

GRADE LEVEL OF ACHIEVEMENT REPORTING: Teacher and Administrator Handbook

The assessments that drive academic learning and self-concept are those used by teachers in classrooms.

Richard J. Stiggins

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This document is intended primarily for:

System and school administrators
Teachers
School board trustees
Faculty of Education academic staff and administration
Alberta Education managers

And may be of interest to:

Parents
Education stakeholders
Community Members

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PART ONE

Theory and Practice

Overview

The most crucial part of communicating student learning is to ensure a shared understanding between the current teacher, the student, parent, and the future teacher receiving the information. “Assessment, evaluation and communication of student achievement and growth are essential parts of the teaching and learning process.” (Western and Northern Canadian Protocol for Collaboration in Education, 2006: viii). Effective communication lets the student, parent and educators know the grade level of achievement the student has demonstrated and informs next steps in the student’s learning. While the communication process involves all the key players, the greater role students are given in this process, the richer the information that is shared and the greater the impact on future learning (see for example, Stiggins, 2001).

Reporting grade level of achievement to Alberta Education is based upon teacher judgment of the results from a variety of assessments throughout the school year, expressed as “at, above or below” in relation to the learner outcomes in a subject after a course for a specific grade level has been completed and the student’s enrolled grade. How grade level of achievement is reported to parents (and students) typically would be much more frequent and thorough, and continues to be a local decision informed by school jurisdiction policy and the requirements of the *Guide to Education: ECS to Grade 12*. This Handbook is designed to assist decision-making about GLA in both reporting contexts.

Successful implementation of grade level of achievement reporting necessitates:

- a clear understanding of the Alberta programs of study at both grades above and below the grade taught;
- recognition of the wide range of student performance within a classroom and the wide range of programming required to enable all students to be successful;
- the use of a wide variety of assessment strategies aligned to the learner outcomes;
- the collection of a body of evidence that demonstrates consistency for purposes of making a judgment;
- the fair and equitable assessment of all students (Appendix I); and
- a clear and transparent process for communicating to students, parents and receiving teachers.

Determining grade level of achievement for each student has **four** primary benefits:

- to be used as a catalyst within the school's professional learning community to focus on individual student learning needs and interests;
- to determine effective practices and strategies to foster higher levels of student achievement and confidence;
- to contribute to the data or evidence used to report student achievement to parents/guardians, fulfilling the school's responsibility as outlined in the *Guide to Education: ECS to Grade 12* in the section entitled *Assessment as the Basis for Communicating Individual Student Achievement* (Appendix II); and
- to provide richer information at the system level (both jurisdictional and provincial) to inform effective practices to determine the impact of specific programs on student learning (e.g., English as a Second Language, special education needs) and to determine processes to further refine these programs.

The **purpose of this Handbook** is to assist educators in understanding grade level of achievement, the role it plays in communicating student learning, and how to effectively implement the reporting of grade level of achievement for students enrolled in grades one through nine to Alberta Education as an adjunct to the on-going reporting to parents/students. Some of the issues staff struggle with as they implement grade level of achievement reporting are addressed through a series of vignettes and school stories in section two. Additional issues are addressed using a question and answer format available on the Alberta Education website at <http://www.education.gov.ab.ca/ipr/GLA/QandA.pdf>.

The following graphic helps to illustrate some of the key issues that influence decision making supportive of GLA reporting.

The Keys to Grade Level of Achievement Reporting

Learner Outcomes

What will students learn based on the programs of study?

Criteria

What will be accepted as evidence of learning?

Assessment/Evaluation

How will evidence of learning be gathered and interpreted?

Communication

How can grade level of achievement be reported meaningfully?

Learning Opportunities

What learning activities will enable student learning needs to be addressed/met?

Definitions

For the purposes of this Handbook, the following definitions are provided. Using language consistently and effectively is important to come to a shared understanding and to inform educational practice in the interests of higher levels of student learning.

| | |
|--------------------------------|--|
| accommodation | a change or alteration in the regular way a student is expected to learn, complete assignments or participate in classroom activities |
| achievement level | a student's demonstration of knowledge, skills and attitudes relative to grade level learner outcomes |
| adapted programming | programming that retains the learner outcomes of the programs of study and where adjustments to the instructional process are provided to address the special education needs of the student |
| assessment | process of collecting information on student achievement and performance that includes a variety of assessment tasks designed to monitor and improve student learning |
| assessment for learning | assessment experiences that result in an ongoing exchange of information between students and teachers about student progress toward clearly specified learner outcomes (also called <u>diagnostic and formative assessment</u>) |
| assessment of learning | assessment experiences designed to collect information about learning to make judgments about student achievement and performance at the end of a period of instruction that can be shared with those outside the classroom (also called <u>summative assessment</u>) |
| body of evidence | a collection of information about student achievement and performance of the learner outcomes in programs of study incorporating data and samples from a variety of assessments administered throughout the school year |
| criteria | what students need to do to show they have achieved the learner outcomes (e.g., compare and contrast, explain, analyze) |
| criterion-referenced | evaluation relative to grade level curriculum standards (learner outcomes) |
| diagnostic information | the results of formal and informal assessments that identify students' areas of strengths and weaknesses and which are used to determine individualized programming for students |

| | |
|--------------------------------------|---|
| evaluation | making decisions about the quality, value or worth of a response for the purpose of providing descriptive feedback (formative) and determining marks (summative) |
| grade level of achievement | a teacher judgment, based on the results from a variety of classroom assessments throughout the school year, expressed as “at, above or below” in relation to learner outcomes in a subject area after a course for a specific grade level has been completed and the student’s enrolled grade |
| graded programs of study | learner outcomes, expressed in programs of study, organized in grade level groupings from 1 to 9 |
| horizontal enrichment | providing more in-depth learning opportunities with respect to the learner outcomes at the enrolment grade level |
| individual program plan (IPP) | a concise plan of action designed to address student’s special education needs, based on diagnostic information which provides the basis for intervention strategies, and includes, as part of the essential information, current level of performance and achievement. Each student identified as having special education needs must have an IPP. |
| learner outcomes | what Alberta Education expects a student to learn; the knowledge, skills and attitudes a student demonstrates as a result of schooling |
| mark | a letter, number or comment reported as a statement of student achievement and performance |
| modified programming | programming in which the learner outcomes are significantly different from the programs of study and are specifically selected to meet students’ special education needs |
| norm-referenced | evaluation in relation to other students within a group |
| performance level | how well a student demonstrates grade level learner outcomes |
| reliability | the degree to which the results of an assessment are dependable and yield consistent results across raters, over time, or across different versions of the same assessment |
| validity | the degree to which inferences drawn about a student’s achievement of the knowledge, skills and attitudes in the programs of study are trustworthy for making decisions about the student’s learning |
| vertical enrichment | providing learning opportunities with respect to the learner outcomes above the enrolment grade level |

A Self-reflection Tool

Before beginning this journey of understanding and implementation...

The following statements present teacher behaviors consistent with the recognized fair assessment practices (see Appendix I). Please reflect on the statements below in terms of your current practices.

| Classroom Assessment Practices | To a Great Extent | | | To a Limited Extent |
|--|-------------------|---|---|---------------------|
| | 4 | 3 | 2 | 1 |
| 1. I attend to the learning needs of each student in my classroom. | 4 | 3 | 2 | 1 |
| 2. I determine grade level of achievement for individual students based on demonstration of the learner outcomes in the Alberta programs of study. | 4 | 3 | 2 | 1 |
| 3. I use grade level of achievement assessment information to provide appropriate programming for individual students. | 4 | 3 | 2 | 1 |
| 4. I use a wide variety of assessment strategies aligned to the programs of study to gather evidence upon which to make a valid and reliable judgment about student learning. | 4 | 3 | 2 | 1 |
| 5. I establish procedures to report work habits (effort, participation, behavior, attendance, incomplete assignments) separately so that they do not distort grade level of achievement. | 4 | 3 | 2 | 1 |
| 6. I use assessment for learning to provide information about student progress and direction for improvement. | 4 | 3 | 2 | 1 |
| 7. I have knowledge of the learner outcomes at grade levels both below and above my grade assignment to ensure my instruction meets the needs of all students. | 4 | 3 | 2 | 1 |
| 8. I keep informed about current research on appropriate assessment and communication practices to enhance my skills in making meaningful judgments. | 4 | 3 | 2 | 1 |
| 9. I use samples of student work to improve the consistency of my judgments. | 4 | 3 | 2 | 1 |
| 10. I use a variety of evaluation tasks, checklists, rating scales and rubrics. | 4 | 3 | 2 | 1 |
| Currently, I implement _____ of these practices to _____ extent. (<i>all, most, some</i>) (a <i>great, some, a limited</i>) I am working towards doing all of them to a great extent. | | | | |

Moving Towards a Common Understanding of Grade Level of Achievement

“Communicating student achievement is the primary purpose of grading.... Communication is most effective when it is clear and concise; grades are certainly concise, and they can be clear communication vehicles if there is a shared understanding of how they are determined and, thus, what they mean” (O’Connor, 1999: 11-12).

Parents often ask, **“So, how's my child doing?”** and teachers respond with a mark, a letter grade or a comment. Sometimes teachers even provide parents with some form of comparison, such as the class average, their child’s performance relative to provincial standards, or the extent of the progress their child has made since the last formal evaluation.

The term “grade” may be confusing, as it is currently used to refer to marks, class placement and to denote programming and promotion. For the vast majority of students “grade” referring to class placement and “grade” referring to programming are the same. However, other students require more or less time to demonstrate evidence that they have achieved the acceptable standards based on the program of studies for the subject or course.

“For some learners’ brains, the ‘normal’ time to learn to read is age 3 or 4. For others, the ‘normal’ time is age 8. There can be, in fact, a spread in differences from a few months to five years in completely normal, developing brains.” (Jensen, 1998: 34) “Surprisingly, there is no timetable for learning to read. Differences of three years are normal. Some children will be ready to read at age 4; others, just as normal, will be ready at age 7 or even age 10.” (Jensen, 1998: 23)

For purposes of clarity of communication it is necessary to distinguish among the meaning of the word “grade” as

- **class placement;**
- **a mark to indicate performance; or**
- **a level of achievement based on the programs of study.**

The key issue is, which of the alternatives provides the most accurate and meaningful information about student learning to inform students, parents and others who have a legitimate right to know? Another issue that needs to be addressed arises when information about student learning is communicated using symbolic representations. These can easily be misinterpreted if there is not a shared understanding of what the symbols mean.

Teachers often wrestle with how to interpret and communicate achievement and progress information about their students. They have been reporting on student achievement and progress for years, but continue to struggle with important questions that have no easy answers, one of which is “How does a receiving teacher know if a student is achieving at grade level in language arts, mathematics, science and social studies?”

