



# UNIT-4

## Assessing Student Performance

### Learning Outcomes

**By the end of this unit the learner will be able to:**

- ✓ Help effectively monitor and measure students' performance
- ✓ Understand the difference types of tests and examinations
- ✓ Confidently evaluate individual and group performance

## Unit 4

### Assessing Student's Performance

#### Introduction

An effective assessment task is one which assesses students' attainment of the learning outcomes. Unit learning outcomes are what students are expected to know, understand or be able to do in order to be successful in a unit. They begin with an action verb and describe something observable and measurable. Key to successful learning: aligning assessment with learning outcomes.

One of the keys to successful learning is the aligned curriculum (Biggs, 2003): this means that learning outcomes are clear, learning experiences are designed to assist student achievement of those outcomes, and carefully designed assessment tasks allow students to demonstrate achievement of those outcomes.

This concept is illustrated as follows

1. The learning outcomes are clear.
2. The learning experiences (face-to-face and virtual) are designed to help students achieve those learning outcomes.
3. The assessment tasks allow the students to demonstrate their achievement of those learning outcomes.

#### Reviewing your assessment strategy

Begin by thinking about your current assessment practice. The questions below will help guide your reflection.

- How do you currently assess your students? List the methods you use.
- Is each assessment worth doing and can/do you explain to your students why?
- Can you explain how the assessment methods you currently use are matched to the expected learning outcomes?
- What skills and capabilities do you want your students to leave your unit/course with?
- Approximately how much does each assessment process cost students and staff in terms of time taken and resources used?
- Do you feel you might be over assessing? How do you know?
- What criteria do you use? Are they yours, or can you involve students themselves in formulating them?

- Do the students know the criteria? Do they really understand them?
- Is the feedback you give your students clearly related to your assessment criteria?
- How well does the feedback students receive on assessed work help them to know how they are doing?
- How much practice and guidance do students get in the chosen assessment methods?
- What assessments do students enjoy and why?
- How do you know that the students find your assessments useful?
- In what ways do the assessments help your student learn?

Review your assessment strategy regularly. It can be even more productive when done in partnership with your students and colleagues. Designing assessments which allow students to demonstrate their achievement of the learning outcomes.

Assessing learning can profoundly shape the educational experiences of students. One of the challenges of effective assessment is to ensure that there is a close alignment between the learning goals, the teaching and learning activities aimed at meeting learning goals and the assessment tasks used to assess whether learning goals have been met. Current best practice includes assessment which is aligned to learning goals which focus not only on content knowledge but also on process and capabilities.

### **Common assessment tasks**

There are many different assessment tasks you can use to assess your students. The following will help you choose the right assessment task. Remember that whatever assessment task you decide to use, it should be clearly aligned with the learning outcomes and teaching and learning activities in your course.

### **Short form test**

Short form tests are also known as objective tests. They include multiple choice, completion (or cloze), true-false and matching types, of which multiple choice is the most commonly used. A multiple choice test item consists of a statement, called the stem, and several alternative statements, one of which is the correct answer, while the others are distracters.

For example:

Formative assessment refers to:

- a. A Practice test
- b. A test used to determine a grade;
- c. A test used to determine prior knowledge
- d. A test to monitor learning progress.

### Hints for writing multiple choice items:

- The stem should consist of a single, clear idea. It should make sense independent of the rest of the question.
- Avoid stems stated in negative terms as these are more difficult to understand and may cause confusion.
- Make sure that all the alternatives are grammatically consistent with the stem and similar in form and length to one another.
- Make the distracters plausible by using common misconceptions and typical student errors.
- If you use the alternatives 'none of the above' and 'all of the above' include them as the incorrect answer about 75% of the time.
- The correct answer should appear without pattern and equally often in each of the alternative positions.

### Short answer test

Short answer questions require a brief answer consisting of a phrase, sentence or short paragraph. For example: Write a brief definition of formative assessment.

Hints for writing short answer questions:

- Be clear about what you are asking.
- Avoid using phrases straight from the text book.

## Quantitative Assessment Standards

### Validity

Assessment of a student's knowledge and skills usually results in an empirical 'indicant' i.e. a number (mark) or a grade that represents the knowledge and skills being assessed. Validity refers to the extent to which the indicant measures what it claims to measure. In educational terms, however, it is often not the indicant/measure that is validated but the purpose for which it is being used that is usually submitted to validation processes.

Hence, a mark based on a student's recall of content knowledge cannot be used as a measure of the student's higher order skills, such as knowledge application.

### Reliability

Reliability refers to both the accuracy and precision of measurement. Different tests of a student's particular knowledge or skills, if administered independently of one another, should all give the same result. Two different assessors should arrive at the same conclusion about a student's learning. The

three facets of reliability refer to the basic rationale (can the knowledge and skills be translated into a measurement?), the procedures for data collection (the assessment tool, its administration and marking) and the statistical procedures following (what we subsequently do with the numbers).

