Communicating Student Learning
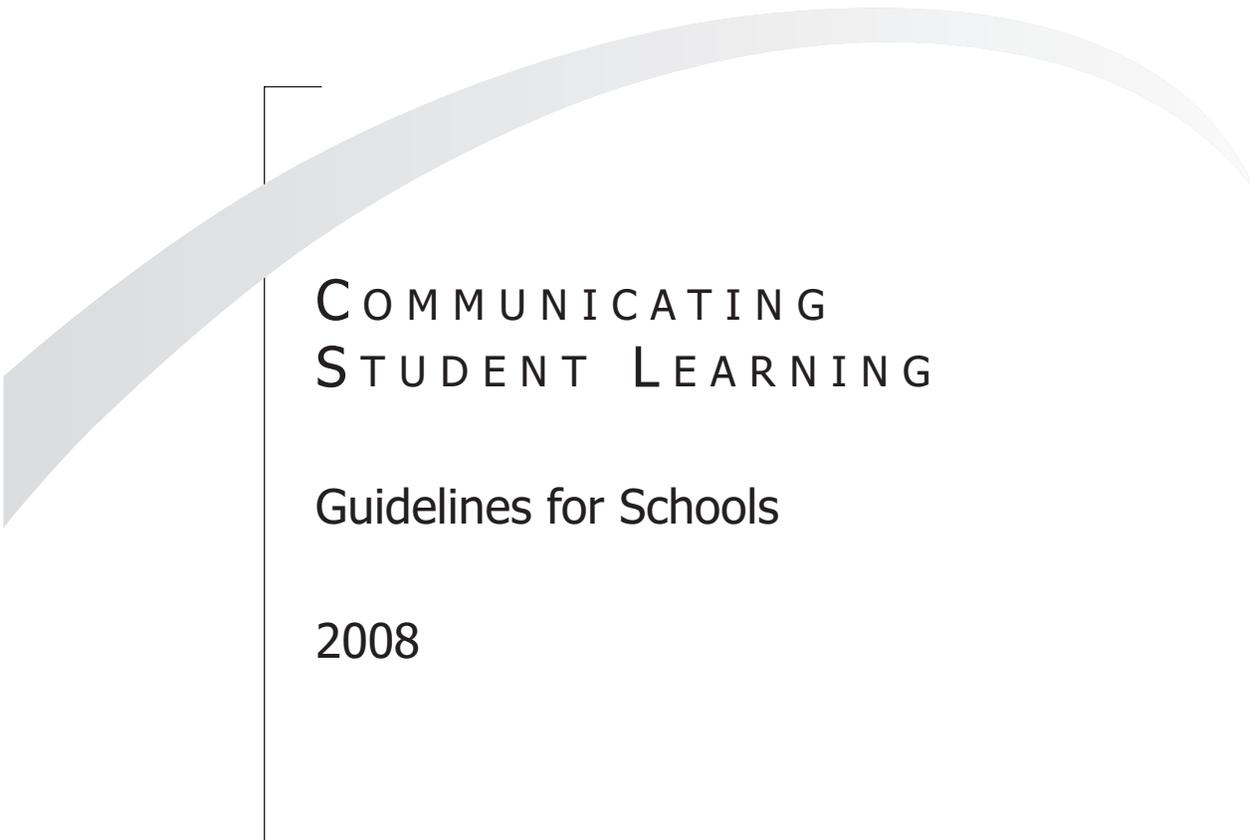
Guidelines for Schools

2008

Manitoba

COMMUNICATING STUDENT LEARNING

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This resource is also available on the Manitoba Education, Citizenship and Youth website at <www.edu.gov.mb.ca/k12/assess/docs/csl>.

Websites are subject to change without notice.

Ce document est disponible en français.

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External Focus Group (cont'd)	Lori Tighe	Director of Assessment and Instructional Support Services Winnipeg S.D.
	Blaine Veitch	Superintendent Flin Flon S.D.
	Laura Zimmerman	Principal Pembina Trails S.D.

Manitoba Education, Citizenship and Youth Staff

School Programs Division	Lee-Ila Bothe	Coordinator Document Production Services Educational Resources Branch
	Wenda Dickens	Coordinator Assessment Unit Instruction, Curriculum and Assessment Branch
	Lynn Harrison	Desktop Publisher Document Production Services Educational Resources Branch
	Grant Moore	Publications Editor Document Production Services Educational Resources Branch
	Linda Thorlakson	Consultant Assessment Unit Instruction, Curriculum and Assessment Branch
Bureau de l'éducation française	Rachel Soufi	Consultant Assessment Unit Educational Support Services Branch Bureau de l'éducation française Division

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1. I NTRODUCTION

Educators are in the midst of reflecting on current practices regarding assessment and communicating student learning. A greater emphasis is being placed on using assessment to focus on learning rather than on using assessment to accumulate marks or compete with others. DuFour and Eaker (1998) suggest that a collaborative, inquiry-based, results-driven approach is necessary in order to foster understanding about what changes need to occur, to employ strategies for implementing these changes, and to monitor the impact of the changes.

Information, collaboration with educational partners, and time are key ingredients in planning for sustainable changes.

1.1 Purpose of the Document

Communicating Student Learning provides Kindergarten to Grade 12 educators with information on principles and practices for effective communication with students and parents* about student learning.

Useful communication about learning occurs long before report card time and communicates more than the grades students have achieved. Effective communication is ongoing and provides students and parents with feedback on the learning habits and skills that students are developing, as well as periodic information on achievement to date. Ongoing communication that focuses on strengths and is used to plan next steps supports further learning, and can sustain or improve the student's motivation to learn.

This document

- provides key definitions related to assessment and communication about learning
- describes the links between assessment and communication
- highlights the importance of planning assessment and communication at the beginning of the learning cycle
- offers a rationale and strategies for communicating information, relative to the assessment purpose, to students, and to parents throughout the learning process
- provides information to help educators examine and improve grading and reporting practices

This document reflects current research concerning best practices in assessment, grading, and reporting. Classroom scenarios are included, as are descriptions of assessment and communication strategies that enhance learning.

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* In this document, the term "parents" refers to both parents and guardians and is used with the recognition that, in some cases, only one parent may be involved in a child's education.

1.2 Fundamental Definitions

In order for communication to be clear, shared understanding of terms and language is required. This section establishes definitions for terms as they are used in this document.

Purposes of Assessment

In *Rethinking Classroom Assessment with Purpose in Mind* (Manitoba Education, Citizenship and Youth 13–14), Lorna Earl and Stephen Katz identified three distinct, yet related, purposes of assessment:

- **Assessment *for* learning** is designed to give teachers information to modify and differentiate teaching and learning activities. . . . It requires careful design on the part of teachers so that they use the resulting information to determine not only what students know, but also to gain insights into how, when, and whether students apply what they know. Teachers can also use this information to streamline and target instruction and resources, and to provide feedback to students to help them advance their learning.

- **Assessment *as* learning** is a process of developing and supporting metacognition for students. It focuses on the role of the student as the critical connector between assessment and learning. When students are active, engaged, and critical assessors, they 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.

- **Assessment *of* learning** is summative in nature and is used to confirm what students know and can do, and, occasionally, to show how they are placed in relation to others. Teachers concentrate on ensuring that they have used assessment evidence to provide accurate and sound statements of students' proficiency, so that recipients of the information can use it to make reasonable and defensible decisions.

Sometimes the terms **formative** and **summative** are used to differentiate the purposes of assessment. Formative assessment is assessment that informs instruction and learning and would include what Earl and Katz describe as assessment *for* and *as* learning. Summative assessment is the assessment that occurs after learning has occurred to determine the level of achievement, and is very similar to assessment *of* learning.

Reference Points for Communicating about Learning

Assessing student learning depends upon a comparison to some point of reference. The reference point, or performance standard, will be one of the following:

- **Norm-referenced standard:** A student's performance is compared to a group of students of a similar age. The sample used may be small (e.g., the rest of the class) or large (e.g., all the other students who took a commercial standardized test). Using this reference point provides an indication of how a student's performance compares with others (e.g., whether the student performed better or worse than the average performance in the group). Norm-referenced thinking has tended to encourage a belief that in each class there are a few "A" students, some "B" students, many "C" students, and so on.

- **Criterion-referenced standard:** A student's performance is measured against a predetermined set of performance indicators. This model is commonly used in skill-based assessments occurring outside of school. The in-car driver's examination and the in-water scuba test are examples of criterion-referenced assessments where the student must demonstrate a predetermined level of proficiency on a specific set of skills in order to "pass." This approach is consistent with outcomes-based curricula.

  Criterion-referenced assessment and grading require teachers, students, and parents to think differently about reporting symbols and what they communicate about achievement. Criterion-referenced assessment focuses on end-of-year outcomes that describe what students are expected to know and be able to do at the end of a given grade level. With criterion-referencing, it is possible that many students can achieve at a mastery level by the end of the year.

- **Self-referenced standard:** The student's initial assessment data are used as the reference point to measure how much improvement has occurred by the second assessment. Using a self-referenced standard provides information about the individual student's growth, but does not indicate how well the student is performing relative to peers or to the expectations for the grade.