What will Grade Level of Achievement reporting mean for students?

Through the implementation of grade level of achievement reporting, communication about student learning will be clearer and students will make more seamless transitions as they progress through their years of schooling. For students enrolled in grades one through nine, placement is usually based on the age of the student and reflects the number of years the student has attended school. However, class placement does not necessarily refer to the program or grade level of the programs of study a student is working towards.

For example, a ten-year-old student would most likely be placed in a Grade 5 classroom with other ten-year-olds who are in their fifth year of schooling, although the student could be working towards the outcomes of the Grade 4 program of studies in language arts.

Teachers will sometimes ask, “Why not just retain the student in the same grade for a second year? If the student has not demonstrated the learner outcomes of a particular grade, perhaps he/she should ‘fail’ the grade.”

There are a multitude of studies that have examined the issue of grade retention. This research can inform how Grade Level of Achievement data can be used to support decisions regarding effective programming.

According to Shepard and Smith (1989: 215)

“Meta-analysis of scores of studies reveals that at-risk students who are promoted achieve at the same or higher levels than comparable at-risk students who have been retained and spent two years rather than one year in a grade. In addition, retained students are no better off than initially comparable promoted children on measures of personal and psychological adjustment: self-concept, attitudes towards school and attendance.”

Their analysis also determined that

“Large-scale surveys of dropouts and graduates reveal that substantially more dropouts than graduates have at some time in their career been retained in grade. Retention increases the probability of eventually dropping out of school by 20 to 30 per cent, even with achievement, socioeconomic factors and gender controlled.”

As a result of their work, Shepard and Smith recommend “for children whose achievement is substantially below defined grade level average, the most effective remedy is not retention, but promotion accompanied by remediation.”

More current research arrived at the same findings. Shane Jimerson (2001) reviewed retention research conducted between 1990 and 1999. “Of the 175 academic achievement comparisons, nine favored retained students while 82 favored promoted students.” He concluded that “Neither retention nor social promotion appears to address the needs of low-performing students.”

Use of grade level of achievement and the supporting evidence of achievement provides the receiving teacher with information on where to start programming for incoming students. “Unfortunately, our images of schools are almost factory images, so school is very standardized. But kids don’t come in standard issue. The challenge is having teachers question the standardized notion of school and then helping kids realize there is a better way to do school.” (Tomlinson, 1996) Differentiation of programming within the classroom appears to be a better alternative than retention. **The critical issue is knowing where the student is relative to graded programs of study, and programming for that student so that he/she can be successful.**

What will Grade Level of Achievement reporting mean for teachers?

Every programming decision is unique and must be considered in the context of what is in the best interest of the student. However, research is more supportive of methods based on differentiation (Appendix IV). That is, for students who have a grade level of achievement below or above the enrolled grade, their needs are accommodated by teaching them with their similarly-aged peers. To do so, students may study the same content as their peers, but the teacher adjusts the skills and process expectations to meet their needs. For example, during a study of local government at grade six, the teacher could expect the oral and written contributions and responses of below-level students to be similar to what would be expected of a 9 or 10-year old dealing with local government issues; and of advanced

students, to be similar to those of a 13 or 14-year old. Providing these types of accommodations, though challenging, is not an impossible task for teachers. When skilled professionals do an effective job of differentiating, the result is a successful learning environment for all students.

Teachers need to be cognizant of the learner outcomes in programs of study at the grade level they are teaching as well as those both above and below that grade level in order to respond to a wide range of student strengths and areas of need. How teachers respond to the needs of students who are already meeting the standard of excellence for their grade placement will depend on whether their school jurisdiction's policy emphasizes horizontal or vertical enrichment.

Providing learning opportunities for students in regular classroom settings does not mean that all students are engaged in the same activities or learning experiences. Within each classroom, students learn at different rates and in different ways and often there are students working towards the learner outcomes of a different level of curriculum than the majority of their classmates. In these instances, it is critical that teachers differentiate instruction and assessment.

For example, it is very possible in a "grade eight mathematics class" that one or more students are still working towards achieving the learner outcomes of grade seven or even grade six mathematics. For these students, the teacher provides learning opportunities that enable the student to successfully demonstrate the learner outcomes of the grade level of curriculum the student is working towards. The teacher will collect a body of evidence that can substantiate the grade level of curriculum the student has achieved.

As well, individual students may be performing at a different grade level of achievement in various subjects.

For example, a student who has achieved the learner outcomes for grade five in language arts may have achieved the learner outcomes for grade four in mathematics.

Determining grade level of achievement, consistent with the classroom assessment practices/principles on pages 8 and 14, indicates to the student, parents, and others who have a legitimate right to know, what level of the graded programs of study a student has successfully completed. Just as important, it lets teachers know where to begin programming for this student in the next school year based on the programs of study. The receiving teacher is aware of the student's placement on the graded programs of study and can provide programming at the appropriate level of the curriculum.

At grades 3, 6 and 9 there may be a question about the need for or expectation of a positive correlation between the teacher-awarded grade level of achievement for a student and the achievement of the acceptable standard on provincial achievement tests. Generally, one would expect that they would correlate well. However, there may be instances when a student's performance on a provincial achievement test may be different from the grade level of achievement awarded by the classroom teacher. For example, at the end of the school year, the teacher may indicate for a student enrolled in grade 3 that the student has achieved a grade 3 level of achievement in language arts. However, the student is below acceptable standard in reading and writing on the grade 3 language arts achievement test.

There may be a variety of reasons why this occurs. **The teacher's grade level of achievement judgment is based on a body of evidence collected over the course of the entire year, and includes evidence of the student's performance across all the strands of the language arts program of studies, not just reading and writing.** The items on provincial achievement tests use a representative sample of what students are to demonstrate during two brief time periods when they are administered during the two sittings of the language arts achievement test. The teacher's achievement judgment takes into account the aspects of the language arts curriculum (speaking, viewing, listening and representing) that cannot be measured by a paper and pencil format. It is also possible that on any given day, which may end up being a provincial achievement test administration day, a student turns in an atypical demonstration of what he/she is typically capable of doing. For these reasons, it may not be appropriate to expect that the teacher judgment of grade level of achievement based on the programs of study and results on provincial achievement tests would necessarily match in every case.

What will Grade Level of Achievement reporting mean for parents?¹

The *Assessment as the Basis for Communicating Individual Student Achievement* requirement in the *Guide to Education: ECS to Grade 12* states that parents must be informed about a student's grade level of achievement. It is left up to the

“principal to determine how to implement this provision, in consultation with teachers, parents and school councils and in a manner consistent with any related school jurisdiction policies. The communication can take place in a wide variety of ways, including parent-teacher conferences, assessment portfolios,

¹ Alberta Education will publish a brochure on GLA reporting for parents.

progress reports, or student work samples. An individual program plan (IPP) is a method often used by teachers when there is a significant gap between a student's level of achievement and the student's grade placement."

Source: STUDENT ASSESSMENT ECS TO GRADE 9 (*Guide to Education: ECS to Grade 12*) SEPTEMBER 2005 ©Alberta Education, Alberta, Canada

Effective communication of learning requires timely communication to parents that encourages and supports student development and learning. Information about student achievement, communicated in a constructive manner through grade level of achievement, enables students to direct their energies effectively, provides parents with information that they can use to assist their children and helps teachers, and others who work with students, plan and implement further opportunities to learn.

What Grade Level of Achievement Is and What It Is Not

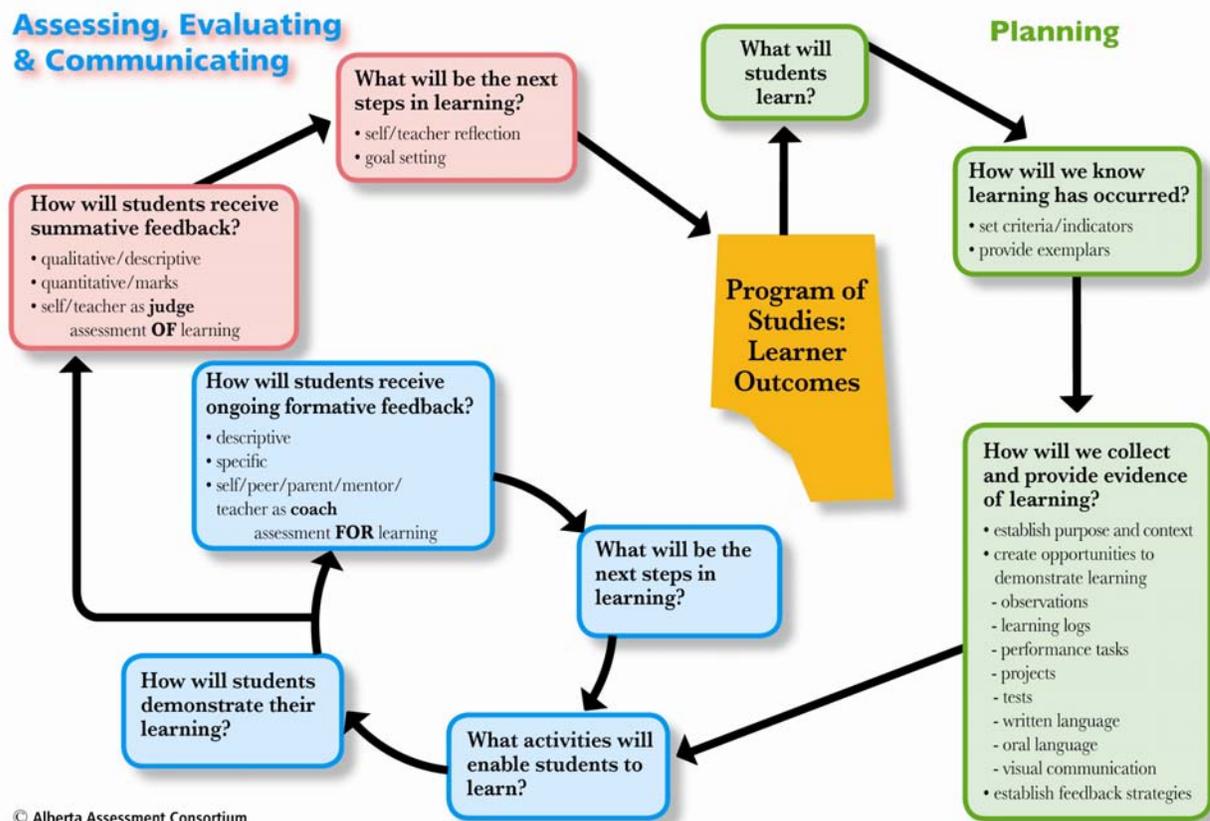
| Grade Level of Achievement Is | Grade Level of Achievement Is Not |
|--|---|
| <ul style="list-style-type: none"> • a teacher judgment expressed as “at, above or below” grade relative to learner outcomes in the programs of study and the student’s enrolled grade | <ul style="list-style-type: none"> • a grade equivalent expressed as a decimal number derived from a publisher test |
| <ul style="list-style-type: none"> • based on a wide variety of assessments over an extended period of time | <ul style="list-style-type: none"> • based on a one-shot test administration |
| <ul style="list-style-type: none"> • what the student knows and can demonstrate in relation to learner outcomes | <ul style="list-style-type: none"> • based on factors such as assignment completion, timeliness, participation, attitude, neatness, effort, behavior |
| <ul style="list-style-type: none"> • designed to provide a more seamless, routine data collection process to better assess and improve student achievement through improved program evaluation at multiple levels of the education system | <ul style="list-style-type: none"> • a mechanism to evaluate schools or jurisdictions |
| <ul style="list-style-type: none"> • criterion-referenced in relation to learner outcomes | <ul style="list-style-type: none"> • self or norm-referenced |
| <ul style="list-style-type: none"> • designed for students on graded programs of study | <ul style="list-style-type: none"> • designed for the small number of students who are not on graded programs of study |
| <ul style="list-style-type: none"> • a vehicle for informing parents about where their child is achieving relative to the graded programs of study | <ul style="list-style-type: none"> • a vehicle for letting parents know where their child is achieving in comparison to a peer group |

