

## References

Covey, S.R. (2004) *The 7 Habits of Highly Effective People*. New York: Free Press.

Program Department: Dufferin-Peel Catholic School Board (2002). *Guidelines for Assessment, Evaluation and Reporting: Elementary and Secondary*. Ontario, Canada, Dufferin-Peel Catholic School Board.

Wiggins, G & McTighe, J. (2005) *Understanding by Design*. Alexandria, VA: Association for Supervision & Curriculum Development.

## SECTION II

### COLLECTING EVIDENCE *For, As and Of* LEARNING

This section consists of three main parts. The first part shows how we can collect evidence *for, as* and *of* learning. The second part provides a brief overview of various assessment types and methods. The third part describes how students can be involved in the entire learning process.

#### 2.1 Collecting Assessment Evidence *For, As and Of* Learning

##### Main Points

- There are three distinct but intertwined purposes for classroom assessment: assessment *for* learning, assessment *as* learning, and assessment *of* learning.
- Assessment *for* learning helps teachers modify learning activities.
- Assessment *as* learning helps students identify where they need to improve.
- Assessment *of* learning allows teachers to rate students' understanding, skills and knowledge against set criteria.

##### Assessment *for* Learning

Assessment *for* Learning is assessment experiences that result in an ongoing exchange of information between students and teachers about student progress toward clearly specified learner outcomes (also called diagnostic and formative assessment and refers to information not used for grading purposes). *Taken from Alberta Assessment Consortium (AAC) Glossary.*

Assessment *for* learning is designed to give teachers information to modify and differentiate teaching and learning activities. In other words it provides teachers with the opportunity to reflect on their instruction, given information about the extent of learning that has taken place. Assessment *for* learning acknowledges that individual students learn in idiosyncratic ways, yet it recognizes that there are predictable patterns and pathways that students follow. It requires that teachers carefully design assessments and that they use the resulting information to determine not only what students know but also to gain insights into how, when, and whether students use what they know. Teachers can then modify and target instruction and resources.

##### 2.1b Assessment *as* Learning

“We know that students will rarely perform at high levels on challenging learning tasks at their first attempt. Deep understanding or high levels of proficiency are achieved only as a result of trial, practice, adjustments based on feedback and more practice.” (McTighe, J. 1996)

Assessment *as* learning is a process of developing and supporting metacognition for students. It is formative in nature. Assessment *as* learning focuses on the role of the student as the critical connector between assessment and learning. Students, as active, engaged, and critical assessors, make sense of information, relate it to prior knowledge, and use it for new learning. This is the regulatory process in metacognition. It occurs when students monitor their own learning and use the feedback from this monitoring to make adjustments, adaptations, and even major changes in what they understand. It requires teachers to help students develop, practice, and become comfortable with reflection and with the critical analysis of their own learning.

### **2.1c Assessment of Learning**

Assessment *of* learning is summative in nature and is used to determine the extent to which students have understood new concepts, how well skills have been improved and to what extent new knowledge has been gained. This data will then be used to evaluate the extent of students' learning against set criteria. Teachers concentrate on ensuring that they have used assessment to provide accurate and sound statements of proficiency for students, so that the recipients of the information can use the information to make reasonable and defensible decisions.

## **2.2 Types and Methods of Assessment**

### **Main Points**

- Assessment needs to be fair, valid and reliable.
- Assessment can be for diagnostic purposes. It can also be formative and summative.
- Teachers need to choose appropriate strategies and use a range of assessment techniques that allow students to demonstrate their learning.

### **2.2a Fair, Valid and Reliable Evidence in Assessment**

#### **Fair Assessment**

Teachers obtain evidence of learning by requiring students to demonstrate their understanding, skills and knowledge. Different students will be able to best demonstrate their learning in different ways. For instance, some students will best demonstrate their learning orally, some by writing, others physically and still others artistically. To be fair to all students a variety of ways of gathering evidence need to be employed by teachers. When group work is to be assessed it is unfair to give all students in the group the same grade. Instead, the tasks of a group of students need to be divided up with each student performing a separate task and providing clear evidence of the work that s/he has done as part of the group.