Each reference point provides a distinct kind of interpretation of learning. It is tempting but erroneous to combine them into a single judgement.

> If all three of these reference points are used together, and the distinctions among them are blurred, the resulting score or statement of learning does not provide clear information about the nature or quality of the specific learning (Manitoba Education, Citizenship and Youth 10).

It may be appropriate to provide separate information based on different reference points, as long as the distinction between them is clear. For instance, teachers may decide to supplement criterion-referenced information about student achievement with self-referenced information, especially if the student is not performing close to grade-level curricular expectations. The key point is that when communicating with students and parents about the learning that has taken place, it is essential to indicate the reference point that was used.

Growth, Progress, or Achievement?

It is also important to be clear about the *kind of information* being conveyed, especially in formal reports. Are the report grades and comments intended to communicate only the current level of *achievement*, or are they meant to show the *growth* or *progress* of the student? In this document, growth, progress, and achievement are defined as follows:

- **Growth** is the increase in learning that has occurred from the beginning of an instructional period to the current reporting event. Growth is measured in terms of the gains made by a student from a baseline assessment to the most recent assessment. Growth is measured **from a starting point**. It emphasizes the improvement that has occurred rather than how far short of a standard the student has fallen.

    Think, for example, how we describe a child's height: we might say that Chris is now 135 centimetres and that he has grown five centimetres in the past year. When describing the growth in Chris' height, we are not concerned with a "standard" height that we expect him to reach.

    In the classroom context, using developmental continua can facilitate a description of a student's growth. For example, in reading, the teacher might have observed in September that Miriam was *able to make connections between letters and sounds.* In November, the teacher noted that Miriam was now *able to use letter sounds to read unfamiliar words in texts*. When communicating these observations to the parents, the teacher would be focusing on the growth that has occurred.

- **Progress** is measured backwards **from a desired end point**, such as end-of-year outcomes. Just as we describe our progress on a journey in terms of how far we are from our destination (e.g., "We're 100 kilometres away from Vancouver now"), we measure progress in relation to an agreed-upon or known standard. When describing Chris' height, we would say he is 135 centimetres and needs to grow another five centimetres before he can ride in the car without a booster seat.

    In the classroom, if one of the known end-of-year outcomes in a writing class is that *the student can choose language (word choices and sentence patterns) that has a definite impact on the reader*, the teacher might report to the parents in March that their child is now *able to choose language that has some impact on the reader*. This kind of information helps the student and parents understand what needs to be done in order to reach the standard.

- **Achievement** is a measure of a student's **current level of performance**. It is often represented using a scale of numbers or letters to indicate the degree to which expectations have been achieved. It does not necessarily indicate how much growth has occurred, or how much progress is still required to reach the learning outcome. For example, if we only say that Chris is 135 centimetres, we are reporting on his current status but not on how much growth there has been in the last year, nor on how much progress we hope to see in the next year.

  Similarly, a report card might indicate only a student's achievement (e.g., 68% or Level 2 in Reading). Adding information such as the student's **starting point** or the **desired end point** helps the teacher, parent, and student focus on what has been done and what still needs to be done. When more than one kind of information is being reported, it is important that the distinctions between indicators of growth, progress, and achievement are clear.

Outcomes

In Manitoba, a **general learning outcome** (GLO) is defined as a broad statement identifying knowledge, skills, and strategies that students are expected to demonstrate. These general outcomes include a number of more precise **specific learning outcomes** (SLOs). For planning purposes, these specific learning outcomes are often taught as groups or clusters, rather than as discrete items. There are a variety of ways in which these specific outcomes may be grouped for planning. Teachers might focus on the entire GLO, a group of related SLOs from several GLOs, a strand, or perhaps a grouping that relates to their report card categories.

Some students work toward **student-specific outcomes (SSOs)**. Student-specific outcomes are unique to the student's needs and abilities, and are not derived directly from the curriculum.

In this document, the term **learning outcome** is used to refer to the outcome or grouping of outcomes the teacher uses to plan and assess student learning.

Marks, Scores, and Grades

In this document, the terms **marks** and **scores** are used to describe the symbols used on individual assessments to summarize the quality of the evidence provided (e.g., 7/10 or 3 on a 4-point scale). The term **grades** is used when referring to the summary symbols used on report cards, usually expressed as letters (e.g., A, B, C, D, F or E, M, N) or numbers (e.g., 3, 2, 1 or percentages).

2. ASSESSMENT AND COMMUNICATION

2.1 Links between Assessment and Communication

Ruth Sutton (1991) has observed:

> . . . assessment is a human process, conducted by and with human beings, and subject inevitably to the frailties of human judgement. However crisp and objective we might try to make it, and however neatly quantifiable may be our results, assessment is closer to an art than a science. It is, after all, an exercise in human communication.

Assessment and communication are part of the same process, with assessment arising from and leading naturally to communication. The root of the word "assessment" is from the Latin *assidere*, which means "to sit beside." As teachers and students sit and work together, communication about the ongoing learning and thinking naturally occurs.

The nature and the timing of the communication depend on the purpose of the assessment.

The Nature of the Communication

When the purpose of assessment is primarily formative, the communication should be descriptive. In other words, students need to know what they did well and what they may need to do differently to improve their performance. Summative assessment information, informing students and their parents about how well a learning goal has been achieved, is often communicated using symbols (letters or numbers).

Grant Wiggins (1998) insists that quality feedback is essential if students are to know how to improve their performance. He makes an analogy to a sports coach who observes athletes' performance during practice and provides feedback about

- what they are doing well
- what they are struggling with
- what they need to do differently in order to be more successful

During practice, assessment takes the form of descriptive feedback and guides the athlete toward performance that increasingly resembles the standards set by professionals. The feedback during practice is not "scored."

The successful coach is the one whose athletes demonstrate their best performance in competition. In the school setting, the student's opportunity to demonstrate his or her personal best comes at or toward the end of a unit when students are required to complete summative tasks such as projects, written pieces, or performances. It is quite appropriate to "score" student achievement on these tasks and to summarize these scores using symbols or comments on a report card.

The Timing of Communication

The timing of communication about assessment can enhance its effectiveness. During the learning process, feedback about performance must be given promptly and frequently so the student has an opportunity to make use of it. In addition, students need frequent opportunities to reflect on their learning. In other words, communication related to assessment *for* learning and *as* learning must be responsive and dynamic.

When the purpose of the communication is information about achievement up to a point in time (assessment *of* learning), schools must communicate to the student and parents with enough time to allow for decisions to be made about what needs to happen during the next instructional cycle—the next term, semester, or year.

Effective communication about assessment is at least a two-way interactive process, and, ideally, three-way. For communication about assessment to improve learning, the teacher and student must be partners in the learning process. Communication involves dialogue between teacher and student, not merely the teacher telling the student what she did correctly and incorrectly. Three-way communication brings the parent into the learning equation and can lead to even greater improvement. Involving parents is especially helpful when students are experiencing difficulty. In those instances, teachers can keep parents informed about their child's strengths, areas for improvement, and ways in which they might provide support at home on an ongoing basis. The conversation does not have to wait until the report card has gone home.

2.2 Planning Assessment and Communication at the Outset

The most effective planning models start with the end in mind. In education, this requires a clear conception of the learning outcomes. Instruction, assessment, and communication are then focused on these learning outcomes.

Wiggins and McTighe offer a backward design model for unit and lesson planning that uses this principle. They suggest the following sequence for planning:

1. Identify desired results
2. Determine acceptable evidence
3. Plan learning experiences and instruction

Teachers who follow backward design principles realize how important it is to plan their assessments before they begin teaching. This process involves identifying the learning outcomes to be addressed in a given unit or learning experience and planning the culminating, summative assessment tasks through which students can provide evidence of that learning. Then, they work backwards from these assessments to design instruction and formative assessments that enable students to build and practise the skills they will need to demonstrate success.

With the unit planned in advance, it is possible for teachers to communicate to students the intended learning outcomes, as well as the products and performances students will be accountable for producing as evidence of learning. When an instructional cycle begins, teachers should also share with students the criteria by which they will be assessed. For example, for a performance assessment, a scoring guide might describe levels of achievement. Teachers may invite students to participate in the creation of these criteria.

Communicating the outcomes and the criteria for success at the outset helps students stay focused. A chart, such as the one in Figure 2.1, could be posted on the bulletin board in the classroom to remind students of the critical evidence that is required for a given unit or term. This sort of chart could also be sent home to inform parents and encourage them to help ensure their child is completing the critical assessment tasks.

Figure 2.1	CHART OF CRITICAL EVIDENCE

Grade 7: Mr. Wesley

**Summative Assessments for Social Studies
Ways of Life in Africa**

Enduring Understanding: Diverse cultures shape diverse ways of life and artforms. This diversity is increasingly affected by global communication and westernization.