Getting Started

Teachers, as part of their professional responsibility, make judgments about student learning. This Handbook will give support and build on teachers' confidence in their professional judgments of student achievement.

The following visual from the AAC resource, *A Framework for Student Assessment*, (2005) reminds us that programs of study form the foundation for the work we do with students. Programs of study define what students will learn and demonstrate. It is up to teachers to determine how they will know that learning has occurred, recognizing the learning needs of individual students and making instructional decisions in response to those needs.

Assessing Student Learning in the Classroom



© Alberta Assessment Consortium
Source: *A Framework for Student Assessment*, 2nd ed. (2005)
www.aac.ab.ca

Source: *A Framework for Student Assessment 2nd edition* (2005) used with permission

Teachers determine what they will collect to provide a body of evidence of learning. “Simply put, a body of evidence answers the question ‘What do students need to do to convince teachers they have met the learner outcomes?’” (adapted from Asp, 2001) The purpose of the body of evidence is to provide data that will enable teachers to justify the student’s grade level of achievement. This evidence must be based on a wide variety of opportunities for students to display their learning, as different students will display their learning in different ways.

Teachers are the most qualified to evaluate student learning because they are closest to the student. They collect a variety of evidence on a daily basis and as a result, have more information about student learning than any jurisdiction assessment, provincial assessment, or publisher prepared assessment could ever tell them. (Appendices IV–VI)

Teachers also determine what activities will enable students to learn, and how students will demonstrate evidence of their learning. Some students will need more time and/or “coaching” than others in order to demonstrate that they have achieved the learner outcomes, i.e., will require more formative feedback and opportunities to learn.

Periodically, students will receive summative feedback to provide them with information about their achievement of learner outcomes. Results from this process will provide the teacher with information about the next steps in the learning for individual students.

In planning for assessing learner outcomes, Stiggins (2001:30) provides a useful model consisting of five distinct decision making areas. By thinking through each of the five areas validity and reliability of any assessment process is enhanced. These five areas consist of:

1. having **clear purposes** for the assessment,
2. defining **clear and appropriate targets** or learner outcomes,
3. selecting **appropriate methods** (e.g., selected response, constructed response, performance assessment or personal communications),
4. ensuring an **appropriate sample** of items, and
5. **controlling for bias** or other sources of distortion of student results.

Considering the following questions will help teachers know how to work with students in their classrooms.

1. What will students learn?

All teaching/learning/assessment experiences begin with the provincially mandated programs of study, and take into account and respond to the

learning needs of individual students. This document is a statement, authorized by the Minister of Education that describes:

- what students are expected to know and do, and
- when students are expected to accomplish this.

Various disciplines organize this information differently, but all include the following:

- a statement of **intent** for the program, sometimes called the **Program Rationale and Philosophy**,
- a set of **General Outcomes (GOs)**, and
- a set of **Specific Outcomes (SOs)**.

Some disciplines also make use of another level of detail. These are identified as bullets, indicators, or illustrative examples.

2. How can we link assessment with the programs of study?

When designing assessments for students it is essential to align the level of thinking required by the assessment with the level of thinking inherent in the outcomes from the programs of study. Benjamin Bloom created a taxonomy that is a very useful tool for teachers. The taxonomy, in an abbreviated form appears below:

Bloom's Taxonomy

| Level of Thinking | Attributes |
|-------------------|---------------|
| Evaluation | Judge it |
| Synthesis | Create it |
| Analysis | Explain it |
| Application | Use it |
| Comprehension | Understand it |
| Knowledge | Know it |

For example, if an outcome requires students to work at the analysis level, assessments requiring only knowledge responses will not provide meaningful evidence of student learning for the particular outcome. One way to facilitate the movement towards higher level thinking is to purposefully connect assessments to multiple elements of the programs of Study. By their very design, **tasks that provide multiple connections with the program Intent, GOs and SOs and where applicable, the bullets, provide a richer environment for students to demonstrate what they know and can do.** Assessments constructed in this manner enable teachers to collect a body of evidence to make a valid grade level of achievement judgement.

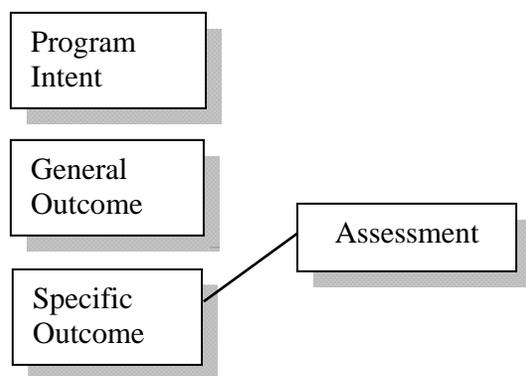


Figure 1 – Minimal connections

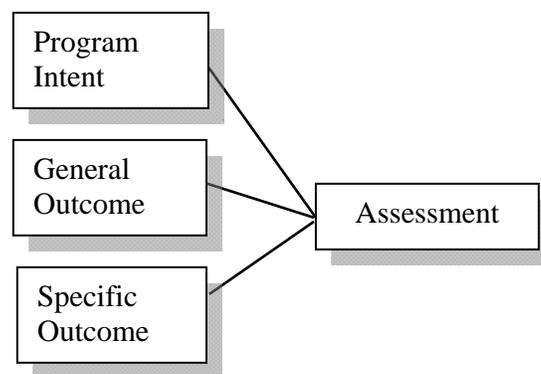


Figure 2 – Multiple connections

Assessments that involve only minimal connections to the programs of study have the potential to trivialize student learning (Figure 1). In contrast, assessments that involve multiple connections to various elements of the programs of study provide opportunities for students to synthesize their learning as they engage in the assessment experiences (Figure 2). Assessments should provide students with the opportunity to demonstrate the full range of learner outcomes of the programs of study.

Looking Deeper – Go to Appendix V to see specific examples of how assessment experiences link to the programs of study.

Two examples are provided in each of the following subject areas: language arts, mathematics, social studies and science. The first example shows an assessment task that correlates to one specific outcome while the second example models an assessment task with multiple connections to the programs of study.

3. How will I collect evidence of student understanding?

A body of evidence serves as the basis for making an informed professional judgment of each student's grade level of achievement. This body of evidence is collected through a process of triangulating data by including observations of learning, conversations with students and products students create (which also includes test and examination results) (Davies, 2000).

Evidence of student learning collected in this manner honours individual learning styles and the multiple intelligences of students. For example, a student who demonstrates an understanding in writing may not be able to do so orally. However, he/she has demonstrated an understanding of the learner outcome. Another student may communicate an understanding of the learner outcome through dance or drama, but not be able to reflect his/her understanding with written work.

It is important to provide a voice for students in the collection of data and “we must constantly remind ourselves that the ultimate purpose of evaluation is to enable students to evaluate themselves” (Costa, A. from Davies, A. 2000: 67). Students may be actively involved through the use of portfolios, student-led conferences, and personal conversations. Students can be partners in the assessment process through involvement in setting criteria, reflecting on their work against the criteria and setting personal goals for learning.

Evidence that is collected for evaluative purposes needs to be preserved to support teacher judgments. Written records, student portfolios (electronic or hard copy), pictures, recordings and videotapes are some of the methods employed by teachers to preserve evidence of student learning.

Use only a modest number of major classroom (assessments), but be sure these (assessments) measure learner outcomes of indisputable importance.

Popham, 2001: 104

4. How will Grade Level of Achievement be determined?

The teacher determines the grade level of achievement in individual courses in relation to the learner outcomes, based on student performance from a variety of classroom-based assessments administered throughout the year. Regardless of grade placement, a student’s grade level of achievement is based on evidence of what the student knows and can do in relation to the graded programs of study. By examining the evidence gained through triangulation of data, (i.e., observations, conversations and products), the reliability and validity of teacher judgments will increase. Grade level of achievement determined in this way will more accurately reflect student demonstration of learner outcomes than a grade level of achievement based on a single piece of evidence. The *Teaching Quality Standard* (pages 52–53) requires teachers to: “select and develop a variety of classroom assessment strategies and instruments to assess the full range of learning objectives.”

In language arts, the program recognizes that people use language to think, to communicate and to learn. The six language arts (listening, speaking, viewing, representing, reading and writing) are the vehicles through which students demonstrate achievement of the learner outcomes in language arts. Students are expected to demonstrate their ability to comprehend and create a variety of different kinds of texts (print, aural, oral, visual, kinesthetic and multi-media).

To assist in making judgments, a continuum of samples of student work would be a helpful, if not a necessary undertaking. Development of a continuum of samples could be a staff activity in the professional learning community. This process will help teachers to come to a common understanding of the standards embedded within the curriculum, and what it looks like to be “at grade level”. **What it looks like to be at grade level is founded on the teacher’s judgment, based on a body of evidence collected throughout the year, that the student would have a reasonable chance of success at the next level of curriculum.**

One way for a staff to develop a shared understanding would be to:

- choose an area of focus in a subject area;
- collect samples of student work in the area of focus;
- arrange student work to show a continuum of development; and
- match student work to the grade level learner outcomes as described by the programs of study.

