

# Assessment

Assessment, evaluation and communication of student achievement and growth are essential parts of the teaching and learning process. Effective assessment:

- is meaningful to both the teacher and students
- motivates students to higher levels of achievement
- assists students to develop the capacity for selfassessment.

The most effective assessment in Knowledge and Employability courses is continuous, collaborative, comprehensive and based on clear criteria.<sup>1</sup>

### Continuous Assessment

Assessment practices should be carried out in such a way that they support and enhance ongoing student learning and development.

Continuous assessment:

- promotes student learning
- is part of instruction in a variety of contexts, using varied methods and instruments that match learner outcomes
- is part of an ongoing process rather than a set of isolated events
- focuses on both process and product
- provides information about students' prior learning
- provides ongoing feedback about the effectiveness of instruction
- · enables students to demonstrate their knowledge and skills
- provides opportunities for students to revise their work in order to set goals and improve their learning
- provides a status report on how well students can demonstrate learner outcomes at that time.

<sup>1.</sup> Adapted from Alberta Learning, *Physical Education Guide to Implementation* (Edmonton, AB: Alberta Learning, 2000), pp. 47–48.

Collaborative Assessment	Students benefit when they are involved in the assessment process. Collaborative assessment may also involve other teachers, parents and community members.
	<ul> <li>Collaborative assessment:</li> <li>encourages students to be more responsible for their own learning and to develop a positive attitude toward Knowledge and Employability courses</li> <li>draws on the skills and knowledge of other teachers, particularly in planning assessment for interdisciplinary learning activities</li> <li>may involve parents, particularly in diagnostic or specialized assessment</li> <li>may involve community members in assessing knowledge, skills and attitudes in a work placement or other community experience.</li> </ul>
Comprehensive Assessment	Assessment practices should address learner outcomes in a variety of contexts. They should also take into account the diverse backgrounds and learning needs of students.
	<ul> <li>Comprehensive assessment:</li> <li>provides opportunities for students to demonstrate what they know, understand and can do: <ul> <li>in many different contexts and subjects</li> <li>in meaningful, real-life situations</li> </ul> </li> <li>includes multiple sources of evidence, both formal and informal</li> <li>builds on student strengths and encourages further learning by creating positive atmospheres and self-images</li> <li>is developmentally appropriate, age-appropriate, genderbalanced, and considers students' cultural and special needs.</li> </ul>
Criteria-based Assessment	Perhaps most importantly, assessment practices should identify and clearly define the critical aspects of performance for demonstrating student learning. Comparing one student's proficiencies to another's does not motivate students to achieve and frequently has the reverse effect. Meaningful, relevant and realistic criteria for achieving learner outcomes can motivate students to take responsibility for their own learning.
	<ul> <li>Criteria-based assessment:</li> <li>is based on demonstration of learner outcomes rather than comparing one student's performance to another's</li> <li>involves students in identifying and/or creating criteria</li> <li>communicates the criteria used to evaluate student work before students begin tasks so they can plan for success</li> <li>provides students with rubrics to indicate performance levels.</li> </ul>

## Planning for Assessment

There are many possibilities in planning assessment strategies. Consider the following guidelines for effective assessment.

- Plan for diagnostic, formative and summative assessment.
  - Diagnostic assessment provides information about what students know and can do before the start of a task, and about their individual strengths and difficulties. This information can be used to inform decisions and instructional plans.
  - Formative assessment provides ongoing feedback about student progress and the effectiveness of instruction.
  - Summative assessment provides information about student progress and achievement at the end of a unit or term, and provides information to assist in setting the next goals.
- Use a variety of assessment methods. Whenever possible, provide students with assignment options or opportunities to suggest alternative assignments to demonstrate their learning.
- Provide students with a variety of informal situations where they can demonstrate their understanding and application of knowledge, skills and attitudes.
- Emphasize the synthesis of knowledge and process objectives, rather than isolated skills.
- Provide adequate time for students to complete their work. Students often do not do their best under time pressure.
- Use students' strengths to ensure success in the evaluation process.
- Help students realize that ongoing self-assessment, as well as external assessment, is a positive developmental process.
- Assist students to understand that making mistakes and developing the ability to identify and correct errors are part of the growth process.
- Engage students in conversations about their learning, their understanding of tasks, the strategies they know and use, and what works best for them.
- Provide ongoing frequent feedback to students about their progress.
- Involve students in developing assessment rubrics.
- Involve students in goal setting, reflection and self-assessment through learning logs, goal sheets, self-reflection captions on portfolio selections and self-assessment rubrics. Help students evaluate progress toward their own learning goals.