Learning Outcomes	Assessment	Due Date
Select and organize geographic information about people and places in Africa	Annotated Map Project	Third week of February
Research and present an African culture	Creative Research Presentation	Second week of March
Find examples of westernization in several African countries	Visual Representation	Third week of March
Compare government of an African country with that of Canada	In-Class Chart and Paragraph	Second week of April
Explain points of view about cultural diversity based on material gathered in the inquiry process	Teacher/Student Conference	Fourth week of April

3. COMMUNICATION TO IMPROVE STUDENT LEARNING

3.1 Communicating a Full Picture of Student Learning

Learning is a complex endeavour. Students' motivation and belief in their abilities can make a huge difference in how well and how much they learn and improve. Research has shown that keeping students at the centre of the learning process increases achievement and fosters their capacity for further learning. When students develop greater awareness of what they know and how they learn, they are better able to respond to new learning challenges.

Students' motivation and future learning are greatly affected by what we communicate to them about their learning, how we do it, and when we do it. Ideally, communication about student learning

- is timely, ongoing, and embedded in the learning process
- describes what students are able to do, and provides direction for next steps
- encourages students to set and revise learning goals
- helps teachers plan
- assists parents in supporting the student at home

This section will illustrate the importance of communicating information about the learner and the learning throughout the learning process. Assessment *for* and *as* learning yields different kinds of information than assessment *of* learning. Providing a complete picture to the student and to parents is essential.

3.2 Communicating with Students to Improve their Learning

For students to be able to deepen their understanding and improve the quality of the work they produce to reflect that understanding, they rely mainly on information from their teacher. Test scores and letter grades have traditionally played a dominant role in communication about assessment, but these symbols in themselves do not provide students with the feedback and guidance they need to learn (Wiggins). When students receive specific, descriptive feedback, they know what it is they need to do differently to improve their work.

Communicating Assessment *for* and *as* Learning Information

Assessment is not something that teachers do to students; it is a process of collaborative communication in which information about learning flows between teacher and student. This two-way exchange of information is at the heart of assessment *for* and *as* learning. If assessment *for* and assessment *as* learning are to improve the quality of students' work, then students must be involved in their own assessment. As Black and Wiliam noted in their review of formative assessment research, "…self-assessment by pupils, far from being a luxury, is in fact *an essential component of formative assessment*." Stiggins (2004) concurs, ". . . we must help students use ongoing classroom assessment *to* take responsibility for their own academic success."

Assessment *for* learning and assessment *as* learning both occur constantly throughout the teaching/learning process, often as part of the same assessment opportunity. They are powerful because the assessment is frequent, dynamic, and responsive to student needs.

Assessment *for* learning helps the teacher adjust instruction and provides information to students to help them improve the quality of their work. This requires two-way communication between the teacher and the learner. For example:

- Teachers check for students' understanding by observing, questioning, or asking students for feedback. For instance, they may ask students to indicate their readiness to move on to new material by using hand signals such as "thumbs up, thumbs down."
- Teachers offer students feedback about their strengths and needs as well as guidance for improvement during student-teacher conferences, and allow time to make the recommended revisions before their work is formally assessed.

This is why the coaching metaphor is so relevant. Effective coaches have a clear sense of excellent performance, they demonstrate acute powers of observation, and then they communicate clear and succinct information about what needs to be done differently to demonstrate excellent performance. They do not judge performance in the practice phase.

Assessment *as* learning places the student at the centre of the assessment process and becomes a routine component of classroom practice that helps students view their performance objectively and make adjustments in order to learn more and improve the quality of their work. Assessment *as* learning occurs as students reflect upon their strengths and needs, set goals for improvement, and identify strategies to accomplish these goals.

Consider the following scenario to see how assessment *for* learning and assessment *as* learning both provide direction to students to increase their learning and, ultimately, improve their achievement.

When students are self-assessing their work, there should be no requirement that they assign themselves a score. Doing so distracts students from the more important task of critically examining their work to determine what they have done well or correctly and what needs to be revised or corrected.

Communicating Assessment *of* Learning Information

Assessment *of* learning is concerned with examining and summarizing the critical sample of evidence of student work that will reflect achievement of the learning outcomes in a given grade and subject. (See Section 2.2: Planning Assessment and Communication at the Outset.)

Communication about assessment *of* learning involves several steps:

1. Decide upon the evidence that will comprise the "assessment *of* learning" sample. Ideally, teachers work as a grade, course, or subject team to do this.
2. Communicate to students and parents what evidence will be required.
3. For each assessment task, convey to students—and ideally parents—what criteria will be used to judge the quality of the student's work.
4. Once the students complete the tasks, inform them about the quality of their work using points, rubric levels, or comments.
5. Provide opportunities for students and parents to discuss the way the teacher determined the score.

Communication about assessments *of* learning typically occurs at or toward the end of a significant period of learning, such as a unit or a term, but can occur throughout the learning process. These summative assessments inform and support future teaching and learning.

Strategies for Communicating with Students to Improve their Learning

For assessment to be most effective in improving students' learning, it needs to occur throughout the teaching/learning process. There are numerous research-proven strategies that facilitate the communication of assessment information with students while they learn, as well as effective strategies for communicating and reflecting on summative information. A sampling of these follows:

Teacher/Student Conferences

Finding time for regular teacher/student conferences can be challenging, but is well worth the effort. Some teachers set aside certain periods or portions of class time to conference with five or six students per cycle in order to provide feedback and guidance about their work. Some teachers manage to provide regular feedback in less formal ways, using an "over the shoulder" approach where they circulate through the class as students work and offer feedback and direction as required. Other teachers offer opportunities during or after class to discuss performance on summative assessments, focusing on providing advice for improvement. Conferences do not need to be lengthy, but if they are clearly focused on where the student is relative to the learning outcomes, as well as what the next steps could be, they can go a long way to improving student achievement.

> **Classroom Scenario: Mr. Stone's Writing Conferences**
>
> Every Tuesday during language arts, Mr. Stone does no formal, whole-class teaching. Instead, students retrieve their writing portfolios from the filing cabinet and set to work. Some students may be working alone on a first draft; some may be working with an editing partner to receive feedback on a second draft; others may be putting the final touches to a polished piece. Mr. Stone, meanwhile, meets individually with eight students who have been scheduled for a conference that day. Each conference lasts for only two or three minutes—enough time for Mr. Stone to recognize a strength in the piece of writing, as well as time either for students to identify problems they know they need help with, or aspects of the writing that Mr. Stone has identified as needing attention. Each conference is focused and purposeful. The teacher and students focus their attention on only one or two specific attributes of the writing. Students know that this one-on-one time with their teacher is essential to their improvement. Each Tuesday, Mr. Stone meets with a different group of students so that, by the first reporting period, he's met with each student two or three times.

Self- and Peer Assessment

Students require frequent and specific descriptive feedback to improve their work. It is not realistic to think that teachers can provide constant feedback for all students. Self- and peer assessment increase the opportunities for students to receive descriptive feedback on their work, and have a number of added benefits:

- Students better understand the standards for quality work when they apply these standards themselves.

- They learn to be less dependent on the teacher for feedback and become better able to independently monitor the quality of their own work.

- They develop metacognitive skills and become more able to adjust what they are doing to improve the quality of their work.

- They broaden their own learning when they see how their peers approach a given task.

- They practise and hone their communication and social skills when they are required to provide useful feedback to others.

A number of elements need to be in place for self- and peer assessment to be effective:

- Students require a clear picture of the learning outcomes and the criteria for quality work. Students can only assess their work or the work of their peers if the assessment tools, such as rubrics or checklists, are written clearly and are easy to use.

- The assessment should focus on one aspect of quality at a time. For example, if a lesson has focused on writing effective descriptive paragraphs, then the assessment of the piece should focus only on the quality of the description, not on spelling, subject-verb agreement, et cetera.

- Students need to have self- and peer assessment modeled for them in order to develop their skills. For instance, the teacher might think aloud about a work sample to demonstrate how to critique and revise an aspect of the work. Or a peer conference could be modeled that illustrates respectful ways to offer feedback.

- Students require frequent opportunities to practise and refine their self- and peer-assessment skills. Scheduling regular opportunities ensures that this essential part of the teaching-learning cycle does not get sidetracked by other priorities.

- Students should not be required to assign marks, either to their own work or to the work of their peers. Marking is part of evaluation (judgement) of student work and it is the teacher's responsibility.

How often should students be involved in self- and peer assessment?

The answer to this question is more a matter of purpose than of frequency. Decisions about who should assess a given task—teacher, student self-assessors, peers, or a combination of these people—can only be made once the teacher is clear on the purpose of the assessment. To illustrate, there are certain points in the teaching/learning process when peer and self-assessment are most effective. For example:

- Teachers should include peer assessment as a routine practice when students are working on early drafts of written material. Peer assessment can improve the quality of work before it is viewed by the teacher as long as the students have been taught what to look for in their partner's work, have an assessment tool such as a checklist or rubric to focus their comments, and are required only to provide anecdotal comments and not scores.

- Teachers should include self-assessment as a routine practice in subjects like mathematics, where students typically complete practice questions following the teaching of a new concept or procedure. Students might be instructed to check their answers against the answer key to determine whether they've "got it" or whether they need to review the new learning and complete more practice work.