## Valid Assessment

For evidence to be valid:

- i) Students (and parents) need prior information about the understandings, skills and knowledge that are to be evaluated.
- ii) The teacher needs to have provided appropriate learning experiences for students so that they can acquire the designated understandings, skills and knowledge.
- iii) The evidence collected by the teacher needs to focus solely on the understandings, skills and knowledge declared in (i) above.

## Reliable Assessment

Assessment is reliable if similar results are obtained by different teachers over time with the same groups of students.

## 2.2b Choosing Appropriate Assessment Methods

The table below presents a range of assessment methods available to teachers.

### Examples of Assessment Methods

Method	Description
<b>Gathering Information</b>	
Questioning	Asking focused questions in class
Observation	Systematic observations of students as they process ideas
Homework	Assignments designed to elicit understanding
Learning conversations or interviews	Investigative discussions with students about their understanding and confusions
Demonstrations, presentations, performances or exhibitions	Opportunities for students to show their learning in oral and performance media
Quizzes, tests or examinations	Opportunities for students to show their learning through written response
Rich assessment tasks	Complex tasks that encourage students to show connections that they are making among concepts that they are learning
Computer-based assessments	Systematic and adaptive software applications keyed to curriculum outcomes
Simulations or docudramas	Simulated or role-playing tasks that encourage student to show connections that they are making among concepts they are learning
Learning logs	Student-maintained descriptions of the process they go through in their learning
Projects and investigations	Opportunities for students to show connections in their learning through investigation and production of reports or artefacts
<b>Interpreting Information</b>	
Checklists	Descriptions of criteria to consider in understanding students' learning
Rubrics	Descriptions of criteria with gradations of performance described and defined
Reflective journals	Student maintained reflections and conjecture about how their

	learning is going and what they need to do next
Self assessment	A process in which students reflect on their own performance and use defined criteria for determining the status of their learning
Peer assessment	A process in which students reflect on the performance of their peers and use defined criteria for determining the status of the peer's learning
Exemplars	Samples of student work that demonstrate a particular level of achievement.
<b>Record Keeping</b>	
Student profiles	A summary of information about the quality of student's work in relation to defined outcomes
Video or audio tapes, photographs	Visual or auditory images that provide artefacts of student learning
Portfolios	A repository for systematic documentation of student accomplishment and reflection about their learning through accumulation of artefacts
<b>Communicating</b>	
Report cards	Periodic symbolic representations of student learning for parents
Demonstrations or exhibitions	Formal presentations by students to show their learning to parents, judging panels, or others
Developmental continua	Descriptions of student learning over time
Portfolios	Systematic documentation of student accomplishment and reflection about their learning through accumulation of artefacts
Parent-student-teacher conferences	Opportunities for teachers, parents and students to examine and discuss the student's learning and plan next steps
Records of achievement	Detailed records of students' accomplishment in relation to the valued outcomes from the curriculum
Learning and assessment newsletters	Routine summaries for parents of curriculum outcomes, student activities and examples of their learning
Transcripts	Official certification of student performance in school subjects through secondary school

(ECE, GNWT, 2004)

### List of Tools to Show Learning Bloom's Taxonomy

AREAS	DEFINITION	KEY VERBS	CLASSROOM PRODUCTS
<b>Knowledge</b>	Knowing and remembering facts	Match, recognize, list, describe, name, define, show, record, select, identify	Report, map, worksheet, chart
<b>Comprehension</b>	Understanding	Explain, locate, inquire, demonstrate, discover	Diagram, model, game, picture, teach a lesson, dioramas, time line
<b>Application</b>	Doing, making use of what is known	Model, apply, code, collect, organize, construct, report, experience, sketch, paint, draw, group,	Survey, diary, mobile, scrapbook, photographs, stitchery, cartoon, model, illustration,