This process will lead to development of a continuum of exemplars that demonstrate grade level learner outcomes outlined in the programs of study. It will also encourage consistency of grade level of achievement reporting within and across grade levels.

5. What about reporting GLA to Alberta Education for Late French Immersion and English as a Second Language (ESL) students, and students taking Knowledge and Employability (K and E) courses?

For students enrolled in late French Immersion programs, there is currently no mandated program of studies and since students are expected to join the regular immersion program in either grade 8 or 9, it would not be appropriate to report a GLA in French Language Arts until such time as they do join the mandated immersion curriculum.

ESL students should be reported relative to the learner outcomes in Language Arts and in Mathematics if sufficient assessment information is available to make this judgment. In either case, if a teacher does not have sufficient information then the “NA” or “not available” code may be used.

For students taking Knowledge and Employability (K and E) English Language Arts 8 (ELA) who have achieved the learning outcomes for the Knowledge and Employability ELA 8 course, their GLA would be “AT.” If they have not achieved the learning outcomes for K and E ELA 8, it would be appropriate to report their GLA relative to the regular Language Arts curriculum that would have been documented prior to their entry into the K and E course.

6. What about reporting for students who have an individual program plan (IPP)?

When reporting grade level of achievement for students who have an IPP there are essentially two categories of students; those on an **adapted program** and those on a **modified program**. The vast majority of students with special education needs are on an adapted program.

Special education students receiving **adapted programming** are working toward the learner outcomes of the Alberta programs of study although often at a grade level that is different than their enrolled grade, in one or more subject areas. Accommodations are provided so the student can participate actively. These accommodations may include:

- alternative formats for resources (e.g., Braille, books-on-tape)
- instructional strategies (e.g., use of interpreters, visual cues, learning aids)
- assessment procedures (e.g., oral exams, additional time, scribes)
- skill sequencing and pacing
- instructional materials
- assistive technology and specialized equipment
- supplementary services
- change of setting

The student's IPP must reflect these accommodations. Students receiving adapted programming are assessed using the curriculum standard, although they may require access to assessment accommodations to demonstrate their level of skills and knowledge. **Through assessment, teachers will report grade level of achievement for students on an adapted program based on the learner outcomes for the grade level identified for programming in the IPP.** The grade level at which programming is delivered to these students should be identified on the IPP under "current level of performance and achievement."

Gifted students usually receive some form of adapted programming. These students work on the graded programs of study but may be significantly advanced in one or more areas when compared with their peers. Adaptations may include faster pacing, greater emphasis on higher cognitive processes, independent research, access to mentors and resources not available or appropriate to most students.

Students receiving **modified programming** are **not on graded programs of study** but receive programming that focuses on life skills, foundation skills and academic readiness skills and this is reflected in their IPP. Modified programming has learner outcomes that are specifically selected to meet the student's special education needs. For example, a student in a grade five language arts classroom may be working on recognizing common signs or using the telephone, and a student in a grade nine mathematics classroom may be learning to make change or how to budget

his/her allowance. Students receiving modified programming may also have access to alternative formats, specialized equipment and other services and supports as required. A student on a modified program is assessed in relation to the goals and objectives established in the student's IPP.

7. What about Students Not on Graded Programs of Study?

A small number of students with special education needs may not be following the graded programs of study. These students will not be given a grade level of achievement for any course of study. In these instances, **what will be reported to Alberta Education is student achievement of goals specific to:**

Life skills—skills that will assist the student in developing independence in the home, school and community

Foundational skills—refers to communication, classroom behavior, gross motor and fine motor skills

Academic Readiness skills—refers to readiness skills to prepare the student for learner outcomes in the programs of study in Grade 1 and subsequent grade levels.

For each of the three skill areas, teachers will indicate the degree to which the student has met the goals and objectives in his/her IPP, i.e., whether **all, most, some or none** of the goals have been met. If there have been no goals set for one or more of the skill areas, teachers will indicate “not applicable” for those areas.

8 How will GLA data be reported to Alberta Education?

An example of the GLA Reporting Format and related instructions is presented in Appendix VII. This reporting format identifies the GLA and related information that is required for reporting GLA as “at, above or below” grade to Alberta Education. In order to ensure confidential treatment of GLA data, conveyance must be done electronically using Edulink. In most cases Student Information software will have been updated to facilitate GLA data capture and transmission via Edulink. Some student information software vendors will not have updated their software to permit GLA data capture. If this is the case then the Edulink software itself may be used to capture 2006–07 and subsequent GLA data. More information and detailed instructions on the topic of GLA data capture, formatting, file naming conventions and transmission will be forthcoming via a special technical bulletin on this topic in late 2006.

9. How should GLA be communicated to parents and students?

The decision of how teachers report a student's GLA to parents/guardians would typically be much more frequent and thorough than the reporting requirement to Alberta Education, and is a local decision of the teacher, school and school authority in relationship to the specifications in the Guide to Education: ECS to Grade 12. Reporting GLA to Alberta Education as "at, above or below" grade does not limit how teachers report student performance and achievement to parents/guardians.

PART TWO

Vignettes/Illustrative Examples

Issues for Discussion

This section of the Handbook provides five vignettes designed to stimulate staff discussion with respect to the determination of grade level of achievement. Vignettes 1, 4 and 5 are adapted from those developed by the Alberta Assessment Consortium in the resource, *Smerging Data: Grading... More Than Just Number Crunching* (2001).

Each vignette includes:

- questions to promote discussion;
- a research base for the content of the vignette; and
- questions to focus self-reflection.

Issue...How many assessments should contribute to my grade level of achievement judgment?

Vignette 1: Decisions, Decisions

When Mr. Brit completed his marking for the year, he smiled as he thought of his Grade 6 students. What a long way they had come together! As he read over their final science projects, he knew that all of the hard work had been worth it—all the homework, editing of writing drafts, self-reflections, and late nights writing descriptive comments to students. Sure, some students didn't always finish their homework, mistakes were made, and perhaps the final draft of Jason's story was tedious. But, as Mr. Brit began to make judgments about the grade level of achievement for his students, he needed to decide what to include. What fairly and accurately represented grade level of achievement?

Think and Discuss

- What should Mr. Brit include to determine each student's grade level of achievement?
- How should Mr. Brit deal with conflicting pieces of evidence, i.e., a student who performs well on some assignments but not as well on others?

Literature and Research Say...

Research indicates that both formative and summative assessments are useful. However, each plays a separate role in helping students learn and providing them with opportunities to perform at their best.

According to Davies (2000: 11), formative assessment is a valuable tool because learning involves taking risks and making mistakes, and then doing things differently as a result. Mistakes provide assessment evidence—they give learners feedback about what is not working and help them figure out what will work. Unless students understand that mistakes are essential for learning, they may not take necessary risks.

Continual formative assessment allows for this process. If formative assessment counts towards a mark as much as summative assessment does, students may be unwilling to take risks for fear of making mistakes that will affect their mark. As Mr. Brit reflects on his year, these issues come to mind. Formative assessment provides the learner with valuable feedback that, when properly used, makes for greater success at later stages of learning. Formative assessment provides students with on-going feedback, coaching, motivation, and encouragement to take risks.

The following illustrates the relationship between the two forms of assessment.

| Assessment for Learning (diagnostic and formative assessment) | Assessment of Learning (summative assessment) |
|---|--|
| Checks learning to decide what to do next then provides suggestions of what to do Teaching and learning are indistinguishable from assessment | Checks what has been learned to date |
| Is designed to assist educators and students in improving learning | Is designed to provide information to those not directly involved in daily learning and teaching in addition to educators and students |
| Provides continual specific and descriptive feedback as formal or informal communication | Compiles data into a single number, score, mark or comment as a formal periodic report |
| Uses ongoing assessments that focus on the full range of learner outcomes—think of a collage or photo album | Uses fewer assessments that focus on learner outcomes of enduring importance—think of a formal snapshot |
| Focuses on improvement and compares a student's current performance with his or her previous best based on the learner outcomes for a grade level | Compares a student's performance to the learner outcomes for a grade level |
| Actively involves the student as a partner in learning | May not actively involve the student as a partner in learning |
| Not used for grading purposes | Used for grading purposes |

Adapted from an unpublished document by Ruth Sutton, 2001, used with permission and published in *Refocus: Looking at Assessment for Learning*. AAC, 2005.

All assessments count, but not all assessments count towards determining marks. According to O'Connor (1999: 64), formative assessment is essential during the course of learning to help students improve and to inform teaching. Results from summative assessments provide the majority of evidence used to determine grade level of achievement. A teacher's professional judgment determines which assessments will be formative and which summative.

How many summative assessments are required to render a valid performance score throughout the year and a grade level of achievement judgment at the end of the year? The most common minimum number is 7 to 10 assessments per term should be considered to derive a mark. This will yield a judgement with a quite respectable reliability of close to if not greater than 0.8. If the judgment is to reflect an accurate estimate of what students know and can do at a particular point in time, then only evidence that reflects this culmination of learning should be used in making that determination. Because any single source of evidence can be tainted, it is best to use multiple sources, all of which the teacher can defend as accurate and unbiased. But without clear evidence on the validity and reliability of these evidence sources, there is no magic number of sources that must be met.

Self-Reflection

- How do I deal with the results from formative and summative assessments when determining a grade level of achievement?
- How can my students benefit from formative assessment? To whom should formative results be communicated?
- How can I be confident that I have a sufficient body of evidence to make a valid judgment?

Issue... On what basis should I determine Grade Level of Achievement for my students?

Vignette 2: Teacher Judgment Versus Publisher Tests

Pat Vance and Kelly Phelps are having a discussion in the staff room in early spring.

“Kelly, how are you going to determine grade level of achievement for your grade 5 students this June?”

“I have already decided to use a publisher standardized test in June and use the grade equivalent scores to determine what grade level my students have achieved” replied Kelly.

“But you know that that there is no publisher test that is truly aligned with the programs of study. And grade equivalent scores are not even remotely the same as grade level of achievement. Is that really fair to your students?” asked Pat.

“Do you have a better idea Pat?”

“Well, I have given this issue a lot of thought. Throughout the year I have used a wide variety of assessment strategies to determine what my students can do relative to the learner outcomes in the programs of Study. And I have kept careful records about what my students know and can demonstrate. I am fairly confident that all but two of my students are at a grade 5 level of achievement. The other two students have shown some progress this year, but are not ready to start the learner outcomes at the grade 6 level. I want their receiving teacher in the fall to have a clear understanding of the level of curriculum where these students can be successful so I will be giving them a grade 4 level of achievement in June.”

“Aren’t the parents going to be upset with this?” asked Kelly.

“Actually, I have kept the parents informed all year that these two students have been working towards the learner outcomes at a grade four level, and would be at a grade four level of achievement in June. They were very appreciative that I was programming for them at a level where they could be successful.”