Portfolios

The portfolio is an excellent vehicle for communicating with students about their learning. It is also one of the most effective ways to make assessment a collaborative process.

A portfolio is much more than a container for storing student work. When implemented effectively, the portfolio becomes a window into learning that enables teachers and parents to "see inside" the learning process. As such, the portfolio provides a focus for student-teacher and parent-teacher conferencing.

A major purpose for using portfolios is to foster student metacognition—that is, to teach students how to monitor, reflect on, and then improve the quality of their own work, and, in the process, to become less dependent on the teacher's assessment of their work.

Figure 3.1   REFLECTION STRIP

Reflection Strip

Complete and attach this Reflection Strip to each item you choose to include in your portfolio.

Name: _____ Date: _____

This piece of work shows:
- ❏ how I have improved an earlier draft
- ❏ something important that I learned
- ❏ something I need to work on
- ❏ something I need help with
- ❏ something I am proud of
- ❏ what I do outside of school
- ❏ how well I have learned something

1. I choose to include this item because:

2. How does this item demonstrate the thing(s) I've checked above?

3. Other important things about me that this item shows:

Reflection Strip: Reproduced from *Talk About Assessment: Strategies and Tools to Improve Learning* by Damian Cooper with permission from Thomson Learning.

Effective portfolio programs integrate learning with assessment by providing a regular time for students to confer with their teacher about specific work samples. By having students attach a Reflection Strip to each piece they include in the portfolio, they think critically and analytically about their work and thereby improve their metacognitive skills. (See Figure 3.1.)

The portfolio's greatest strength is that it is an ever-changing window into each student's learning. For this reason, it provides a focus for providing feedback to students about what they are doing well and what they need to improve.

Portfolios can serve multiple assessment purposes.

- Information from assessments for learning conducted near the beginning of the year and/or unit can be included. It helps to inform the student and the teacher about the knowledge and skills the student brings to a topic or learning task. By including information from initial assessments in a student's portfolio, the teacher and the student have baseline information from which to measure growth.

- Assessment as learning can occur through conferencing between the student and teacher. During a conference, the student shares specific items in the portfolio, why they were selected for inclusion, and what they show about his or her learning. This reflection leads to formulating goals for improvement.

- Assessment data from students' portfolios may also be used in the assessment *of* learning. The portfolio may include pieces of work that have been identified as essential evidence of learning. If this is the case, then the marks assigned to these polished pieces of work could comprise a significant part of the final report card grade.

Classroom Scenario: Ms. Ing's Integrated Portfolio Program

Ms. Ing has been using portfolios in her Grade 5 class for several years. She finds that the portfolio is well suited to the integrated curriculum approach that she favours. Ms. Ing uses the portfolio as the medium through which she is able to accomplish a wide range of tasks, including the following:

- Her students use the portfolio to organize their work at all stages, from vague ideas to works in progress to polished, ready-to-publish pieces.

- Ms. Ing uses the portfolio as the focus for one-on-one student conferencing that occurs every week in her classroom.

- As a reporting period approaches, Ms. Ing has her students ensure that their "evidence of essential learning" section contains all the required pieces of work she will use to help determine their grades.

- At Ms. Ing's school, student-led parent-teacher conferences occur after report cards have been sent home. Each student uses the portfolio as the focus for this conference, using samples they have chosen to demonstrate to their parents both what they have achieved as well as what has caused them to struggle.

Portfolios are an integral part of Ms. Ing's classroom routine. (For information on a four step process for using portfolios in the classroom, see Cooper, *Talk About Assessment*, pages 174–5.)

Using Tests to Improve Learning

Too often, both students and teachers view tests as "the end of learning" rather than as indicators of the need for further learning. Compare these two approaches to returning "marked" tests to students.

Classroom Scenario: Returning Tests (Version 1)

Ms. Anderson's students wrote a science test last week about the characteristics of matter, and on Monday she returned them to her students. As she distributed the tests, the noise level rose as students left their desks to compare their test scores.

Anna: Belinda, what did you get? I got 78%.

Belinda: I got 75%. Let's see what Katy got…. Katy, come over here. What did you get? Bet I beat you!

Derek: Bet I got the lowest mark! Can anyone beat 33%?

Ms. Anderson: All right! Settle down. Put your tests away. Today, we're going to begin a unit on ecosystems.

Classroom Scenario: Returning Tests (Version 2)

In her mathematics unit on data management and probability, Ms. Singh administered a practice test about a week prior to the final end-of-unit test. As she returned the practice tests to her students, she provided a brief reminder of her strategy for when practice tests are returned.

Ms. Singh: You all know what to do. Look carefully at your test papers and locate any highlighted areas. As you know, highlighting indicates that you've made an error. You may work alone, with a partner, or you may form a group of four students to help you correct your errors. Once you've attempted correcting all your errors, we'll discuss what went well and what needs to improve before the end-of-unit test.

How do the approaches in the two classroom scenarios differ? In Ms. Anderson's class, students' attention is focused entirely on marks and their conversations are limited to meaningless comparisons of who did better than whom. In one extreme case, Derek, who has great difficulty with science, seeks the attention of his peers by determining whether he has achieved the lowest mark in the class. Rather than engaging students in an examination of what the data from the tests reveal about student understanding and the resulting need to re-teach some of the material, the teacher immediately moves to the next unit.

In the second case study, Ms. Singh uses the practice test as an opportunity for herself and the class to assess student understanding of data management and probability at this point in the unit, as well as to focus students' attention on those concepts and procedures where they have made errors, and to identify aspects of this mathematics strand that most of the class finds to be particularly challenging. Ms. Singh's test-return strategy demands that students work together to examine their errors and misconceptions. Depending on the composition of the class, she may structure student pairings and groups heterogeneously to ensure that struggling students benefit from those who are having more success. As students sit down with her individually to see their mark, Ms. Singh finds that almost all of the class struggled with two of the problems. She makes a note that these problems will need to be carefully examined by the whole class, and she will likely need to re-teach the related concepts and procedures.

The difference between the content of Ms. Anderson's and Ms. Singh's communication is critical. Ms. Anderson provides her students with scores, and although she may also have written comments on their test papers, few students are likely to pay attention to them when the name of the game is competition. By contrast, students in Ms. Singh's class are directed, through her highlighting, to focus on the precise nature of their errors since there are no marks on their test papers. Furthermore, her strategy requires that students communicate among themselves to examine their errors and misconceptions, with the understanding that she will provide direction as it becomes necessary. In short, the focus is on learning from the assessment data provided by the test, especially since she has identified this as a practice test that will need to be successfully completed if students are to be adequately prepared for the assessment *of* learning that will occur at the end of the unit.

Feedback on Summative Assessments

Students need information about their achievement on an ongoing basis. One of the most valuable but underused and undervalued sources is feedback on summative assessments, especially if students get information about their performance on learning outcomes and not just an overall score. Rubrics often break out the score into learning outcomes, but scores on tests can also be linked to learning outcomes either in addition to or in place of an overall mark. For example, on a Grade 5 math test, students would not simply receive an overall score. They would receive a breakdown showing scores on estimation, mental math, multiplication, and division. This enables students (and teachers) to develop a sense of relative strength and areas for improvement, which makes it possible for students (and teachers) to make appropriate adjustments in future learning opportunities.

Grading Profiles

Students also need to have information about the trends and patterns in their performance over time, so teachers should provide (and/or encourage students to keep) records of their scores. As indicated above, this information should be provided by learning outcome and not by overall score for each summative assessment. Teachers should postpone putting a summary grade on these records until they have sufficient information to make good judgements and until student patterns of performance have been clearly established. The valuable information is provided by the profile, not by the summary symbol.

3.3   Communicating with Parents about Student Learning

When parents are well informed about learning outcomes and how their child is progressing in relation to them, they can be much more effective in supporting their child's learning.

Schools communicate information about student learning in many ways. In their book *Developing Grading and Reporting Systems for Student Learning*, Thomas Guskey and Jane Bailey provide the following list of 16 communication tools:

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**Tools That Might Be Included in a
Multifaceted Reporting System**

- Report Cards
- Notes Attached to Report Cards
- Standardized Assessment Reports
- Phone Calls to Parents
- Weekly/Monthly Progress
- School Open-Houses
- Newsletters to Parents
- Personal Letters to Parents

- Evaluated Projects or Assignments
- Portfolios or Exhibits of Students' Work
- Homework Assignments
- Homework Hotlines
- School Web Pages
- Parent-Teacher Conferences
- Student-Teacher Conferences
- Student-Led Conferences

</div>

This list is not exhaustive, but by using a range of such methods teachers can communicate information about how students' academic and learning skills are developing, as well as information about their achievement at certain points in time. Guskey and Bailey identify this as a list of possible tools and do not suggest that a school/division would necessarily have all of these tools in place. Guskey and Bailey observe that "the reporting system most highly regarded by parents typically includes a mix of traditional and more modern tools," such as school web pages, email, and web portals (175).

There has been a tendency to rely on report cards and grades as the main communication tool. They are useful in communicating the students' achievement status at certain times of the year to the students themselves, parents, teachers, administrators, and others who have the need and right to know about the student's achievement (e.g., next-grade teachers, other schools and educational organizations, employers, and those who award scholarships). However, they are just one piece of an overall communication system.