### **Qualitative Assessment Standards**

Good qualitative assessments are credible, dependable and confirmable. Assessment is credible when the form of assessment is aligned closely with its corresponding form of learning outcome. Assessment is dependable when subjective methods are applied consistently and consensually. Assessment is confirmable when an audit trail (documentary or electronic) is maintained to enable back-tracking to original criteria-based judgments (adapted from Guba & Lincoln's (1989) Fourth Generation Evaluation standards).

### **Tips For Assessing Students' Performance**

Marks and grades are extremely important for most students, hence, marking and discussing those marks with students may take up a great deal of your time as a TA. For the most part, assessment tasks (tests, exams, papers, etc.) are set by the instructor. However, marking is often done by TAs. Some TAs may also wish to devise their own quizzes for use in labs or tutorials.

### **Objective Tests:**

Objective tests are those which generally have answers that are seen to be either right or wrong, and can include multiple-choice, short answer, true/false, or fill-in-the-blank items; mathematical or logical proofs and problems; or tests which require the student to draw or fill in diagrams, tables or charts. If not already prepared, the first thing you will want to do is to prepare an answer key with the appropriate answers.

By having this key beside you, you can simply compare the student's answer with the preferred answer, and give the appropriate grade. In addition, having such a key will ensure fairness, because any other TA who might be marking a portion of these tests will do so in a way that is consistent with you.

Deciding what answers are appropriate is often the job of the supervisor that designed the test, though you will likely want to sit down with them to discuss how at least some of the answers were arrived at (if it is not obvious). One good reason to do this is that there could conceivably be other answers that are partially or wholly correct.

By sitting down with your supervisor, you can work together to discover and agree on appropriate responses to the more ambiguous questions. As well as making your job easier, this will assist your supervisor to design clearer tests in the future.

**You may also want to discuss the following questions with your supervisor prior to marking:**

- What are the point-value of each question, and what letter grades correspond to what numeric scores? Often your supervisor or another TA will also be grading assignments or tests, so it is important that you all evaluate the students in a fair and consistent way.
- Does your supervisor want you to mark the tests on a "curve" or do they want you to assign a grade according to the raw percentage? (This could mean the difference between the top score getting an "A", or perhaps a "C"). Explain the method to your students.
- How much weight are you to give to the process students used to arrive at their answer? Often a student may make a small error that will carry through a whole problem, even though the rest of the work is essentially correct (given the initial error).

It is a good idea to post the answer key outside your office door. This will let your students know where your office is, and perhaps give them some incentive to come in and talk with you. In addition to merely posting the answers, you or your supervisor may prefer that one of you distribute the assignments or tests in class, or have the students come by your office to pick them up.

This method of returning the students work is preferable to merely leaving it to be picked up, because it may allow the TA to make some kind of personal connection with students who might otherwise remain merely a number on a page. However, if you do give assignments back to students in person, try not to embarrass anyone by inadvertently letting others know what grade the student got. You can do this by handing the paper back up-side-down, or with your hand over the grade.

**Essay Tests:**

These tests usually ask students to respond to specific questions in a way that is understandable and readable. Because the questions are focused, there are usually some basic points that the student is expected to include in their essay. Therefore, before marking these tests, the first thing you should do is to sit down with your supervisor to discuss what these essential points are, so you can prepare model answers in advance.

If there are other TAs marking these same tests, they should also be in on these discussions, so that the marking will be as consistent as possible. In this discussion you should also determine if there is more than one acceptable answer to a particular question, and decide on appropriate ways of dealing with these ambiguous or unclear questions ahead of time.

Another thing that should be clearly worked out at this meeting is how the grades are to be distributed on the test. You will need to decide how much each answer is worth, and how important incorrect spelling and grammar will be (in terms of the overall grade). It may also be useful to make lists of common improper answers, along with the penalties for each.

## Evaluating Discussion Group Performance:

This section presupposes that you are expected to grade the students in your discussion group, and that you are wondering how to go about this fairly. Generally, the preferred method of grading students is on the basis of three general factors: quantity, quality and progress.

Quantity refers to how much a student speaks. It is unreasonable and unfair to expect that no student of yours will be too shy to speak in the group, so a large part of your job as a facilitator is to help your students "break out of their shell". If you clearly explain your expectation that everyone will make sincere efforts to speak, and do all you can to help your silent students, then it will be more than fair to mark the students on this basis.

In the long run, they'll be thankful, since a great deal of what is required to "make it" in the academic world has to do with one's ability to communicate what she or he thinks. Though it may not be necessary to make a note every time a particular student speaks, keeping this requirement in mind will help you to decide who needs more help during the course. In addition, it will provide you with a way of considering the contributions of your students when you sit down to give out the grades at the end of the course.

With that said, it must be pointed out that many discussion group facilitators may be faced with students who speak either too much, or never to the point. This is where the second requirement of quality comes in. By considering the quality of what a speaker says, you will have some means of assessing the difference between a student who talks a lot and says nothing and a student who only occasionally talks yet always "hits the mark". Again, you should clearly explain to your students at the beginning of the class that not every contribution will be positively evaluated, so they can learn to use judgement before speaking out.