Think and Discuss

- How would Kelly Phelps’ decision to use a standardized test impact the grade level of achievement his students would receive?
- How are Mr. Phelps’ grading practices different from Ms. Vance’s?

Literature and Research Say...

Mr. Phelps plans to use a norm-referenced approach to grading, which bases overall grades on the bell curve. Criterion-referenced grading, on the other hand, judges student achievement based on the graded programs of study.

The literature indicates that norm-referenced grading makes learning highly competitive. Students compete against one another for scarce rewards (high grades) distributed by the teacher. Mr. Phelps has allowed a norms table to predetermine the number of students who will be at grade level in the subject.

O’Connor (1999, 116) states that even for technical reasons the use of a normative approach to classroom grading is inappropriate. In order to establish a normal distribution, the sample size must be large—at least several hundred, preferably thousands.

Most publisher tests are generic, norm-referenced achievement tests. Their primary purpose is to sort and select. They can be reasonably used to identify students whose performances on generic school-related skills are well below what would be expected of most children at that age, but cannot be used to determine what grade level of curriculum a student has demonstrated.

Another major shortcoming is the lack of alignment to Alberta curriculum. For example, in most publisher tests, the mathematics subtests assess only a small component of the mandated mathematics curriculum, and do so in a format that is antithetical to the philosophy and intent of the *Western Canadian Protocol for Mathematics*.

Similar comments can be made with respect to the subtests measuring aspects of Language Arts—Spelling, Capitalization, Punctuation, and Usage and Expression. Students are expected to have competencies in these areas of curriculum to enhance their writing skills. However, student performance on multiple-choice questions does not accurately reflect actual writing skills. Results from publisher tests reflect performance of a student compared to other students, not performance relative to the graded programs of study.

One of the guiding principles of *Fair Assessment Practices for Education in Canada* is that assessments reflect the classroom situation for learning as closely as possible. Since teachers do not “teach” in a multiple-choice format, and students learn best when they are active participants in their learning, then overuse of measures of this nature is inappropriate.

The process by which the norms are developed and interpreted is also problematic. Examination of the norms tables to convert raw scores to grade equivalent scores shows, that for a given subtest, the range in converted scores covers several grade levels. Using one publisher test for example—a reading comprehension test designed for students enrolled in grade 3—the grade equivalents range from part way through kindergarten to part way through grade 6. However, there is no material on this test at the kindergarten level, nor at the grade six level. In fact, the material included in this test is primarily at grade three. Furthermore, if a student enrolled in grade three achieves a grade equivalent of “6.3” on the reading subtest, it actually means that the student is reading grade three material as well as a student in the third month of grade six would read grade three material. It says nothing about whether the student could successfully read material at a grade six level.

Another problem with using grade equivalent scores is the fact that if a student answers two or three more questions correctly, the grade equivalent score can jump as much as a whole grade. This is particularly evident at the bottom and top ends of the norms table.

With publisher tests only a small number of raw scores on the norms table convert to grade equivalents that are within the grade level range for which a particular test level was designed. Using the percentile scores, one can determine that only 30 to 40 per cent of the students enrolled in a given grade would achieve grade equivalent scores within their enrolment grade range. This does not accurately reflect the real-life situation where the majority of students in a regular class can demonstrate a grade level of achievement that is commensurate with their enrollment grade. For all the reasons specified above, results from a standardized test CANNOT be used to determine grade level of achievement.

Self-Reflection

- What role does the program of studies play in my determination of a student's grade level of achievement?
- Why is criterion-referenced grading a better practice than the bell curve?
- How can I be sure that the assessments I have used all year long will provide me with evidence to make a reliable and valid grade level of achievement judgment?

Issue...On what basis do I determine grade level of achievement for students who are achieving beyond enrolment grade?

Vignette 3: What grade level of achievement do we report?

Sally Brown, a grade three teacher, has come into the staffroom for some advice from Natasha Shamji, a veteran grade 4 teacher whom she respects a great deal.

"I have a student in my classroom named Dale who consistently performs at the standard of excellence in mathematics, and I am worried that he will become bored."

"Have you been providing him with enrichment activities to deepen his understanding of the grade 3 mathematics curriculum, Sally?"

"Yes, I have, Natasha, but he sails through these as well, and I need some advice on how to keep this student challenged."

"It sounds to me as if Dale is ready to challenge the grade 4 curriculum in mathematics. Can you differentiate your instruction for Dale so that he will continue to be challenged and will have the opportunity to demonstrate a grade 4 level of achievement at the end of this school year?"

"That sounds like the best idea for Dale. Can I get some assistance from you in interpreting the standards of the grade 4 curriculum as I work with Dale?"

“I would be happy to share my assessments and exemplars with you. When Dale gets to my grade 4 classroom next fall, I will need to differentiate my instruction as well to meet his needs.”

Think and Discuss

- How does my classroom practice impact the grade level of achievement I assign to students?
- What evidence would I need to collect to support a grade level of achievement above the age cohort?

Literature and Research Say...

Sally Brown has made a decision to use vertical enrichment for Dale. He will remain in a class with his age cohort but she will program for him at a grade level of curriculum that is above his enrolment grade. Rogers and Kimpston (1992) indicate that

“Intellectually gifted and talented students are able to learn material rapidly and understand concepts deeply. Keeping them challenged and learning to their capacity can require changes in their regular school programs. Sometimes, gifted youngsters may be so advanced in knowledge and so clearly operating at an intellectual level beyond that of their same age peers that educational acceleration is a realistic and desirable alternative to normal grade-level work.”

The decision to accelerate must be made on an individual basis, taking into account the child’s intellectual, social and emotional needs. The decision should involve the school, the parents and most importantly the child.

In a study of mathematically precocious youth, as reported by Brody and Benbow (1987), hundreds of students were assessed as to the effects of acceleration on academic success and social and emotional adjustment. “This study did not reveal any harmful effects as a result of acceleration.”

Self-Reflection

- What role does the program of studies play in determining grade level of achievement?
- How do I determine if horizontal or vertical enrichment is the most appropriate strategy?
- How could I set up opportunities for differentiated learning to enable students to demonstrate understanding at a grade level above the age cohort?

Issue...What factors should be considered in determining a mark or a grade level of achievement?

Vignette 4: What Counts?

During parent-teacher interview week in November, Principal Svoboda receives a visit from Mr. Sanchez, the parent of one of her grade four students. Mr. Sanchez is unhappy about one aspect of the interview that just occurred with his child's teacher. He is concerned about his child's language arts grade. In previous years, his son, Juan, had always received marks at the acceptable standard in language arts.

This term Juan received a mark of "D". Mr. Sanchez and Juan were confused by the report card mark, since the work that Juan had brought home had been judged as acceptable. Mr. Sanchez had asked Juan's teacher to clarify how the mark was determined. The teacher explained that, while Juan had been producing acceptable work, he had deducted marks because Juan "just doesn't listen during instruction." Mr. Sanchez felt that the "D" mark didn't reflect how Juan had been performing against the expectations of the programs of study and was in fact misleading, so he had come to the principal to seek clarification on the school's grading policy. Mr. Sanchez is also concerned that at the end of the year, Juan will not be judged at a grade four level of achievement.

Think and Discuss

- What should count in determining a mark or a grade level of achievement?
- What should not count?

Literature and Research Say...

The literature consistently asserts that the only factors to consider in determining a mark are indicators of individual performance against the learner outcomes of the programs of study. Work habits, effort, and other non-achievement factors do contribute to students' achieving learner outcomes and usually have a positive impact on the quality of student performance. However, including these factors in the calculation of the student's mark, or grade level of achievement blurs the meaning and should not be done according to grading and reporting writers including O'Connor, Guskey, Stiggins, McTighe, and Wiggins.

Some teachers argue that giving marks for non-achievement factors helps motivate and control students. Studies show that most students view high marks as positive recognition of their success, and some students work hard to avoid the consequences of low marks. However, there are no studies that support the use of low marks as punishment for low academic performance. Instead of promoting greater effort, low marks more often cause students to withdraw from learning (Guskey and Bailey, 2001: 34-35).

According to McTighe, (as cited in AAC, 1999: 21) reporting documents should distinguish between the following factors:

- **achievement**—performance relative to identified learner outcomes based on collected evidence and judged against established criteria (based on summative data)
- **performance**—degree of growth toward mastery of the learner outcomes,
- **work habits**—includes effort, completion of assignments, behavior and attendance

The performance mark and grade level of achievement indicated for individual courses takes into account what the student has demonstrated in relation to the learner outcomes. Information about work habits, participation, completion of assignments and attendance needs to be reported separately from grade level of achievement.

Self-Reflection

- What role do achievement and non-achievement factors play in how I determine a performance mark and a grade level of achievement?
- How do I control and motivate my students if I don't use marks as a deterrent or as an incentive?

Issue...How do I justify that my grade level of achievement judgments are fair and accurate?

Vignette 5: Ryan's Impending Doom!

Ryan began the school year nervous about his prospects for success in grade nine mathematics. He had never been a very successful mathematics student. His teacher, Ms. Wong, was an excellent mentor and she made every attempt to help Ryan cope with his insecurities. During the first four weeks of the year Ryan did not do very well.

Ms. Wong took a look at Ryan's report card from the previous June. She determined that there were significant grade eight mathematics skill deficits that had been documented by Ryan's previous teacher. Ms. Wong realized that before Ryan could be successful on grade nine learner outcomes, these skill deficits had to be addressed. Her intervention strategies caused Ryan's skills and confidence to improve, and by mid-year, Ryan was finding success in the grade nine mathematics curriculum.

At the end of the school year, Ms. Wong took a careful look at all the performance marks that Ryan had accumulated during the course of the year. She realized that if she used all the summative assessment results for this student from throughout the year, Ryan would not have achieved a passing mark. This would have left him feeling completely defeated, even though he had worked diligently throughout the year.

Ms. Wong made the decision to use only the more recent evidence of what Ryan was capable of demonstrating against the grade 9 mathematics learner outcomes. Using her professional judgment, she indicated that Ryan had achieved a grade nine level of achievement at the acceptable level by using the most current information she had about Ryan's performance and achievement.

Think and Discuss

- How accurately did Ryan's final mark reflect his achievement?
- If Ms. Wong had used all the summative data for the year, how would the final mark affect Ryan's self-perception as a learner?
- What data best reflects student achievement?

Literature and Research Say...