• Be explicit about expectations. Clearly establish and communicate the criteria for assignments. Providing exemplars, modelling the process and outlining specific expectations can help provide the explicit step-by-step instruction that benefits Knowledge and Employability students.

Teachers are encouraged to assess student progress relative to prescribed curriculum throughout the year using a variety of strategies that may include the following.

#### Performance Assessment

Performance assessment involves judging a performance task—a response, product or performance designed to demonstrate learning. Performance tasks could include:

- group activities, such as role playing, simulation games and panel discussions
- speaking activities, such as oral presentations, interviews and debates
- displaying/demonstrating activities, such as artwork, charts, graphs and maps
- written assignments, such as paragraphs, reports and position papers.

Effective performance tasks<sup>2</sup>

- establish clear criteria for assessing student learning related to specified learner outcomes
- focus on high priority and relevant outcomes
- establish a meaningful, real-life context
- require the application of a range of thinking skills or processes
- contain age- and grade-appropriate activities that are sufficiently challenging
- call for products or performances directed to a specific audience
- allow for more than one right answer
- elicit responses that reveal levels of performance rather than simply correct or incorrect answers
- provide for students of varying ability levels to successfully complete tasks
- provide for purposeful integration of subject areas
- provide clear directions for students
- engage students so their interest and enthusiasm will be sustained
- provide students with the criteria and opportunities to reflect on, self-evaluate and improve their performance.

### Choosing Assessment Techniques

<sup>2.</sup> Adapted from the Maryland Assessment Consortium, "Performance Task Rubric" (Linthicum, MD: Maryland Assessment Consortium, 1994).

Consider the following suggestions for developing and using performance assessments.

• Use the criteria above to identify and evaluate performance tasks.

See <u>Criteria for Designing Performance Assessment Tasks</u> for a rating scale you can use.

- Collect examples of performance assessment tasks and rubrics from books, Web sites and colleagues.
- Have ongoing discussions with colleagues about assessment tasks and rubrics—what's working and what's not.
- Work with others in your school or department to develop common language about assessments and grading.
- Develop a plan of action for including more products or performances in your assessment program.
- Add one self-reflective activity during the week.
- Add one performance assessment with criteria and scoring rubric per grading period.
- Select an appropriate number of learner outcomes for each task (e.g., 3–5 outcomes).
- Give students an opportunity to reflect on their performance and set goals for future learning once they have completed the task. This allows teachers and students to link assessment results to teaching and learning.

#### **Portfolio-based Assessment**

Portfolio-based assessment is an increasingly popular strategy being used to maintain, record and report a visual record of a student's progress, achievement and level of competency. Samples of student work are collected and maintained in a portfolio; qualitative differences in this work over time may be assessed. Written work, reports, maps, tests, completed projects or photographs of completed projects may be kept as part of a student's portfolio.

It is important to involve students in the process of selection and self-reflection, include a variety of products (written, audiotapes of oral reading, videos), and organize the information to demonstrate progress over time. Encouraging students to develop and maintain their own portfolios takes a considerable amount of time. The process, however, once in place, has been found to be effective in motivating students to achieve at higher levels of competency and to take pride in their achievements.

When properly implemented, portfolio-based assessment strategies:

 encourage students to take ownership, to have a vested interest in the creation of their own portfolio by having them select items for inclusion in the portfolio

- recognize a range of efforts and depict tangible achievements
- create a visually appealing history of student progress
- encourage students to reflect on their work by reviewing procedures used, revising and perfecting the product of their efforts
- can contribute to successful transitions from one setting or year to another (e.g., a mini-selection portfolio containing samples that illustrate progress provides a baseline for the receiving teacher).

#### Tests

Most teachers will use tests to measure achievement on certain types of outcomes. Tests may be objective or free response, depending on the type of material and the purpose of the assessment.

- *Objective tests*—matching, fill-in-the-blank, true/false, multiple choice, key-list questions.
- *Free response tests*—sentence answers, paragraphs, essays.

Consider the following tips for using tests.

- Balance testing with other evaluation instruments and techniques when determining marks for reporting purposes.
- Ensure that tests are scheduled and students are adequately prepared. Unscheduled tests may be used for diagnostic purposes rather than for grades or report card marks.
- Consider using error and miscue analysis of tests to provide information about student difficulties. For example, are errors on a test related to misreading directions, carelessness, lack of understanding of concepts, application of concepts, test taking or studying? Error analysis can also be used to analyze classroom assignments.