It is important that schools and school divisions develop communication strategies that provide much more information than what is included in a traditional report card. Different strategies are more effective for certain types of information. Carr and Harris provide a helpful chart that is included below.

Figure 3.2 COMMUNICATION STRATEGIES AND THE TYPES OF INFORMATION THEY COMMUNICATE

Reporting on Student Learning
How does your school report learning? The following opportunities for reporting are available in nearly every school community. The following topics are easily addressed by using the strategies listed across the top.

	Parent Information Night	Open House	Newsletters	Rubrics	Phone Calls	Conferences	Report Cards
Information about topics, units, and materials	X	X	X				
Assessments	X	X	X			X	X
Types of instruction	X	X	X				
Performance in relation to standards				X	X	X	X
Behaviour					X	X	X

Reporting on Student Learning: From *Succeeding With Standards: Linking Curriculum, Assessment, and Action Planning* by Judy Carr and Doug Harris. ASCD, 2001, 103. Reproduced with permission from the Center for Curriculum Renewal <www.curriculumrenewal.com>.

When parents know the purpose of each strategy, it is easier for them to understand what kind of information is being conveyed and to build a complete picture of their child's learning.

The communication system needs to be comprehensive, coherent, and feasible. All the pieces need to fit together so that detailed information about the student as a learner is provided in appropriate ways and at appropriate times. For example, the school can communicate in a formal but limited way about six weeks into the school year, followed by a more comprehensive report card at about 12 weeks. For instance, some schools ask teachers to have one telephone contact with each student's parent in the first two months. Some send home an early "progress report" before a final term report on achievement. Some schools hold student-teacher-parent conferences in mid-October, followed by report cards in December. Whatever options are used, the school's communication system should fit its community and be sustainable. It should not overburden the "message receivers" or the "message senders."

Tools for Communicating Assessment Information to Parents

Communicating assessment *of* learning information to parents provides them with ongoing information about the achievement of their child. Traditionally, this communication has come in the form of grades and report cards; however, there are many other tools available to teachers.

The key principle is that no grade or report card should ever be a surprise to a student or parent. Using a variety of communication tools can ensure this does not happen.

Some possible tools include:

- **Course Outline and Grading Plan**

  In the first week of each year or course, teachers should provide parents with a page or two that describes the assessment and grading plan. Some schools send three copies home: one for the parents, one for the student (age-appropriate), and one for the parents to sign and return to the teacher.

- **School Web Pages**

  School web pages have great potential for providing easily accessible information to parents about curriculum or course outlines, the assessment plan, required assignments and due dates, scoring rubrics, information on how grades are determined, and so on. These pages need to be kept reasonably up-to-date.

- **Scored Summative Assessments**

  Just as scored summative assessments provide valuable information to students, they can also be instructive for parents if the feedback provides information about achievement of learning outcomes and not just overall marks.

- **Grading Profiles**

    A printout of marks earned to date can be a valuable source of information for parents. They can give an indication of some preliminary results early in the term, and give parents the chance to help their child before the grades become formalized on a report card. However, it should be clear that these marks are early results and not the complete picture. When the summaries are organized by learning outcome, they can provide an even more specific profile of the student's emerging achievement.

- **Grades**

    Grades provide an overall summary of student achievement. Traditionally, the summary has been in the form of a single grade for each subject, but as the focus of curriculum is moving to more clearly defining the learning outcomes, grades can provide a profile of student achievement. Instead of a single grade for, say, mathematics, reports can communicate grades for each general learning outcome or strand. The level of specificity of this form of grading may vary according to the subject, the teacher, and the grade level. (See examples in Section 4.)

- **Report Cards**

    Well designed report cards issued several times each school year provide clear summary information about student achievement and behaviours, and narratives about their strengths, areas for improvement, and next steps. They are a major part of each school's communication system.

    The purpose for each report card must be clear. For example, the report should clearly indicate whether it represents an interim indication of progress to date, or a final judgement about level of achievement and credit status. (See Section 4 for more detail.)

- **Web Portals**

    Some schools are experimenting with web portals to provide parents with password-protected access to student assessment information, as well as attendance records. The portals can offer either a summary grade or more in-depth detail about course assignments. Providing parents with access to assessment and grading information presumes that the assessment methods used, and the resulting marks and grades, meet the quality standards described in Section 4.

    These portals are most helpful when
    - the parents know how the grade was calculated
    - grades are organized by learning goal and not by assessment method
    - the portals communicate grades at reporting periods (Information about student achievement must be reasonably up-to-date. When the posted grade is no longer current, the student's record should change.)

- **Provincial Assessment Reports**

   When students participate in provincial assessments, schools must communicate the results to parents. Schools often provide this information on separate reports or in a separate section of the report card. Schools should communicate results in a way that helps parents understand the meaning of the report and its relationship to the students' school work.

- **Portfolios**

   Student achievement can be effectively communicated by having students select work samples that illustrate growth or achievement and compile them in a portfolio. (See "Portfolios" on page 14.) Electronic portfolio systems allow students and teachers to electronically store and manage work samples, reflections, and goal setting at school, and have the added benefit of being accessible by students and parents at home.

- **Continua**

   Developmental continua describe stages of student learning. They list the processes, strategies, and attitudes that students demonstrate at key points.

   These continua can be used to show parents how their child has grown since a previous meeting and how the child is progressing, as well as to illustrate the child's current learning stage. Some educators find them to be an effective means of communicating student achievement because they are phrased in positive terms, describing what students can do as opposed to ways they might be deficient.

   Using the descriptions on a continuum, the teacher can blend varied information, such as that obtained from observation of learning behaviours, student self-evaluations, as well as analysis of work samples, in order to make an informed judgement about student achievement.

- **Conferencing with Teacher(s)/Student/Parents**

   Communication about learning can occur effectively in parent-teacher and student-involved and student-led conferences. The more student involvement there is, the more effectively the communication can support learning. The continuum of involvement is illustrated in Figure 3.3.

Figure 3.3   S T U D E N T   I N V O L V E M E N T   C O N T I N U U M

| Student
not present | → | Student
present but
does not
participate | → | Student
participates | → | Increasing
student
involvement | → | Student-led
conference |
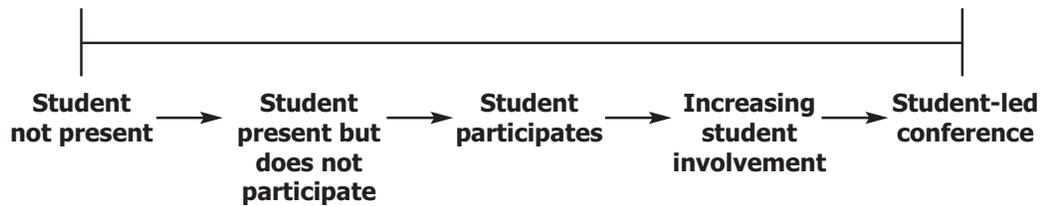
Student Involvement Continuum: Reproduced from *How to Grade for Learning: Linking Grades to Standards* by K. O'Connor. Thousand Oaks, CA: Corwin, 2002, 225. Reproduced with permission.

The amount of student involvement can vary from very limited to considerable, depending on the comfort level of the participants and the preparation of the students. Ideally, schools should move as far to the right as possible on this continuum as quickly as possible. (For information on implementing student-involved conferences, see Davies et al., *Together is Better*; Millar et al., *Student-led Conferences*; and Davies and Stiggins, *Student-involved Conferences*.)

Schools should organize conferences around samples of student work that show what learning has taken place rather than talking in general about summary scores.

4. GRADING AND REPORTING PRACTICES

The purpose of grades and report cards is to provide high-quality information about student learning to students and parents in a form they can readily understand and use. This section provides guidelines for schools as they review and develop their policies and practices for grading and reporting.

4.1   Grades

Grades provide information about student achievement in a summary format and are a key part of the communication system. To be of high quality, grades must meet four standards: they must be meaningful, consistent, accurate, and supportive of learning.

- **Meaningful**

  Grades should meaningfully represent the achievement of learning outcomes. A single summary symbol may not provide a clear enough description of achievement. Organizing assessment information by learning outcome enables teachers to produce a profile of strengths and areas for improvement.

  When grades are meaningfully organized, teachers can determine entry points for instruction when they start teaching students, and can adjust instruction during the course or year. In addition, organizing by learning outcome helps teachers assess whether they have sufficient evidence about the achievement of all outcomes to determine grades, course credit, and future placement.

- **Consistent**

  Grades also need to be consistent—that is, the same performance would result in the same grade from different teachers of the same subject or grade level. To achieve consistency, educators need to ensure they are working from a common understanding of learning outcomes and performance standards.

- **Accurate**

  Grades should be unencumbered by other factors and should be as pure a measure of achievement as possible. Effort, behaviour, attitude, and other non-achievement factors should not inflate or deflate the grade.