The use of all evaluation data is relevant in determining a student's grade. As Davies (2000: 68) states, "to evaluate well, we should look at all the evidence—observations, products, and conversations. We can then use this evidence to determine whether the student has met the widely held expectations for his or her age." However, while all the evaluation data should be considered, is it practical to use all the data to calculate a student's mark? O'Connor (1999: 71) believes that only the most recent data gathered from a student should be used to calculate a mark, because "... students then get full credit for their improvement rather than a score based on artificial manipulation of numbers."

Marks based on a student's highest, most consistent level of performance will usually be his or her most recent performance. These marks will demonstrate what the student has actually achieved in relation to the learner outcomes in the programs of study. In Ryan's case this would have meant that only those marks that truly represented what he could demonstrate against the knowledge and skills of the grade nine mathematics curriculum would be counted.

Guskey (1996) affirms O'Connor's position on the issue of what information provides the most accurate description of students' learning. If students demonstrate that past assessment information no longer accurately reflects their learning, then the past information must be de-emphasized or dropped and replaced by the new information. Continuing to rely on past assessment data represents a miscommunication of students' learning. Thus, using the most recent data to determine a student's mark appears to be an optimal practice.

The same principle can be applied to the teacher's decision to eliminate specific pieces of data when calculating students' marks. If the result from a specific assignment or test is an aberration from the rest of a student's marks, should it be counted in the final grade calculation? Ms. Wong had been able, on the basis of professional judgment, to eliminate specific assignment marks or test scores from Ryan's final grade calculation, and thereby have the results better reflect Ryan's achievement in mathematics.

Self-Reflection

- How can I ensure that what I report includes data reflective of the student's true performance?
- How do I deal with situations where a student's performance against curriculum declines as the year progresses?

Putting It into Practice

An Elementary School's Story

“What do you think this means on this report card?” This was the question that a teacher asked of me. It was my first year as the principal at the school and I suggested we speak to the teacher who had assigned the mark. However, this was not possible because that teacher was no longer teaching at the school. So we were left with a check mark on the line between “meets the learner outcome” and “meets the learner outcome with support”.

As it happened, this was not the only teacher who posed the same question. As a staff we realized we were not clear about what our report cards were communicating to parents about their children's learning. We also realized we needed to address this as a staff because as professionals we were not clear about the basis for communicating grade level of achievement or performance level against the graded programs of study.

The questions we needed to answer included:

- How do we as a staff come to know and understand the graded programs of study?
- What assessment strategies do we use to determine grade level of achievement against the programs of study?
- How do we assess level of performance in a consistent manner, and how does that inform programming?

We began our professional conversations by looking at the programs of study. We examined the learner outcomes for each grade and looked at samples of student work to determine the grade level we would assign to the work as well as the performance level we would assign. This was not a one day professional development activity, but a process we engaged in during the months leading up to our first report cards. We needed to ensure that the reporting format we used allowed for clear communication.

There was still a great deal of work to be done as we realized that our assessment of students needed to support their learning and not just give a summative evaluation. We embarked on a professional development plan that would give us the skills to effectively provide feedback to our students and would engage them more in their learning. We knew that we needed to enhance our skills in using assessment **for** learning. Using the learner outcomes, we developed assessments that would ensure our lesson plans would be focused on what the students were expected to learn and demonstrate. We collected exemplars which showed the performance levels for the learner outcomes. In collaboration with students, we developed criteria that would enable them to know what they were expected to learn and which focused our feedback to them. Students used the criteria to reflect on their personal learning as well as to give feedback to their peers.

Staff adopted the principles of “Understanding by Design” (Wiggins and McTighe, 2005) to ensure programming was consistently aligned with the learner outcomes. Assessment **for** learning strategies were used as a basis for strengthening the connection between teaching and learning, and for creating a strong relationship between students and teachers, so students knew and understood how to meet learner outcomes. Teachers gathered insights into where students needed support and where they could be challenged. Evidence of learning went home to parents so they too understood what their child was expected to learn and the criteria for assessing the quality of learning within the grade level of instruction.

The process of knowing what learning looks like at each grade level and having exemplars as a reference for students, parents and staff enhanced staff confidence. Staff unanimously agreed that reporting student learning, with a clear understanding of grade level of achievement (i.e., what it looks like using criteria and exemplars for performance levels), brought a high degree of integrity to their assessment and communication of student learning. Reports cards provided consistent and valuable information about student learning for parents and assisted receiving teachers in providing programming for students. Students understood themselves more as learners and were meaningfully engaged in assessing and taking responsibility for their learning.

As a staff we continue to develop our expertise in assessing and knowing the learning needs of our students against the graded programs of study, and in reporting their learning. Our increased understanding of grade level of achievement and assessing performance levels contributes to the quality programming we are committed to providing our students. Students know where they are in their learning and where they are going because of enhanced teacher knowledge of grade level expectations and how to enable students to successfully achieve them. The beginning of a strong learning community was created when we asked ourselves the question, “What do you think this means on this report card?” Great questions make for even greater learning!

A Junior High School’s Story

The staff at our junior high school, serving approximately 700 students, has been involved in a journey of learning and teaching. The focus and impetus for the learning came about as a result of a provincial initiative requiring teachers to articulate a grade level of achievement for core courses of study for each student at the end of the school year. The teaching came about and continues as the school’s leadership staff works with teachers to not only implement the initiative, but to understand the inherent implications for programming for our students.

The notion of “grade level of achievement” was not new for staff but as we journeyed to implement the requirement it became evident that there was not a common understanding of what was meant or needed. To support this work, school leadership staff and teachers were invited to attend a district training session focused on reviewing each school’s data related to marks and grade levels of achievement assigned by teachers the previous June. We were also provided with samples of “course histories” of some sample students. To frame the session, information from the Teaching Quality Standard (TQS), the *Guide to Education*, as well as district reporting polices were provided and reviewed.

In working with the group from our school I was surprised by the reaction to some of the documents provided. Comments included “I’ve never seen this before,” “I didn’t know we had to do this,” and “Now I’m beginning to understand what we are doing and why.” As this was only my second year at the school as principal, I was fascinated and surprised. I realized that even though I was sure the staff had seen these various documents, they had not been contextualized. Nor did the staff understand the significance of certain aspects of these documents in relation to their work.

The school team worked hard to understand the messages provided at the training session and then established a plan to work with the rest of the staff at our school. We decided that it was critical for all staff to have the same “frame of information” that we were presented with at the training session. Our goal was to share the information in a way that would inform, but not overwhelm the staff. We also decided it was critical to establish next steps for all staff.

As the principal, it was important for me to have the teachers who came with me to the training take the lead in sharing the information. I knew that the team I had brought with me had growing confidence in understanding and applying the information and I knew their leadership in the next steps was critical in establishing successful implementation.

Our next steps involved sharing the information with the leadership team at the school. It was believed that this group would need to have an in-depth understanding of the requirement and also have an opportunity to reflect on the information prior to sharing with the entire staff. It was also critical that we identify the students at our school that had an enrolment grade that differed from the reported grade level of achievement. We also worked to identify students who were reported at grade level (enrolment grade and grade level of achievement were the same) but had received a teacher awarded mark of less than 50% (had not demonstrated acceptable standard.)

The assistant principal ran course histories for all students within the school. These were reviewed to identify our target group. Complete profiles of the identified group were then prepared for review.

The two teachers who had participated in the original training met with the assistant principal to look at these profiles and determine next steps. A leadership meeting was called and information was shared. The leadership team wanted to know what was expected next.

- What was the implication for teaching and learning right now?
- What would the process be to share the information with other staff?
- What would we have to do differently at year end?

The team willingly accepted the mandate and the requirements for the task. In reviewing course histories they were able to begin to put faces to the group of students we were talking about and for whom we were going to have to program differently. The team decided the next step was to share the information with the entire staff to consider the implications of this information prior to report cards going out in mid March. The team also decided that another step was to ensure that for students for whom programming was at a different grade level than their enrolment grade, calls to parent would be made and the grade level at which the student was receiving programming would be communicated.

At report card time there were many questions. Staff was nervous about students who were not at grade level and those that were, but were failing. It became increasingly clear to staff that the issue was not one of just reporting a grade level of achievement, but one of programming. Questions related to how to do this in social studies and science, and how to access different resources became topics of discussion.

In an effort to support staff growth, we advised teachers to continue to program so that students could achieve some success. We knew that it was critical to establish a process so that we would know in June which student's enrolment grade and grade level of achievement did not match as a result of our judgments, and which students had a teacher-awarded performance mark less than 50%. All staff committed to recording these anomalies on a class list. We also ran low mark scores and grade level reports to cross reference our records.

At our first staff meeting in September all teachers were provided a list, by course and grade, of students who had enrolment grades and grade levels of achievement that were different, as well as a list of students who had achieved a mark that was less than 50%. The name of the previous teacher was also provided because this individual knew more about that student's achievement in that course than anyone else. Staff was advised that, for this school year, programming for this group would be at the appropriate grade level to ensure success. Staff was encouraged to access their subject

leaders for support and if needed, district consultants could be accessed to support programming.

Next steps at our school will include continual tracking of student success and failure. Discussions around programming for success will become part of team meetings. Staff will be asked to share success stories and strategies as the year progresses. Another district training session focused on using our school data will occur in October.

We believe we will be affirmed in our direction and in the steps our school staff has taken in their learning, their teaching and implementation of this work.

Practical Resources

The following resources can be used to assist teachers in determining a student's grade level of achievement. These resources provide descriptions and/or examples of student work that represent achievement of grade level expectations. None of these tools should be used as the sole determiner of a student's grade level of achievement.

1. Programs of Study

http://www.education.gov.ab.ca/k_12/curriculum/

2. Individualized Program Plans

http://www.education.gov.ab.ca/k_12/specialneeds/ipp.asp

3. Information Bulletins for Provincial Achievement Tests

At grades 3, 6 and 9, Learner Assessment provides Information Bulletins each year that describe “what it looks like” for students to be at the acceptable standard or the standard of excellence in subject areas that are assessed by the provincial tests.

4. Alberta Assessment Consortium (AAC) Performance Tasks and Exemplars

A wide variety of performance tasks, many including student exemplars, are available on the AAC website. These tasks provide a clear indication of the expectations of curriculum at all grade levels, and the student exemplars provide a resource that enables teachers to see what constitutes acceptable work at a specific grade level. For further information about AAC resources and membership in the consortium call 780-447-9420.

<http://www.aac.ab.ca>

5. Assessment Resources Developed by Alberta School Districts

Example: *Highest Level of Achievement Test Teacher Resource for Writing* (Edmonton School District No. 7) This resource provides exemplars of student writing from “not yet grade 1” to grade 12 at four levels of performance—limited, adequate, proficient, and excellent. For further information contact the district's Student Assessment Branch, 780-429-8353.