#### **Self-assessments and Peer-assessments**

Self-assessment is an essential component in Knowledge and Employability courses. Students need to be encouraged and supported in reflecting on and evaluating their skills, strategies and growth on an ongoing basis. A variety of self-assessment checklists and rubrics are included in the Knowledge and Employability Studio for this purpose. Peer assessment may be used to assess other students' participation skills in group activities and their completed projects. Peer assessment builds students' skills in critical thinking, revising, and giving and receiving feedback.

#### **Questionnaires and Inventories**

Questionnaires and inventories may include true/false, multiple choice, key-list, matching and/or sentence completion items related to the student's interests and attitudes. Examples of useful inventory instruments include:

- The Likert Scale—a five-point key that may be used in connection with any attitude statement. Examples of the key are strongly approve, approve, undecided, disapprove and strongly disapprove. A summed score may be established by weighting the responses to each statement from five for strongly approve to one for strongly disapprove.
- The Semantic Differential—uses descriptive words to indicate possible responses to an attitudinal object. The response indicates the direction and intensity of the student's beliefs from plus three (very favourable) through zero (very unfavourable).
- Rank Order—a group of three or more items is presented, which the student arranges in order of preference. This type of item is a cross between matching and key-list questions.

#### Observation

Observing student behaviour can be a useful informal assessment technique for individual students or a group of students undertaking an activity over a given time frame. Observations may be used to record performance on a checklist or to record data for an anecdotal report. Measures for observation could include strategy use, student responses to questions, or use of time and materials.

#### **Specialized measures**

Specialized measures may be used for individual students or groups of students with similar needs and abilities. Often these assessments are used to identify learning difficulties, monitor growth or support individualized program plan for students with learning disabilities. The following are common examples of specialized measures:

- Anecdotal records of student progress. Anecdotal records are specific observations recorded on an ongoing basis in a log or diary. These records can provide useful data for analysis and interpretation.
- Student/teacher interviews or conferences may be used to acquire student perceptions about progress, to move the student toward increased self-direction, or to review an activity, unit or test.
- Informal reading inventories can provide baseline information and measure growth in oral and silent reading. Miscue analysis of oral reading errors provides information about strengths and areas of need to guide instruction.
- Tape-recorded tests can be used to assess students' listening skills and knowledge.

### Assessment Tools

There are numerous assessment checklists and rubrics included in each subject area in the Knowledge and Employability Studio. These tools are integrated into relevant topics (ELA and Science) or grouped together as a separate section (Math).

The tools are also included on the CD–ROM in Word format in the Assessment and Self-assessment folders. Because many of these tools can be used across subject areas, they are organized in alphabetical order rather than by subject.

The following types of tools can be used in various combinations with the techniques discussed above.

#### Checklists

Checklists serve to record performance levels in a variety of activities or situations, such as the completion of tasks associated with simple, specific criteria or participation in group/individual activities. Checklists may be useful for teacher, peer and self-assessment.

#### **Performance Assessment Scales**

A performance assessment scale may be used by the teacher when assessing student performance and level of competency. In addition, a copy of the scale may be given to each student to assist in self- and peer-assessment activities. A variety of student and teacher assessment checklists are included in the Knowledge and Employability Studio.

The use of a commonly understood assessment scale will assist in:

- increasing consistency in assessment practices
- recording and reporting the level of student competency in a concise manner
- referencing the level of student competency on items placed in a student's portfolio.

Consider the following samples of performance assessment scales.

Level	el Meaning Commentary			
Excellent	The student meets the standard of excellence for the grade, demonstrates exemplary performance or understanding, shows creativity.	This is a " <b>Wow!</b> "		
Proficient	The student meets the acceptable standard for the grade by demonstrating solid performance or understanding.	This is a " <b>Yes.</b> "		
Satisfactory	The student just meets the acceptable standard for the grade. Performance and understanding are emerging or developing, some errors are being made, grasp is not thorough.	This is a " <b>Yes, but</b> " The teacher needs to make decisions about appropriate interventions to help the student improve. This is a " <b>No, but there is some</b> <b>basis for making improvement</b> ." The teacher needs to make decisions about appropriate interventions to help the student improve.		
Limited	The student is not yet meeting the acceptable standard for the grade and has serious errors, omissions or misconceptions.			
Insufficient/ Blank	No score is awarded because there is insufficient evidence of student performance based on the requirements of the assessment task.	<ul> <li>This is a "No judgement can be made."</li> <li>The teacher must decide: <ul> <li>if the student should redo the task</li> <li>if more time should be provided to complete the task</li> <li>if a different task at the student's ability level should be assigned</li> <li>if further instruction leading to reassessment should be provided</li> <li>if the task is inappropriate for the student and should be scrapped.</li> </ul> </li> </ul>		