		put in order	sculpture, learning centre, construction
<b>Analysis</b>	Explaining what is known	Categorize, take apart, analyze, separate, dissect, compare, contrast	Graph, survey, report, time line, family tree, commercial, fact file, questionnaire
<b>Synthesis</b>	Putting together the known into something new	Add to, create, imagine, combine, suppose, predict, role-play, change, hypothesize, what if?, design, invent, infer, improve, adapt, compose	Story, poem, play, song, pantomime, news article, invention, radio show, dance, mural, comic strip
<b>Evaluation</b>	Judging the outcome	Justify, debate, solve, recommend, judge, criticize, prove, dispute	Editorial, survey, panel, self-evaluation, letter, conclusion, recommendation, court trial

It can be seen that the list includes ways that students can demonstrate their learning in a wide variety of ways:

- Orally (e.g., through questioning, through learning conversations and presentations);
- In writing ( e.g., through homework and learning logs);
- Physically ( e.g., demonstrations and projects);
- Artistically (e.g., performances and docudramas).

It is important to be clear what we are assessing because that narrows down the choices of instruments available to us. Here are some common categories of learning that we might be interested in assessing:

**i) Knowledge**

How much knowledge have students gained about certain facts vital in the understanding of a body of knowledge?

**ii) Understanding**

How clearly do students understand the major concepts, the over-riding themes or ‘big ideas’ associated with a topic?

**iii) Thinking and Inquiry**

To what extent can students exhibit critical thinking about a topic by demonstrating the ability to, for instance, question and critique contemporary thinking.

**iv) Communication**

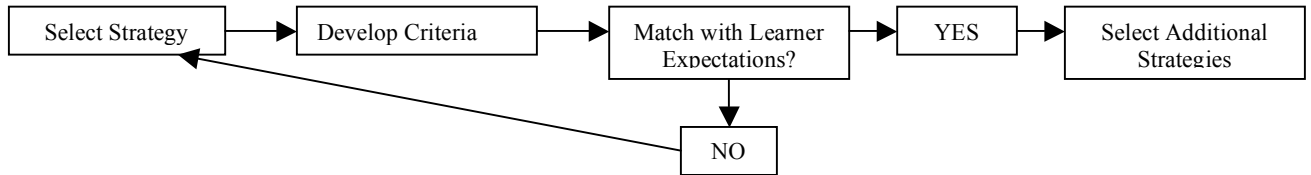
How well can students communicate ideas orally, in writing, physically and artistically?

**v) Applying & Connecting**

How able are students to apply information or make connections between concepts?

## TYPES OF ASSESSMENT STRATEGIES

There are many sources of information about student achievement. No one source or measure is necessarily better than another. Each measure can provide useful and different information about student achievement. Interpretation of the findings is valid only when linked to the circumstances under which student performance was assessed. The most accurate profile of student achievement is based on the findings gathered from assessing student performance in a variety of contexts. The key is the **MATCH** between the specific learner expectations and the selected assessments.