- **Supportive of Learning**

  Grading is most supportive of learning when students are involved in the entire learning process. When students know what the goal and criteria for success are, when they know which assessments are part of the instructional process and which assessments will be used as summative indicators of achievement for grading purposes, they are more likely to see the purpose of assessment as learning and not as accumulating marks.

  When grades are used to reward and punish student behaviour, they become distorted and their use in supporting real learning is diminished.

When grades are meaningful, consistent, accurate, and supportive of learning, they provide a worthwhile source of information that students, teachers, and parents can use to make good decisions. When grades fail to meet even one of those conditions, poor decisions may result.

Grading Guidelines

Teachers, schools, and divisions need to follow a number of guidelines to arrive at grades that are meaningful, consistent, accurate, and supportive of learning.

1. **Relate grading procedures to the learning outcomes.**

   - *Use learning outcomes (not assessment methods) as the basis to record evidence and determine grades.*

   The basis for grades has traditionally been assessment methods, and the categories in teachers' grade books have been tests, projects, and assignments. However, this tells the teacher more about what kind of assignments or tests the student is good at than what aspects of the curriculum the student best understands.

   For grades to be a meaningful representation of student achievement, the basis for grades must be derived from the learning outcomes. Teachers need to decide the level of specificity they will use to collect and report evidence of student achievement. This often involves grouping learning outcomes into clusters. Ideally, teachers and curriculum leaders collaborate to make these decisions.

   Figure 4.1 presents a simulated grade book using learning outcomes for physical education and health. In this example, the scores for each assessment have been recorded by learning outcome. When more than one learning outcome is being assessed, a score is assigned to each and there is no overall or total score. This has obvious implications for the planning of assessment, as each assessment must be planned by learning goal. The test was scored by points, and the other evidence is represented using a rubric or level score. In order to summarize achievement for each learning goal, the scores need to be in a common scale. Therefore, the test score has been converted to a level.

   Using the other guidelines, a grade can now be determined for each learning outcome. A summary grade for the subject is unnecessary if a student is consistent across all learning goals and can mask important learning gaps if a student's performance is inconsistent.

Figure 4.1   SIMULATED GRADE BOOK PAGE OR STUDENT PROFILE

Grade 8 Physical Education and Health

Student _____

Learning Outcomes	Summative Assessments								Most Consistent Level
	General Safety Rules Test Sept. 15	Rhythmic Gymnastics Routine Sept. 30	Alternative Pursuits (Observation) Oct. 15	Personal Fitness Training Oct. 24					
Movement		3	2						
Fitness Management				Inconsistent fitness participation 2					
Safety	6/10 2	2							
Personal and Social Management			Fair play and teamwork 3						
Healthy Lifestyle Practices				Detailed plan 3					

4 = exceeding   3 = meeting   2 = approaching   1 = not meeting

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2. **Use criterion-referenced performance standards as reference points to determine grades.**

   - *The meaning of grades (letters or numbers) should come from clear descriptions of performance standards.*

   - *"If they hit the goal they get the grade!" (i.e., NO bell curve!)*

   As was noted in Section 1.2, grading systems use three types of standards or reference points: norm, criterion, and self-referenced standards. To summarize student achievement in learning-outcomes–based systems, criterion-referenced standards must be used, and these standards must tell us why "good" is good and describe what competency looks or sounds like. As Kendall and Marzano stated,

   > Performance standards specify 'how good is good enough.' They relate to issues of assessment that gauge the degree to which content standards (outcomes) have been attained. . . . They are indices of quality that specify how adept or competent a student demonstration should be (Kendall and Marzano 16-17).

With clearly identified performance standards, teachers can make more consistent judgements about student performance.

We have traditionally linked symbols to percentages with one- or two-word descriptors for each level of performance (such as A = 90–100%: Excellent, B = 80–89%: Good, C = 70–79%: Satisfactory, D = 60–69%: Minimally Acceptable, and F = 0–59%: Unacceptable/Failing). The problem with grades expressed as percentages is that it implies we can consistently identify 101 levels of performance. Obviously, performance levels cannot be so precisely and reliably determined. To have meaningful performance standards that students and parents can understand and that teachers will use consistently, a limited number of levels must be clearly described. In a pure learning-outcomes–based system, there would be only two levels: meeting expectations and not meeting expectations. There are, however, good reasons to acknowledge and encourage excellence, and to distinguish between achievement that is close or not close to competent, so it is easy to expand to at least four levels. There is no right or magic number of levels, but if there were, it would be a lot closer to 2 than to 101.

Figure 4.2 provides an example of the use of performance standards with a limited number of clearly described levels.

Figure 4.2   QUICK SCALE: GRADE 2 NUMERACY

This Quick Scale is a summary of the criteria described in detail in the Rating Scale that can be viewed at <www.bced.gov.bc.ca/perf_stands/numerg2.pdf>. These criteria may apply at any time of the year, depending when specific skills or concepts are introduced.

Aspect	Not Yet Within Expectations	Meets Expectations (Minimal Level)	Fully Meets Expectations	Exceeds Expectations
Snapshot	The student may be unable to complete the task in a reasonable amount of time without one-to-one help.	Most parts of the basic task are correct; some errors or omissions. The student may have difficulty explaining the result. May need some assistance.	In familiar situations, the student completes all parts of the basic task accurately and can explain the result. May need occasional consultation.	The student completes all parts of the task accurately and efficiently and explains the result. May develop an extension or alternative method.
Concepts and Application • recognizing mathematics • grade-specific concepts, skills • estimates, predictions	• has difficulty seeing the relevance or application of mathematics to everyday problems • needs one-to-one support to select and apply appropriate processes • estimates and predictions are often guesses or wishes; may be very illogical	• if prompted, identifies ways to use mathematics in problems similar to those previously encountered • in simple, familiar situations, can select and apply most appropriate processes; some errors • in familiar situations, most estimates and predictions are within the bounds of logic	• with some support, identifies ways to apply mathematics to everyday problems • in familiar situations, selects and applies appropriate processes to solve simple problems; minor errors • in familiar, relatively simple situations, estimates and predictions are logical	• may independently find ways to apply mathematics to everyday problems • selects and applies appropriate processes to solve simple problems; efficient • makes logical estimates and predictions in both familiar and unfamiliar situations

Quick Scale: Grade 2 Numeracy: Reprinted from *B.C. Performance Standards: Numeracy—Grade 2*, with permission from the B.C. Ministry of Education. All rights reserved.

Levels of performance may be identified by symbols such as letters or numbers, or they may have percentages attached to them. Regardless of the symbol system, it is the descriptions that make the level of performance meaningful to teachers, students, and parents.

Several factors need to be considered when deciding whether to use percentages, letters, or numbers to describe levels of performance. One factor is acceptance by students, parents, and the community. Any initiative to move away from existing systems must be carefully planned with the rationale for the change well communicated.

Another factor that affects the choice of a symbol system is the way in which the grades are used. For example, grades are sometimes used to sort and select students for a limited number of scholarships or for entrance into post-secondary programs. Since a percentage scale allows ranking by achievement, they are often used by high schools. If percentages are used, great care must be taken to ensure that teachers' assessment and grading practises are consistent and accurate.

It follows that the selection of an appropriate grading symbol system should be consistent with the reference point being used to judge achievement. If student achievement is to be used to rank students, then using percentage grades might be appropriate. If student achievement is to be described using a criterion-referenced model, then letter grades or achievement levels are appropriate.

3. **Limit the valued attributes included in grades to individual achievement.**

   a) *Base grades on achievement (i.e., demonstration of the knowledge and skill components of the standards); report effort, attitude, and other non-achievement factors separately.*

   For grades to be accurate and have meaning, it has to be clear what the symbol is communicating. As suggested in Guideline 1, it is the achievement of learning outcomes that should be communicated, but other ingredients such as effort, participation, and attitude are also often included. As a result, it is often difficult to tell what a grade means. Some students have achieved poorly but, because they tried hard and behaved well, they have received inflated grades; other students have achieved well but have not exhibited the desired behaviours, so they have received lower grades than they should have. In these situations, teachers are using grades as control mechanisms, which is inappropriate. The behaviour must be addressed, but it must be addressed by investigating causes and alternatives and not through grades.

   The best way to deal with this in a communication system is to use expanded format report cards, with one section for achievement and one section for non-achievement factors such as behaviour, work habits, citizenship, and so on.

Figure 4.3

AN EXPANDED FORMAT REPORT CARD

Report Card Grades 9–12	Semester	Report Period	Date

Student | Grade

Courses	Report Period	Percentage Grade	Course Median	Comments Strengths/Areas for Improvement/ Next Steps	Attendance		Learning Skills 3 — Good 2 — Satisfactory 1 — Needs Improvement				
					Classes Missed / Total Classes	Times Late	Participates Actively	Works Independently	Organizes Time/ Materials	Cooperates with Others	Completes Assignments/ Homework
Title: _____ Code: _____ Teacher: _____	First										
	Final										
Title: _____ Code: _____ Teacher: _____	First										
	Final										
Title: _____ Code: _____ Teacher: _____	First										
	Final										
Title: _____ Code: _____ Teacher: _____	First										
	Final										

An Expanded Format Report Card: Adapted with permission from the Ontario Provincial Report Card, Grades 9–12. All rights reserved.