Sample A: Knowledge/Skills and Processes/Attitudes and Values<sup>3</sup>

Sample B: Occupational Competencies

Level	Meaning
Mastery (M)	skill/task/knowledge has been mastered; student can instruct others
Advanced (A)	skill/task/knowledge is at a satisfactory level and individual requires no assistance or supervision

 Adapted from the Alberta Assessment Consortium (AAC), How to Develop and Use Performance Assessments in the Classroom (Edmonton, AB: Alberta Assessment Consortium, 2003), pp. 48–49. © Alberta Assessment Consortium (AAC)–adapted with permission.

Developing (D)	skill/task/knowledge is at a satisfactory level but requires some additional time, assistance or supervision
Emergent (E)	skill/task/knowledge is introduced but requires a great deal of time, assistance and supervision

#### Rubrics

Rubrics provide a measurement scale with a set of criteria that describes the characteristics of a product or performance along the scale. Rubrics are helpful for establishing clear and consistent performance measures, for communicating performance expectations to students and for student self-assessment.

Effective rubrics:

- address all aspects of the outcomes being measured and do not address anything extraneous
- use well-defined scales that cover important dimensions of student performance; i.e., what students are expected to know and do
- describe measurable qualities of a performance or product (not quantities)
- state criteria in specific terms using action verbs
- clearly distinguish one performance or product level from others so that they can be applied consistently by different scorers
- address the same criteria, in the same order, number and using parallel language at each level
- are developmentally appropriate
- can be understood by students and parents
- can often be used for a variety of tasks
- are fair and free from cultural or other biases
- are useful, feasible, manageable and practical for the intended purpose.

Rubrics can be found from a variety of sources, including books, Web sites and each subject area of the Knowledge and Employability Studio. These rubrics may be used "as is" or combined, split, reworded, added to, deleted from or otherwise modified to suit the particular teacher and student needs. Rubrics can also be developed from scratch to match specific situation and learner outcomes. There are numerous Web sites to help teachers build rubrics electronically. Try using a search engine to search for "rubric generator" or "rubric creator."

### Using Assessment Information

Assessment information should be used to provide:

- feedback to students relative to individual growth at each stage of the learning process. Feedback should be provided on a regular basis and should encourage increasing amounts of self-monitoring and self-assessment
- information to teachers concerning the appropriateness of learning goals and objectives, and the effectiveness of learning strategies and materials that have been used. Such information enables the teacher to modify the program as required for the whole class or individual students with respect to pacing, learning resources, teaching methods or objectives
- information to parents regarding the student's progress. Where possible, reports to parents should be interpreted through interviews so that assessment strategies are understood. The interview is also valuable in identifying student needs that may be met through targeted program planning and delivery.

# Criteria for Designing Performance Assessment Tasks<sup>4</sup>

The following analytic rating scale provides a guide to ensure that important elements are included in performance assessments. It also provides an indicator of the extent to which each element is present.

To what extent does the performance assessment:		Fully	Partially	Not at all
a.	establish clear criteria for assessing student learning related to specified learner outcomes—these criteria form the basis for evaluating and communicating student learning—involving students in developing criteria is encouraged			
b.	assess student performance on high priority and relevant outcomes— what is important for a student to know and be able to do is based on student learning needs and interests together with the priorities of the community, school and jurisdiction			
C.	establish a meaningful, real-life context (based on issues, problems, themes and/or student interests)			
d.	require the application of a range of thinking skills or processes			
e.	contain age- and grade-appropriate activities that are sufficiently challenging			
f.	provide students with a meaningful/real-life role			
g.	call for products or performances directed to a specific audience			
h.	allow for more than one right answer			
i.	elicit responses that reveal levels of performance rather than simply correct or incorrect answers			
j.	provide for students of varying ability levels to successfully complete tasks			
k.	provide for purposeful integration of subject areas			
I.	provide clear directions for students			
m.	engage students so their interest and enthusiasm will be sustained			
n.	merit the time and energy required to complete it			
0.	provide an evaluation rubric matched with the criteria			
p.	provide students with the criteria and opportunities to reflect on, self-evaluate and improve their performance?			
			1	1

<sup>4.</sup> Adapted from the Maryland Assessment Consortium, "Performance Task Rubric" (Linthicum, MD: Maryland Assessment Consortium, 1994).