6. Alberta Education Curriculum Handbooks for Parents

This resource provides parents with the “flavour” of each of the general outcomes, and was prepared with the caveat of choosing outcomes using “parent friendly” language. This document in no way represents the entire programs of study.

7. **Writing Samples from the Alberta Education website**
http://www.education.gov.ab.ca/k_12/testing/achievement/samples/default.asp
8. **Rethinking Classroom Assessment with Purpose in Mind**
<http://www.edu.gov.mb.ca/k12/assess/wncp/index.html>

APPENDICES

EXCERPTS FROM THE PRINCIPLES FOR FAIR STUDENT ASSESSMENT PRACTICES FOR EDUCATION IN CANADA²

This resource defines principles pertinent to the implementation of grade level of achievement reporting. The following are excerpts from the text of the *Principles*.

The *Principles for Fair Student Assessment Practices for Education in Canada* contains a set of principles and related guidelines generally accepted by professional organizations as indicative of fair assessment practice within the Canadian educational context. Assessments depend on professional judgment; the principles and related guidelines presented in this document identify the issues to consider in exercising this professional judgment and in striving for the fair and equitable assessment of all students.

Based on the conceptual framework provided in the *Standards for Teacher Competence in Educational Assessment of Students* (1990), it is organized around five interrelated themes:

- I. Developing and Choosing Methods for Assessment
- II. Collecting Assessment Information
- III. Judging and Scoring Student Performance
- IV. Summarizing and Interpreting Results
- V. Reporting Assessment Findings

II. Collecting Assessment Information

Students should be provided with a sufficient opportunity to demonstrate the knowledge, skills, attitudes, or behaviors being assessed.

Assessment information can be collected in a variety of ways.

² To access the full text of the Principles for Fair Student Assessment Practices for Education in Canada, see <http://www.education.ualberta.ca/educ/psych/crame/research.htm>

1. Students should be told why assessment information is being collected and how this information will be used.

Students who know the purpose of an assessment are in a position to respond in a manner that will provide information relevant to that purpose. For example, if students know that the purpose is to assign a grade, they are well advised to respond in a way that will maximize strength. This is especially true for assessment methods that allow students to make choices, such as with optional writing assignments or research projects.

IV. Summarizing and Interpreting Results

Procedures for summarizing and interpreting assessment results should yield accurate and informative representations of a student's performance in relation to the goals and objectives of instruction for the reporting period.

Summarizing and interpreting results refers to the procedures used to combine assessment results in the form of summary comments and grades which indicate both a student's level of performance and the valuing of that performance.

2. The way in which summary comments and grades are formulated and interpreted should be explained to students and their parents/guardians.

Students and their parents/guardians have the “right-to-know” how student performance is summarized and interpreted. With this information, they can make constructive use of the findings and fully review the assessment procedures followed. It should be noted that some aspects of summarizing and interpreting are based upon a teacher's best judgment of what is good or appropriate. This judgment is derived from training and experience and may be difficult to describe specifically in advance. In such circumstances, examples might be used to show how summary comments and grades were formulated and interpreted.

3. The individual results used and the process followed in deriving summary comments and grades should be described in sufficient detail so that the meaning of a summary comment or grade is clear.

Summary comments and grades are best interpreted in the light of an adequate description of the results upon which they are based, the relative emphasis given to each result, and the process followed to combine the results. Many assessments conducted during a reporting period are of a formative nature. The intent of these assessments (e.g., informal observations, quizzes, text-and-curriculum embedded questions, oral questioning) is to inform decisions regarding daily learning, and to inform or otherwise refine the instructional sequence. Other assessments are of a summative nature. It is the summative assessments that should be considered when formulating and interpreting summary comments and grades for the reporting period.

7. Combining disparate kinds of results into a single summary should be done cautiously.

To the extent possible, achievement, effort, participation, and other behaviors should be graded separately.

A single comment or grade cannot adequately serve all functions. For example, letter grades used to summarize achievement are most meaningful when they represent only achievement. When they include other aspects of student performance such as effort, amount (as opposed to quality) of work completed, neatness, class participation, personal conduct, or punctuality, not only do they lose their meaningfulness as a measure of achievement, but they also suppress information concerning other important aspects of learning and invite inequities.

LEGAL RESPONSIBILITIES

The *School Act* defines specific roles for principals and teachers.

The role of the principal is to:

- “evaluate or provide for the evaluation of programs offered in the school” (*School Act*, 2000 cS-3 s20(c));
- “ensure that students in the school have the opportunity to meet the standards of education” (*School Act*, 2000 cS-3 s20(d)); and to
- “supervise the evaluation and advancement of students” (*School Act*, 2000 cS-3 s20(h))

The role of the teacher is to:

- “teach the courses of study and education programs that are prescribed, approved or authorized pursuant to this Act (*School Act*, 2000 cS-3 s18(b));
- “promote goals and standards applicable to the provision of education adopted or approved pursuant to this Act” (*School Act*, 2000 cS-3 s18©);
- “regularly evaluate students and periodically report the results of the evaluation to the students, the students' parents and the board” (*School Act*, 2000 cS-3 s18(e));
- ensure that students know what is expected of them; and
- establish clear and fair criteria and standards (with student involvement when appropriate)

In July 1996 Alberta Education enacted a policy titled *Assessment as the Basis for Communicating Individual Student Achievement* that was to serve as the basis for reporting a grade level of achievement for students enrolled in grades one through nine.

The policy was intended to reduce the confusion between “grade” as an enrollment designation and “grade” as a level of achievement, and to support the professional responsibilities of teachers to provide clear communication in describing student learning.

“Teachers shall ensure that information is effectively communicated to parents about:

- **what their child knows and can do in the courses being studied**
- **how well their child is doing in those courses**
- **the grade level(s) the child has achieved in relation to the grade levels of the provincial programs of study for language arts, mathematics, science and social studies.**

The provision does not restrict the communicating of achievement to written reports, nor does it require schools to use a particular type of instructional grouping or placement policy.

Teachers must communicate the grade levels at which they judge students to be working, in at least the four specified subject areas of the curriculum. The basis for their professional judgment in these matters also needs to be clear so that students and parents can readily understand how student learning has been assessed.

Principals determine how to implement this provision, in consultation with teachers, parents and school councils and in a manner consistent with any related jurisdiction policies. The communication can take place in a wide variety of ways, including parent–teacher conferences, assessment portfolios, report cards or student work samples. An Individualized Program Plan (IPP) is a method often used by teachers when there is a gap between a student’s level of achievement and that student’s enrolled grade. Whatever methods are chosen for implementing this provision, often face-to-face methods are the most successful for achieving clear and open communication.”

“All assessment information should be shared, not only with parents, but also with students when it is in the students’ best interest to do so. Communicating with students about their levels of achievement is particularly important when students are planning their future courses and making program choices.”

Source: Assessment as the Basis for Communicating Individual Student Achievement (*Guide to Education: ECS to Grade 12*) 2006 ©Alberta Education, Alberta, Canada.

Pursuant to Section 39(1)(f) of the *School Act*, 2000 cS-3, *the Minister may do the following:*
by order adopt or approve goals and standards applicable to the provision of education in Alberta.

In May 1997 the *Teaching Quality Standard Applicable to the Provision of Basic Education in Alberta, Directive 4.2.1* was approved by the provincial legislature.

“Teachers gather and use information about students’ learning needs and progress.

Teachers

1. Monitor students’ actions on an ongoing basis to determine and respond to their learning needs.
2. Use a variety of diagnostic methods that include observing students’ activities, analyzing students’ learning difficulties and strengths, and interpreting the results of assessments and information provided by students, their parents, colleagues and other professionals.

Appendix II (continued)

3. Select and develop a variety of classroom assessment strategies and instruments to assess the full range of learning objectives.
4. Differentiate between classroom and large-scale instruments, such as provincial achievement tests, administer both and use the results for the ultimate benefit of students.
5. Record, interpret and use the results of their assessments to modify their teaching practices and students' learning activities.
6. Help students, parents and other educators interpret and understand the results of diagnoses and assessments, and the implications for students.
7. Help students develop the ability to diagnose their own learning needs and to assess their progress toward learning goals.”

These three pieces of legislation and the related Student Evaluation Policy 2.1.2., the Student Evaluation Regulation, and the Student Record Regulation are the legislative basis on which teachers, administrators and school boards assess, evaluate and communicate student learning. For additional information see the Alberta Education Policy, Regulations and Forms manual @ <http://www.education.gov.ab.ca/educationguide/pol-plan/polregs/toc.asp>.

PROGRAMS OF STUDY

Programs of study are legal documents, approved by the Minister of Education, mandatory for use in schools offering the particular program. The development of programs of study is guided by provincial standards and processes. They are intended to set grade appropriate learner outcomes and high standards for all Alberta students.

Structure

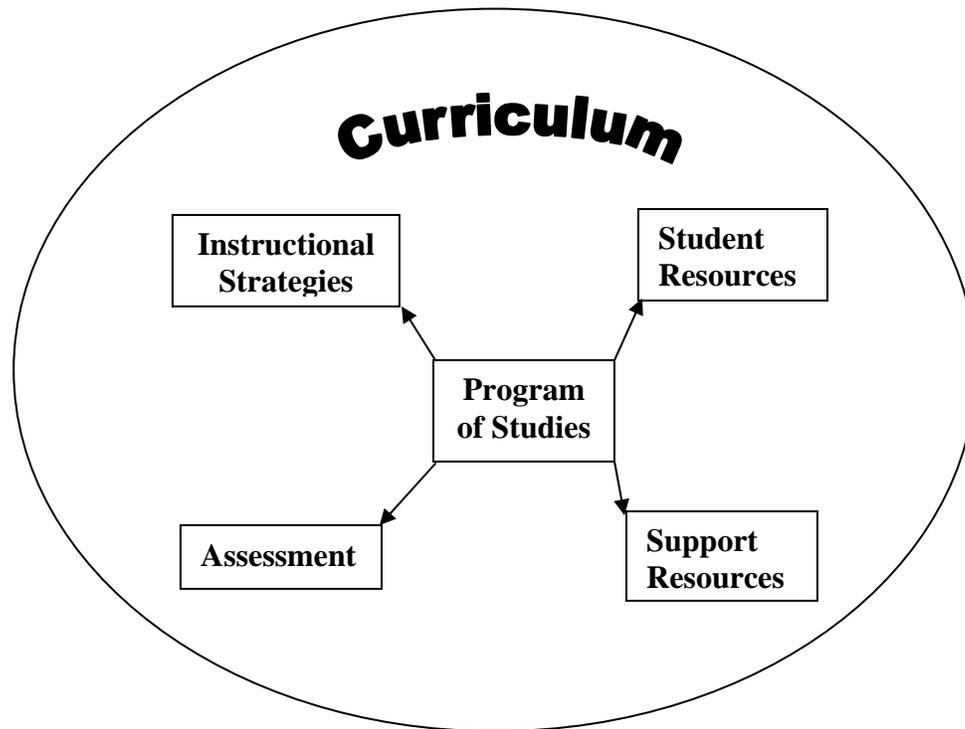
Programs of study must be considered as a unified whole. Parts cannot be considered in isolation. The rationale, philosophy and outcomes within a grade level and across grade levels provide important contexts for interpreting a particular outcome.