To be accurate, grades should not be inflated by the use of bonuses (e.g., added points on tests or extra credit). Similarly, grades should not be deflated by the use of penalties (e.g., for handing required assessment evidence in late or for cheating or plagiarizing). These are both inappropriate behaviours and consequences should be outlined in the school/division behaviour policy. When the late assignment represents critical evidence of the learning outcomes, an appropriate consequence might be to require the student to attend make-up sessions until it is completed. Support could then be provided to complete the work. (For ideas about dealing with late work, see O'Connor, *How to Grade for Learning*, page 103; and Cooper, *Talk About Assessment*, pages 244, 249.) If the student has cheated or plagiarized to submit an assignment, an appropriate consequence would be a requirement to do it again with academic honesty.*

b) *Base grades on the achievement individual students are able to demonstrate, and not on group marks.*

Cooperative learning is a very powerful teaching/learning strategy. When used appropriately, students learn deeply, but teachers often assign group marks to the products or performances that are developed through cooperative learning activities. This practice not only seriously distorts student achievement but it ignores one of the key principles of most systems of cooperative learning—individual accountability. It is important to remember that the strategy is called cooperative learning, and that cooperative learning must be followed by *individual* assessment in order to collect the evidence that is used to determine grades. There is only one student's name on the report card, and it must be only that student's achievement that forms part of his or her grade.

4. **Sample student performance—don't include all scores in grades.**
   ■ *Use formative assessment as an opportunity to provide feedback to students.*
   ■ *Use a variety of summative assessments to determine grades.*

Students need to be clear about the purpose for each assessment and how the results will be used. In particular, it is critical that there be a clear distinction between formative assessment (assessment *for* and *as* learning) and summative assessment (assessment *of* learning).

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* In the case of provincial standards tests, students who choose not to participate (e.g., they are absent without leave) are awarded a mark of '0'. This is necessary because the test is mandatory and can be written only at scheduled times. It is also less severe than withholding the credit. These students can participate in the test at the next opportunity and have the '0' replaced with the mark they achieve at that time. The same applies to students who have cheated or plagiarized. They are awarded a mark of '0' and have the option to participate in the test at the next opportunity (with academic honesty) and have the '0' replaced with the mark they achieve at that time.

Formative assessment should be used to provide feedback to students and teachers so they can make appropriate adjustments to their learning and teaching. There should be an emphasis on words (e.g., descriptions, rubrics, checklists), not numbers, and these assessments should not be a part of the grade calculation.

Summative assessment should be the primary source of information for determining grades. Teachers should inform students which assessments are summative, and provide varied opportunities to demonstrate what they know, understand, and can do.

While it is not legitimate to include data from formative assessments when determining grades, such evidence can help to confirm teachers' summative judgements. In cases where a student has had unusual difficulty with a summative assessment task, teachers may review recent formative evidence from the student's daily work and choose to offer a re-assessment opportunity or to use their professional judgement to adjust the summary grade.

5. **"Grade in pencil"—keep records so they can be updated easily.**
   - *Use the most consistent level of achievement with special consideration for more recent evidence of achievement.*
   - *Provide several and various assessment opportunities.*

Learning is a process that usually results in the improvement of our knowledge, understanding, and skill over time. This needs to be acknowledged in the grading process by monitoring consistency in student achievement. When that consistency is lacking, there should be an emphasis on the more recent evidence. This means that new evidence must replace (and not simply be added to) old evidence to determine grades.

This guideline means that students need several opportunities to demonstrate their understanding of each learning outcome. This can be accomplished by overlapping assessments or by providing reassessment opportunities. Reassessment, if offered, must be available to all students, but they should understand it is a privilege and not a right. Privileges have to be earned, so to earn a reassessment opportunity students must show that they have engaged in learning activities that increase their likelihood of success.

6. **"Crunch" numbers carefully, if at all.**
   - *Avoid using the mean; consider using median or mode.*
   - *Think "body of evidence" and professional judgement; determine grades, don't just calculate them.*

Grading is often treated as a numerical, mechanical exercise based on taking all the scores for each student and calculating the average, or mean. The problem with this approach is that it frequently does not provide a sensible summary of each student's

achievement because outlier scores skew the mean. The most common outlier scores are low outliers. For example, if a student achieved at a 90-percent level on most assessments and then scored abnormally low on a subsequent assessment of a similar body of knowledge and skills, the grade should be in the 90-percent range to be an accurate representation of achievement. The low score is considered an anomaly and is not used in the calculation. Statistically, the more appropriate measures of central tendency are the median (middle score when scores are listed from highest to lowest) or the mode (the most frequently occurring score).

The appropriateness of the various measures of central tendency depends on the consistency of the student scores. With very consistent scores, it does not matter which measure is used; with somewhat consistent scores with some outliers, then the median or mode are more appropriate; but with very inconsistent scores, none of the measures of central tendency work. Therefore, in such situations, teachers must use their professional judgement to determine the most appropriate summary grade to represent each student's achievement. This requires careful consideration of the body of evidence provided by the student and what this reveals relative to the performance standards (such as those in Figure 4.2).

Zeros

One very difficult "number-crunching" issue is the use of zeros. Teachers have most commonly used zeros when students have not submitted the required assessment evidence or for behavioural transgressions such as cheating or plagiarizing. Two problems arise with zeros:

- Zeros create a mathematical problem in the percentage system, because so many points are designated for failing compared to the number of points for the other levels. Most commonly, the cut point for pass/fail is 50 with 50 percent for the other three or four points on the scale. Therefore, a disproportionate scale exists where a zero has a much greater impact than other levels on the scale.

- Zeros have a devastating impact on motivation. Using zeros can make it almost impossible for students to recover and be successful. Consider the following scenario:

> The assessment plan for a course includes 10 summative assessments. After the first five, a student has received scores in the 70s and has an average of 75 percent. Then the student fails to submit the sixth assessment, receives a zero, and the grade falls to 62.5 percent. Although four more summative assessments will occur, the student will need to average 94 percent on those four assessments in order to get back to 75 percent. This level of performance might be impossible for this student, so she may decide that if she can't make a 70 average, she will not even continue trying.

Alternatives to zeros

In order to address the mathematical problem, several alternatives to the use of zeros exist:

- One is to use an equal-difference scale instead of a percentage scale. Instead of having multiple percentage points for each level, all assessments would be recorded on a scale with equal difference. A five-level scale would be recorded as 5 4 3 2 1, so in the above example the student might receive five 3s, a 1, and would then only need two 3s and two 4s to maintain a three average. Most students would consider this possible and would probably not give up.

- A second alternative to zeros is to put in a floor to make the percentage scale an equal-difference scale. For example, if there are 10 points for an A, a B, a C, and a D, then there should be 10 points for an F, so the pass/fail cut would be 60 percent and, instead of a zero, the lowest score recorded would be 50 percent. Getting a score of 50 percent would not mean that the student knows or understands 50 percent of the outcomes. It would simply be a symbolic representation to ensure the math makes sense.

- The third and best alternative to the use of zeros is to simply leave a blank space in the grade book for missing or tainted evidence. When it is time to determine grades, decide whether there is enough evidence to make the necessary determination of a grade. If there is sufficient evidence, the grade should be determined on the basis of the available evidence. If there is insufficient evidence, then the grade should be recorded as an "I" for "Incomplete" or "Insufficient evidence." Procedures then need to be developed with timelines and requirements for how "incompletes" can become "completes."

Zeros also affect the student's motivation to work. Sometimes students will willingly take a zero to avoid completing the work if they know that they can still get an average of 50 percent. Consequently, important course outcomes are not addressed. To ensure that important work is completed, several alternative consequences can be used instead of grade consequences. For example:

- A phone call home to parents
- Mandatory extra help (study hall) during lunch hours or spare periods until the assignment is complete
- Temporary suspension from extracurricular activity
- Withholding course credit until sufficient assignments are complete

When students realize that their work must be completed and they cannot "just take a zero," some schools have found an increase in pass rates and student motivation. (For more information about zeros, see Guskey, "Zero Alternatives"; Reeves, "The Case Against the Zero"; Wormeli, *Fair Isn't Always Equal*; and Wormeli, "Turning Zeroes to 60's.")

Ultimately, accurate grading requires teachers to make a professional judgement about students' achievement based on a body of evidence that the student has produced. Not all learning can be quantified in numerical terms, and some evidence may be anecdotal. What is essential is that teachers are able to determine whether students have achieved the learning outcomes for the course.

7. **Use quality assessment(s) and properly record evidence of achievement.**

   a) *Assessments must meet standards for quality.*

   Accurate and meaningful grades rely on quality assessment. Teachers must ensure that every assessment that is used to determine grades is a quality assessment. Quality assessments have the following five attributes:

   ■ **Clear Targets**

   Teachers must have a clear understanding of both *what* is to be learned (the learning outcomes) and how well students are expected to demonstrate their learning (the performance standards). These need to be communicated in understandable ways to students early in the learning process.

   ■ **Clear Purpose**

   The purpose (*for*, *as*, and *of* learning) of every assessment must be clear and must be communicated to students.