CATEGORY	STRATEGY	INFORMATION IT PROVIDES
<b>TESTS</b>	<ul style="list-style-type: none"> <li>• Multiple Choice</li> <li>• True/False</li> <li>• Short Answer</li> <li>• Paper &amp; Pencil</li> <li>• Matching</li> <li>• Extended Response</li> </ul>	Pre and post test of knowledge, content mastery, ability to make references, recall, recognition, memorization, content, problem solving process, summative information
<b>LEARNING LOGS</b>	<ul style="list-style-type: none"> <li>• Reflective Journals</li> <li>• Personal Response Journals</li> <li>• Dialogue Journals</li> </ul>	Understanding, written ability, conventions, organization, pre and post comparisons, feedback to teachers, personal connections, social skills, connection to concepts in literature, understanding of story elements, internalization of literature, personal experience, goal setting, understanding process, affective mode, background knowledge
<b>OBSERVATIONS</b>	<ul style="list-style-type: none"> <li>• Anecdotal Records</li> <li>• Conferences</li> <li>• Checklists</li> </ul>	Immediate evaluation and feedback of learning, focus on specific learner expectations, social skills and behaviours, teamwork, interactions, knowledge into context, levels of understanding, relationships, attitude, oral language skills, listening skills, synthesizing, cooperation, leadership skills, tolerance, respect
<b>PERFORMANCE TASKS</b>	<ul style="list-style-type: none"> <li>• Simulations</li> <li>• Demonstrations</li> <li>• Labs</li> <li>• Video Productions</li> <li>• Presentations - Drama/Music/Dance</li> <li>• Computer Based Software</li> </ul>	Creativity, understanding, end product, public speaking and performing, group work, organization skills, application of skills to new situations, reasoning skills, analysis, real-life application, process, procedures, equipment handling
<b>PROJECTS</b>	<ul style="list-style-type: none"> <li>• Models</li> <li>• Experiments</li> <li>• Work Samples</li> <li>• Investigations</li> <li>• Surveys</li> <li>• Scrapbooks</li> </ul>	Knowledge, application, motor skills, planning, research skills, demonstration, organization, process, procedures, formulating and testing hypothesis, perseverance, gathering and processing information to create meaning, summative information, cooperation

<b>WRITTEN LANGUAGE</b>	<ul style="list-style-type: none"> <li>• Lab Reports</li> <li>• Essays</li> <li>• Research Papers</li> <li>• Script</li> <li>• Brochure</li> <li>• Word Puzzles</li> <li>• Articles</li> <li>• Stories</li> <li>• Proposals</li> </ul>	Logical organization, hypothesis, comprehension, following directions, writing skills, use of logic, interpersonal relations, expression, vocabulary, style, understanding of different writing structures/genres research skills, evaluation, summative, initiative
<b>ORAL LANGUAGE</b>	<ul style="list-style-type: none"> <li>• Retelling</li> <li>• Debate</li> <li>• Story Boards</li> <li>• Interviewing</li> <li>• Poetry Reading</li> <li>• Questions/Responses</li> <li>• Audio tapes</li> <li>• Teaching a Lesson</li> <li>• Games</li> </ul>	Comprehension, synthesis, paraphrasing, speaking and listening skills, substantiation of positions, development of counter argument, reasoning, assessment of background knowledge, perspective, organization, decision making skills, personal information, attitude, synthesizing, analyzing, memorization, interpretation, composure, confidence, enunciation, articulation
<b>VISUAL COMMUNICATION</b>	<ul style="list-style-type: none"> <li>• Story Boards</li> <li>• Illustrations</li> <li>• Design</li> <li>• Advertisement</li> <li>• Photographs</li> <li>• Videotapes</li> <li>• Diorama</li> <li>• Collage</li> <li>• Maps</li> </ul>	Assessment of background knowledge, comprehension, organization, creativity, growth and maturity level, depth of conceptualization, good for non-readers or early readers, application, synthesis, process, application of knowledge and skills, equipment use, decision making

<b>DEVELOPING CRITERIA FOR PERFORMANCE</b>	<b>WHO ASSESSES?</b>	<b>COLLECTING, ANALYZING AND COMMUNICATING LEARNING</b>
<ul style="list-style-type: none"> <li>• <u>What</u> should each demonstration include?</li> <li>• <u>How Well</u> should it be demonstrated? i.e. what does an excellent or acceptable demonstration look like?</li> <li>• Use Exemplary Models</li> </ul>	<ul style="list-style-type: none"> <li>Student</li> <li>Peer</li> <li>Teacher</li> <li>District, Territory</li> </ul>	<p>A collection of student work samples shows the development of student learning over time. A collection may include videotaped presentations, work samples, test scores, photographs, reflections and other evidence related to significant learner expectations. These collections are analyzed by the teacher or teaching team, in partnership with students and parents.</p> <p>Teachers use a variety of ways to communicate learning progress, including student and teacher led conferences, progress reports, newsletters, letters, telephone calls.</p>

