher-provided test questions are also generally error free since they have undergone multiple quality and validity tests. Question banks also typically contain different types of questions including multiple choice, short answer, etc. Large question banks can be presented to students in highly randomized ways, so that students are generally not answering the same question at the same time or, if they are, even the answers are ordered differently.

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#### How it can be applied in a Distance Learning setting:

Faculty members that are planning to use publisher-provided automated tests and quizzes are advised to consider early planning and training as this method requires considerable preparation time. They also should familiarize students with how the on-line testing system operates by giving one or more sample tests or quizzes prior to the final exam.

#### 5. Segmented High-Stakes Assessment

#### **Definition:**

A course where student's final grade is based exclusively on their grades on a midterm and a final exam is an example of high-stakes assessment. If students do poorly on one evaluation, their grade is severely impacted--maybe never to recover. High-stakes assessments, where one test carries significant weight, are generally recognized to be a bad teaching practice. High-stakes assessments are unfair and unnerving for students and should be avoided.

A segmented high-stakes assessment approach divides up a single high-stakes assessment into multiple, smaller, lower-stakes segments. For example, instead of one final exam worth 30% of a student's total grade, three smaller (and therefore lower stakes) tests (each worth 10%) could be given to students instead.

#### Advantages:

Students will have multiple chances to practice applying their knowledge and skills. More frequent lower-stakes evaluations give students opportunities to make mistakes, and if they learn from them, still do well in a course rather than failing it outright. Making mistakes and correcting one's learning without severe penalties is an essential component of learning.

This approach could be labor-intensive in terms of creating and correcting multiple assessment items as opposed to a single exam. The same applies to the feedback that must be provided for each of the segmented assessment method.

#### How it can be applied in a Distance Learning setting:

Instructors could create several short quizzes or exams that would replace a single high-stakes final exam. This way the final exam grade could be collated from a combination of several lower-stakes quizzes--for example 5 quizzes could be given and then each student's 3 highest grades used to compute their final exam grade.

#### 6. Course Projects (Or Capstone Projects)

#### **Definition:**

An individual or group project generally encompasses major themes or issues raised during the course. Projects create an opportunity for students to apply higher-order thinking and learning skills that include critical thinking and problem solving. Projects can be used as part of the regular coursework (perhaps substituting for a test) or, in the case of larger and more significant "capstone" projects, they can even take the place of a traditional final exam.

#### Advantages:

Projects specifications can be easily prepared and disseminated. Additionally, students are generally accustomed to this type of assessment and thus it may not represent a major change when combined with the current shift to distance-learning.

#### **Disadvantages:**

As is the case for any work undertaken outside of a supervised environment, plagiarism is always a possibility. Instructors should develop detailed project rubrics which clearly specify the criteria and expectations for student work. Explanations of penalties for plagiarism should be included.

If courses already have a project as an assessment item, replacing the final exam with yet another project may be unadvisable since students may wind up duplicating work already completed in a different context.

#### How it can be applied in a Distance Learning setting:

Projects can be distributed and collected via Blackboard (preferably also using Turnitin to help minimize possible plagiarism). Students will, of course, need to complete projects over the course of several days or weeks working on their own or in groups (if permitted by the instructor).

Faculty members are advised to distribute clear instructions on what tools students need to use, how to use them, and how to submit their projects.

#### 7. Debates

#### **Definition:**

Debates are discussions about a particular topic or issue in which students put forth and defend or refute supporting and opposing arguments. In this assessment method, students actively engage with and discuss their perspectives on topics and issues presented in class. Debates can be a valuable way to promote critical thinking, speaking and presentation skills.

#### Advantages:

Issue-oriented debates actively engage students in course topics and generally mirror real-world issues and concerns. Debates allow students to develop and exercise skills that translate into valuable real-world competencies. They enable students to see both sides of a situation or topic and this requires them to think critically and support what they say with substantive and factual information. Debates often help students better understand and evaluate the evidence supporting both sides of a controversial issue and reach fact-based, objective conclusions rather than belief-based, subjective ones. By engaging students more deeply with course topics and concepts, debates can also help increase student's retention of information learned.