   ■ **Appropriate Target-Method Match**

   This involves choosing the "right" assessment for the learning outcome(s) being assessed. For example, when assessing knowledge-level outcomes, selected response methods are both efficient and effective, but to assess skills or the application of knowledge, some method of performance assessment should be used.

   ■ **Appropriate Sampling**

   A critical principle is that decisions should never be made on the basis of one assessment. There must be enough evidence, both in quantity and variety, for teachers to provide the feedback students need and to make the judgements they need to make (i.e., determine grades). Teachers will have sufficient evidence when they are confident that one additional piece of evidence would simply confirm what they already know. The amount of evidence needed depends on the consistency of each student: the more consistent a student is, the less evidence is needed; the more inconsistent, the more evidence is needed. Evidence from a variety of assessment approaches also contributes to quality. One way to do this is to triangulate evidence gathered through observations and conversations with students during the learning process, as well as from work samples and other products of learning. (For more information about triangulation, see Davies, *Making Classroom Assessment Work*.)

- **Avoidance of Bias and Distortion**

  A number of variables can cause assessment results to be distorted. There may be concerns about student-specific issues (e.g., low reading skill, physical health, emotional setback), disturbances in the assessment setting (e.g., noise, lighting, temperature), and concerns with the assessment itself (e.g., clarity of wording of directions and questions, time available to complete). Teachers must be conscious of all the factors that can interfere with quality assessment, and attempt to avoid or mitigate them. If that is not possible, an alternative assessment opportunity should be provided.

b) *Evidence of achievement and behaviour must be carefully recorded and maintained.*

Teachers must keep records of the information about student achievement and behaviours that are summarized in grades and on report cards. It is not sufficient to make decisions based on memory. To enable quality decisions and, if challenged, to have the necessary evidence to defend their judgement, teachers can use tracking sheets like Figure 4.1, spreadsheets, or computer grading programs. It is also helpful to keep, or have students keep, samples of their work in formal or informal portfolios.

8. **Discuss and involve students in assessment, including grading, throughout the teaching/learning process.**

   The following is a list of key indicators of student involvement in the assessment process:

   - Students understand how their grades will be determined (assessment *of* learning). At the beginning of instruction, the teacher should share with students and parents an assessment and grading plan for the year/course. This statement should be age-appropriate, written in student- and parent-friendly language and ideally should be no more than one page in length. All the teachers at each school who are teaching the same grade/course should develop these statements together, and not individually.

   - Teachers provide students with opportunities to have input into the criteria for success. Exemplars also help them to understand the conditions of quality.

   - Students are allowed, at appropriate points, to make some choices in how they demonstrate their learning.

   - Teachers and peers provide specific descriptive feedback that informs self-assessment, reflection, and goal setting.

   - Students keep track of their achievement to identify their strengths and areas for improvement.

   - Students discuss their learning in student-involved or student-led conferences.

4.2 Report Cards

Report cards are a key component of the communication system. They are of interest to students, parents, receiving schools, and employers. They should provide high-quality information to all interested parties in a form they can readily understand and use. The following is a set of guidelines that will help to ensure that report cards communicate effectively.

Guidelines for Report Cards

1. When designing report cards, keep in mind that they provide summary information about student achievement and behaviours and are just part of a larger communication system.

2. Be clear about the purpose of each report card. State this purpose directly on the report card. Clearly distinguish whether the information on the report cards reflects achievement, growth, or progress.

3. Report accurate information about the achievement of learning outcomes. Provide separate information about behaviour and attitude.

4. Clearly describe the performance standards (symbol systems) for achievement and behaviour. The description on the report card may be brief, but expanded versions should be readily available on the school/division website or in other materials.

5. Include information on absences and late arrivals.

6. Use jargon-free language on report cards that is understandable for students and parents. Format and design elements (e.g., use of white space) can enhance comprehension.

7. Release report cards to parents often enough to provide timely information but not so frequently that reporting overwhelms them and overburdens teachers (i.e., not more than three or four times per year).

8. Include a narrative section on the report card where teachers can highlight the most significant aspects of each student's achievement and behaviour. These comments should always identify student strengths and provide descriptions of any areas that need improvement, as well as suggestions about how the parent can help the student improve (next steps). Allow sufficient space for meaningful comments.

    Decide whether teachers will develop comments individually or whether the school/division will develop a comment "bank" from which teachers can choose and customize their comments.

9. Provide formal opportunities for parent and student involvement. For example, sections for student self-assessment/reflection and parental response could be part of the reporting process. Student reflection and parental response are facilitated when narrative comments focus on strengths, areas for improvement, and next steps for parents, teachers, and students.

Report cards are just one element of the communication system, and must be used together with the other components. Figure 4.4 provides an outline of factors to consider when designing or assessing a communication system.

Figure 4.4	C O M M U N I C A T I O N C O N S I D E R A T I O N S

General Considerations

___ fair
___ honest
___ useful
___ credible
___ feasible
___ user-friendly

Communication System Components

Informal
 ___ conversations
 ___ notes/postcards
 ___ phone calls
 ___ email

Formal
 ___ interim reports
 ___ learning-outcomes–based expanded-format report cards
 ___ parent-teacher interviews
 ___ student-involved conferences (student ___ is present
                  ___ participates
                  ___ leads)

Report Card

Purpose ___ clearly established
      ___ clearly stated

Frequency ___ 2, 3, or 4 times per year/course

Achievement Information

Information about ___ achievement ___ growth/progress ___ behaviours ___ other

Subject grades ___ one per subject
      ___ several per subject by learning outcomes or strands

Performance standards (Scale Key) ___ Criteria/descriptors

Comments

___ Amount
___ Focus (strengths, areas for improvement, next steps)
___ Teacher-generated

Other

___ Attendance and lates
___ Clarity of layout

Use of Technology

Communication Considerations: Adapted from O'Connor, K. *How to Grade for Learning: Linking Grades to Standards*. Thousand Oaks, CA: Corwin, 2002. 229. Reprinted with permission.

5. SUMMARY/CONCLUSION

As the primary function of schools shifts from categorizing students as high, average, and low achievers to certifying their proficiency on learning outcomes, we need to rethink what, how, and when we need to communicate to students and parents. In this document, a number of key ideas about communicating assessment information have been presented:

1. **Our understanding of what constitutes communication about assessment has expanded.**

   We now understand that assessment involves much more than simply allocating a summary grade to represent the learning that has occurred within a specified period of time. We understand that assessment *for* learning, *as* learning, and *of* learning are all powerful methods to improve the achievement of all students. Key to this understanding is the role communication plays in effective assessment. As we have seen, providing students with descriptive feedback that informs them about what they are doing well, what they are struggling with, and what they need to do differently to improve their performance is the key to effective communication about assessment.

2. **Students, parents, and teachers are partners in the communication process.**

   We have also come to understand the need for students, their parents, and teachers to collaborate in communication about learning. Whether in the form of email or telephone communication during the term, student-involved conferences at key points during the school year, or simply informal chats about progress and learning difficulties as the need arises, everyone has a role to play in communication that supports students as they seek to improve their learning.

3. **Opportunities for communication must be built into classroom instructional routines.**

   Because talk about assessment is critical to student learning, teachers need to become skilled at providing frequent opportunities for such discussions in their instructional routines. To facilitate this, teachers need to understand how their instructional repertoire, classroom management skills, and skills in supporting assessment *for* and *as* learning must all work together to ensure effective communication and the productive use of class time for all students.

   Teachers also need to be proficient in using a wide variety of strategies that promote communication about quality work and the extent to which quality is reflected in the work of individual students. These strategies include routine and effective use of conferencing and portfolios, the collaborative identification of assessment criteria and the corresponding indicators of quality work, and the routine use of self- and peer assessment to enable students to internalize the attributes of quality work and performance.

4. **Communication about learning must be made with reference to clear performance standards that are criterion-referenced.**

   Performance standards communicate how good is good enough (i.e., proficiency), and should help students and parents understand the learning goal(s) for each student and how well the student has achieved.

5. **For communication about student achievement in summary format to be effective, grades need to be meaningful, consistent, accurate, and supportive of learning.**

   For this to happen, schools and divisions should have clear guidelines in their policies and procedures. These guidelines should ensure that grades be based on learning outcomes, and that grades are determined based on individual achievement and do not include behaviour or group scores.

6. **Communication about achievement goes beyond the traditional report card. There needs to be a communication system that includes a variety of methods.**

   Report card formats need to be designed to communicate detailed and useful information about student achievement. Information needs to be provided about achievement on groups of related learning outcomes, not just subjects. This can be done effectively at some levels with developmental continua. There also must be information about a reasonable number of behaviours that each division or school values. Report cards should also include a comment section that communicates clearly about student strengths, areas for improvement, and next steps. Electronic communication can also be effective, and divisions should consider whether electronic portfolios and/or parent web portals would be beneficial to their communication system.

The goal of assessment and communication about learning is to maximize student achievement and sustain or enhance the student's motivation to continue learning. In order to assess and communicate effectively, students, teachers, and parents all need to be informed and involved in the process.

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