*“A Framework for Student Assessment  
Alberta Assessment Consortium”  
September, 1997*

## 2.3 Involving Students in the Evaluation Process

Students who are involved in the assessment process develop a sense of ownership for their learning and feel empowered to learn more. They are able to recognize the evidence of their learning, to see growth over time, and to set goals for future success. Involving students in the assessment process assists them in articulating their progress and future plans to others, including parents. Student-involved assessment, record keeping and communication are processes that can be started with students in the primary grades. It may take a while for teachers and students to feel comfortable with this type of assessment if they are not familiar with the process. Students must be taught the necessary skills with plenty of modelling, demonstration and practice. Teachers might consider a planned approach to build the skill of student-involved assessment.

There are at least four ways teachers can help students become involved in the assessment process:

### 2.3a Helping Students Recognise what is Expected of Them and Why it is Important

Students need to know what they must do in order to succeed. It also helps them if they know why they are doing a particular set of activities and what they should be learning. Providing students with *exemplars* of excellent work helps students visualise what is required. In other words the teacher and students all need to have the same ends in mind. A discussion about what makes the exemplar exemplary is important.

### 2.3b Sharing with Students the Criteria by Which their Work will be Assessed

Students must understand expectations and criteria for learning in order to meaningfully assess their achievements. By making expectations for learning clear, all partners in the learning process (i.e. students, parents and teachers) will understand what students are expected to learn and how achievement will be measured. *Rubrics* present the criteria for assessment in the clearest and most succinct fashion. Typically rubrics use a scale consisting of four or five categories describing a range of quality of performance or product. The following rubrics used by Yellowknife Catholic Schools applies to writing, oral presentation and participation in Language Arts.

Teachers who provide such a document for students and parents may need to explain some of the words and phrases used.

Having students involved in the development of the rubric is the most effective way of involving students and ensuring an understanding of expectations. Teachers can further help students understand the criteria being used by asking students to use the rubric to assess the quality of an anonymous work.

Rubric for Class Participation – Provided by Lynn MacFadyen, YCS staff member

Name: \_\_\_\_\_

Teacher: \_\_\_\_\_

	Criteria				Points
	4	3	2	1	
<b>Attendance / Promptness</b>	Student is <b>always</b> prompt and regularly attends classes.	Student is late to class <b>once every two weeks</b> and regularly attends classes.	Student is late to class <b>more than once every two weeks</b> and regularly attends classes.	Student is late to class <b>more than once a week</b> and/or has poor attendance of classes.	–
<b>Level Of Engagement in Class</b>	Student proactively contributes to class by offering ideas and asking questions <b>more than once</b> per class.	Student proactively contributes to class by offering ideas and asking questions <b>once</b> per class.	Student <b>rarely</b> contributes to class by offering ideas and asking questions.	Student <b>never</b> contributes to class by offering ideas and asking questions.	
<b>Listening Skills</b>	Student listens when others talk, both in groups and in class. Student <b>incorporates or builds off</b> of the ideas of others.	Student <b>listens</b> when others talk, both in groups and in class.	Student <b>does not</b> listen when others talk, both in groups and in class.	Student <b>does not</b> listen when others talk, both in groups and in class. Student often <b>interrupts</b> when others speak.	
<b>Behavior</b>	Student <b>almost never</b> displays disruptive behavior during class.	Student <b>rarely</b> displays disruptive behavior during class.	Student <b>occasionally</b> displays disruptive behavior during class.	Student <b>almost always</b> displays disruptive behavior during class.	
<b>Preparation</b>	Student is <b>almost always</b> prepared for class with assignments and required class materials.	Student is <b>usually</b> prepared for class with assignments and required class materials.	Student is <b>rarely</b> prepared for class with assignments and required class materials.	Student is <b>almost never</b> prepared for class with assignments and required class materials.	
				<b>Total</b>	

**Note: Only to be used in assessing work habits.**