Since responding to a debate question is a highly personal task, it is difficult to envision how students might cheat or plagiarize--especially when debates are conducted live.

#### **Disadvantages:**

As with other active-learning strategies, students need to learn how to properly engage in a formal debate in a classroom setting. Faculty must directly assist students in this process by creating clear, specific questions and actively guiding and moderating student responses. If this is not done well, a debate can quickly lose focus and devolve into little more than a shouting match where some students dominate and quite possibly also offend other students. Additionally, faculty must clearly define and distribute rubrics detailing expectations for student participation as it is critical that students understand that their grade for a debate activity is not just determined by who talks the most--or the loudest. It is suggested that faculty also develop a grading sheet where key elements for participation are indicated and that they fill one of these out for each student as the debate evolves. In this respect, grading debates properly can be somewhat labor-intensive for faculty.

#### How it can be applied in a Distance Learning setting:

Debates can take place synchronously (i.e. live) using video/voice conferencing products. If this method is chosen, faculty need to establish clear "ground rules" about how participation will occur and then actively moderate the activity so that all students are not attempting to talk at once. It is strongly suggested that live debates begin with all students muted and that students "raise their hand" via features included in the meeting platform (WebEx, Collaborate, Microsoft Teams). As the moderator, the faculty member will then choose who gets to speak when and for how long.

Importantly, debates do not always need to occur synchronously, live, in "real time". It is possible to conduct an extended, thoughtful "conversation" over several hours (or even days) on line via text-based "Discussion Forums" in Blackboard. CETL can provide additional information if needed.

Faculty are advised to distribute clear instructions on what tools students need to use, how to use them and how to participate in the debate <u>in advance</u>.

#### 8. Student Presentations

#### **Definition:**

**Student** Presentations involve students using their voice along with any visual aids needed (PowerPoint, real-world objects, posters, etc.) to explain and clarify one or more topics to an audience.

#### Advantages:

Similar to debates and projects, student presentations are often an excellent way for faculty to "step aside" from a teacher-centric role in the classroom and create more student-centered approaches to teaching and learning. Presentations can give students important opportunities to actively process knowledge, attend to what others are thinking and better understand and formulate their own opinions.

#### **Disadvantages:**

Presentations can be labor-intensive in terms of correcting and giving feedback. Students may incorrectly focus more on the "look" of their presentation's materials rather than its actual informational content. In order for presentations be educationally relevant and successfully executed, faculty must develop detailed presentation rubrics which clearly specify the criteria and expectations for student work.

#### How it can be applied in a Distance Learning setting:

Presentations can be delivered "live" online (WebEx, Collaborate, Microsoft Teams) or recorded and then uploaded to Blackboard or YouTube as a "narrated PowerPoint" presentation.

Faculty are advised to distribute clear rubrics and instructions on what tools students need to use, how to use them and how to submit their final presentations.

#### 9. Student Portfolios

#### **Definition:**

A portfolio consists of samples of student's work from the semester collected and assembled as evidence to show how the students have met specified learning outcomes or assessment criteria.

#### Advantages:

A portfolio can include a wide variety of items from the semester (written work, journals, drawings, diagrams, tests, projects, etc.) as well as student reflections on their own development as learners during the semester. Portfolios can help students' better analyze and evaluate their own thought processes and work habits. As a non-traditional form of assessment, portfolios can often better interest and engage student interest, effort, and creativity.

#### **Disadvantages:**

A portfolio can be labor intensive for faculty members in terms of planning, grading, and giving feedback. Students may also be tempted to focus too much on the overall look of their portfolio rather than on its actual contents. In order to avoid students forming the impression that portfolios are completely subjective assessments, they also require faculty to develop and adhere to clear, detailed grading rubrics. These rubrics are essential to ensure that students understand exactly what they are expected to create and include in their portfolios in order meet specific grading standards.

#### How it can be applied in a Distance Learning setting:

Student Portfolios can be distributed and collected via Blackboard (preferably using Turnitin if the portfolio contents are written words). Email submission can also be used. Faculty are advised to distribute clear instructions on what tools students need to use, how to use them and how to submit their final portfolio projects.