Deciding what makes one student's contribution qualitatively better than another's can sometime be a tricky matter. Generally, the points you'll want to look for are similar to those you would look for in a good essay, namely: a clear understanding of the course content (e.g. the facts, theories and concepts used); an accurate use of logic (e.g. not contradicting themselves, or using trivial or fallacious arguments); an effective ability to communicate (e.g. asking and answering questions effectively, and being clear and concise).

Moral insight (e.g. the ability to identify the values inherent in course material and to formulate justifications according to some value system) is also an important element in any good discussion. In addition, there are skills to look for that are specific to group situations, such as well-developed interaction skills (e.g. degree of enthusiasm) and the student's overall contribution to the class (e.g. the relevance and constructiveness of their contributions).

Another factor on which a student's discussion group grade can be based is the particular student's progress or improvement. It is unfair to expect every student to enter a discussion group feeling equally comfortable about talking, or equally capable of contributing in a meaningful way.

Therefore it would be unfair to hold the earliest performance (or lack of it) against a student for the duration of the course. Instead, a student should see improvements in their grade that reflect improvements in their contributions (based on the factors already discussed). Moreover, as a course proceeds, the material will likely become progressively more difficult because it relies on earlier lessons being understood and applied. So in factoring in the progress component of a student's grade, you will likely want to consider weighing useful contributions that occur later in the course more heavily than those occurring earlier.

One final alternative for marking a student's participation is to use learning journals. This not only allows the student to release any concerns or feelings about the course or issue, but also lets you see that the student has taken time to reflect upon the material discussed in the session. Often we neglect to consider the importance of silent thinking within the discussion group. Some students generate questions, theories, and elaborations in their heads, but may be reluctant to express these in front of the group. Journals provide a way of evaluating these reflections. There are many useful ways of using journals and further information is available in the Instructional Development Centre.

As you have probably figured out by now, it is rather difficult not to be somewhat subjective when evaluating a student's discussion group performance. The progress component is intended as a safeguard against your students doing consistently badly, but it will only work if you are always very clear with them about their progress in the course. Providing accurate and up-to-date assessments of the student's performance may have the added effect of motivating students to do even better.

### **Making a Personal Connection in Your Evaluations:**

Some teaching assistant jobs will consist entirely (or almost entirely) of marking papers, exams, labs, etc. This experience can be an alienating one, both for you and for the students. You may have begun this job with the hope that you could have a clear and lasting impact on your students' education, but you now discover that you will rarely get a chance to interact with them. The following suggestions will allow you to still maintain some human contact with your students, even if you rarely (or never) see them.

Giving out grades (even extremely bad ones) need not be the meanest thing you ever do. Softening a criticism so that it isn't taken as a personal attack is always a good idea, for instance, instead of saying "Only an idiot would say..." or "How could you possibly think that", etc., you could write "So-and-so disagrees with your statement that... . What do you think about that?" This response, rather than stirring an immediate reaction of anger or despair in the student, will allow them to delve further into a question, and to come to understand for themselves where they went wrong. Even when marking

objective tests and assignments, something as minor as not using red ink can go a long way towards improving your students' confidence (some students have said that red ink looks too much like blood). Invite (in writing) students to come to see you for help when you must give them bad grades.

Always be sure to add positive and encouraging points where you think that the student has done well. For example, you could say "Good point. You should mention this the next time this issue comes up in class" or "Very interesting...I hadn't considered that before", etc. Rather than only telling your students where they've gone wrong, this will go a lot further toward helping them to develop the academic motivation and confidence they need to do even better in the future. Even adding some encouraging comments at the end of an objective test will go a lot further than handing back a paper full of check marks and numbers.

If you do know something about a particular student (e.g. because you've heard them speak in class, or talked to them during office hours, or you've marked their previous work), you might want to add specific or personal remarks on their tests or papers, depending on what sort of support or encouragement you think that particular student needs, or on the specific interests she or he has. You may even want to provide extra-challenging remarks for the more gifted students. This will help you to feel a closer connection with your work, and will help your students to know that someone out there cares about what they are doing.

### Dealing with Grade Disputes:

1. Only discuss a student's grades in private. Have the student make an appointment to meet you in your office. If possible, ask to have their paper or exam so you can review it before the student arrives for the appointment. If the concern is a miscalculation of marks, you may ask the student to give you the paper, so you can re-total the marks, and return it to the student at the next class session.
2. Prepare for the student meeting by having your marking scheme and answer keys ready. You do not need to defend what you have done, but be prepared to explain it.
3. The student may be right; you could have made a mistake, or the student may convince you the answer is appropriate. If this happens, be gracious. Apologize if it is your mistake and change the grade. If the student convinces you that the answer is correct, acknowledge you had not thought of that possibility and alter the marks accordingly.
4. If the student approaches you with a grade dispute for something you did not mark, do not get involved. Tell the student to talk to the person who did the marking.
5. If you and the student cannot resolve the dispute, meet with the course instructor. This will appease the honest student and discourage the one who might be trying to intimidate you.

### Further Reading:

- ✓ *Grant Wiggins, (1993), Assessing student performance.*