Programs of study often begin with a rationale and philosophy that outline why the program is offered and why it is important. Following the rationale and philosophy are outcomes that provide statements of what students are expected to know (knowledge outcomes), be able to do (skill outcomes), or are encouraged to develop (attitude outcomes) in a subject at a grade or level.

Programs of study consist of two types of learner outcomes, general and specific. General outcomes are the broad, overarching statements while specific outcomes provide more detailed descriptions that give shape to the general learner outcomes students should be expected to develop.

Different programs of study will provide additional methods to present the material in an organization that suits the discipline. An example of this is the new Alberta Kindergarten to Grade 12 Social Studies Program of Studies. This is organized around the core concepts of citizenship and identity. The relationship between citizenship and identity forms the basis for skills and learner outcomes in the Program of Studies. Six interconnected strands reflect the interdisciplinary nature of social studies and constitute the basis for the learner outcomes.

School authorities and jurisdictions use programs of study to ensure that students meet provincial standards of achievement. As the diagram below demonstrates, all aspects of curriculum and instruction are designed to support students in meeting the outcomes in the programs of study.



Some of the ways programs of study discern age appropriate knowledge, skill and attitude outcomes is by varying the following qualities:

- Degree of abstraction
 - Science Grade 3: Describe the distinctive properties of some common solids, such as wood, paper or plastic, that make them suitable for use as building materials
 - Science Grade 4: Predict how changes in the size of a lever or the position of the fulcrum will affect the forces and movements involved
 - Science Grade 5: Apply an understanding of circuits to the construction and control of motorized devices
- Cognitive Complexity
 - Mathematics Grade 3: Collect first-hand data and organize it using tally marks, line plots, charts and lists, to solve problems.
 - Mathematics Grade 6: Select, justify and use appropriate methods of collecting data including questionnaires, experiments, databases and electronic media.

- Logical sequence
 - Social Studies Kindergarten: Students will value their unique characteristics, gifts and talents
 - Social Studies Grade 6: Students will recognize and respect the democratic rights of all citizens in Canada
 - Social Studies 30-1: Students will appreciate various perspectives regarding identity and ideology

- Degree of independence in skill development
 - ELA Grade 1: participate in shared listening, reading and viewing experiences ...
 - ELA Grade 2: engage in a variety of shared and independent listening, reading, and viewing experiences ...
 - ELA Grade 3: choose a variety of oral, print and other media texts for shared and independent listening, reading and viewing experiences ...

Assessing student work in relation to curriculum standards.

Outcomes from the programs of study are the basis for assessment. Outcomes based programs of study describe what knowledge, skills and attitudes student should be able to demonstrate. Therefore student assessment, both formative and summative, is essential since only through assessment can a teacher determine what a student needs in order to achieve an outcome; and, only through assessment can a teacher “sign-off” on an outcome as being achieved by a student. A teacher cannot account for meeting the requirements of an outcomes based curriculum by reporting “input” in the form of teaching and learning activities. They can only be accountable by reporting “output” in the form of student performance.

It is essential for a teacher to know the curriculum outcomes for his or her grade, and the grades above and below. Outcomes are carefully worded to give a clear description of what is expected, but in order for teachers to be able to describe different levels of proficiency, they should work with colleagues to develop common understandings about these curriculum outcomes. Illustrative examples, exemplars, the use of common assessments and collaborative marking with high quality rubrics all help to develop this common understanding of grade level expectations for curriculum outcomes. As well, Provincial Achievement Tests and Diploma exams are excellent resources for establishing relative benchmarks for student performance or outcomes that can be assessed by a paper and pencil test.

Learning and Teaching Resources

Alberta Education produces and authorizes learning and teaching resources that assist teachers in developing a common understanding of learner outcomes, in determining appropriate levels of student performance and in supporting student learning.

Guides to Implementation are developed by Alberta Education for most new programs of study and provide grade appropriate information on:

- Breadth and depth of topic exploration
- Reading difficulty
- Learning activities and exercises
- Extension activities
- Instructional strategies
- Assessment tools
- Student exemplars
- Illustrative examples
- Background information
- Student misconceptions

Alberta Education is currently moving into online guides that provide support for those outcomes that are new or most difficult. For instance, in Social Studies, the online guide features outcomes related to the First Nations, Métis and Inuit (FNMI) and Francophone perspectives, and the concepts of identity and diversity. The Knowledge and Employability Studio supports both teachers and students with print, audio and video exemplars.

Authorized Learning Resources provide age-appropriate context for the program of studies. Student and teacher resources selected from publishers and classified as Basic Resources must support 80% of the program of studies. Occasionally, resources are developed specifically for a new course (e.g., Science 7–12 and Social Studies K–12). These resources exceed 95% alignment with the programs of study.

PROGRAMMING FOR DIFFERENTIATED INSTRUCTION

Key Characteristics of a Differentiated Classroom

An obvious feature of the differentiated classroom is that it is student centered. Shifting the emphasis from the “teacher and instruction” focus to the “student and learning” focus means redefining the role of the teacher.

Many of us learned to teach with sort of a frontal approach to teaching, where the teacher stands in front of the students. The teacher tells and the students listen. Where the teacher really is the provider of information, it follows then, that the teacher is supposed to have all of the answers.

In a differentiated classroom, a teacher’s role shifts. The teacher becomes a facilitator of time and space, an assessor of students, a person who helps kids learn to plan and learn to assess the effectiveness of their planning. Someone said once that a teacher in a differentiated class or in a student-centered class is no longer the sage on the stage but rather the guide on the side. And it’s really kind of a nice role shift for teachers, but one that takes a little while to get used to.

As a teacher, you can use numerous strategies and tools to differentiate instruction and assessment. Regardless of the specific combination of techniques you might choose, there are several key characteristics or elements that form the foundation of effective differentiated learning environments:

- Teachers and students accept and respect one another’s similarities and differences.
- Assessment for learning is an ongoing activity that guides instruction. Learning tasks are planned and adjusted based on assessment data.
- All students participate in respectful work—work that is challenging, meaningful, interesting, and engaging.
- The teacher is primarily a coordinator of time, space, and activities rather than a provider of information. The aim is to help students become self-reliant learners.
- Students and teachers collaborate in setting class and individual goals.
- Students work in a variety of group configurations, as well as independently. Flexible grouping is evident.
- Time is used flexibly in the sense that pacing is varied based on student needs.
- Students often have choices about topics they wish to study, ways they want to work, and how they want to demonstrate their learning.

Appendix IV (continued)

- The teacher uses a variety of instructional strategies to help target instruction to student needs.
- Students are assessed in multiple ways, and each student's progress is measured at least in part from where that student begins.

Benefits

Teachers report a variety of benefits they have seen after shifting from the traditional “one-size-fits-all” approach to a differentiated one.

The ultimate reward in differentiation is twofold. Successful learning occurs for students who have previously gone under-challenged or over-challenged. Also, it makes teachers feel more like creative professionals.

Strategies for Managing a Differentiated Classroom

Among instructional strategies that can help teachers manage differentiation and help students find a good learning “fit” are the following:

- use of multiple texts and supplementary resources;
- use of computer programs;
- use of learning centers;
- use of learning contracts;
- tasks and products designed with a multiple intelligence orientation;
- independent learning contracts;
- group investigation;
- criteria developed jointly by student and teacher;
- graduated task and product rubrics.

Teachers moving toward differentiated instruction in an inclusive classroom find greater success if they:

- have a clear rationale for differentiation,
- prepare students and parents for a differentiated classroom,
- attend to issues of classroom structure and management as they move toward more student-centered learning,
- move toward differentiation at a pace comfortable to both teacher and learners, and
- plan with team members and other colleagues interested in differentiation

Adapted from Tomlinson, 1995

Using Assistive Technology for Learning (ATL) Tools to Support Student Learning

Assistive Technology for Learning (ATL) is defined as the **devices, media and services** used in learning environments to overcome barriers for students with physical, sensory, cognitive, speech, learning or behavioural special needs to actively engage in learning and to achieve their individual learning goals. ATL is a subset of a broad range of technologies that enhance children's learning. ATL assists students in performing functions that would otherwise be difficult or impossible to accomplish independently and is directly related to educational delivery of the learner outcomes in the Alberta *Program of Studies*.

Areas where assistive technology for learning may positively impact a student's success in learning include but are not exclusive to:

- printing and handwriting
- reading
- writing
- studying
- Math.
- computer access
- vision
- hearing
- communication

A continuum of low-tech, mid-tech and high-tech options should be considered when developing a system for a student with these needs and abilities to access and demonstrate their learning.

A list of potential ATL tools, such as the ones below, can help teams to explore the use of ATL in ways that may allow students to engage in and demonstrate their learning more effectively or in ways that would not be possible without this technology. Tools are listed from simpler to more complex.

Reading

- Changes in text size/space/colour/background colour
- Use of pictures with text
- Talking electronic devices for single words
- Scan and Read/Text to Speech Software
- Electronic books

Organizing and Studying

- Print or picture schedules
- Low-tech aids to find materials (e.g., colour tabs, coloured paper or folders)
- Highlight text (e.g., markers, highlight tape, ruler)
- Voice output reminders for tasks, assignments, steps to tasks
- Software for manipulation of objects/concept development – may use alternate access method such as Touch Screen
- Software for organizing ideas and studying
- Hand-held devices with scheduling software (e.g., Palm)

Mathematics

- Abacus, math line
- Calculator/calculator with printout
- Talking calculator
- Onscreen calculator
- Software with cueing for math computations
- Tactile/voice output measuring devices
- Software that provides onscreen manipulation
- Math processing software

Printing and Handwriting

- Variety of pencils and pens
- Pencils with adaptive grips
- Adapted paper (e.g., raised lines or highlighted lines)
- Slant board
- Prewritten words or phrases
- Templates
- Portable word processor
- Computer with word processor

Spelling and Writing

- Word cards, word book, word wall
- Pocket dictionary, thesaurus
- Electronic dictionary/spell checker
- Word processor with spell check and grammar check
- Talking word processor
- Software with talking spell checker
- Word prediction software to facilitate spelling and sentence construction
- Multimedia software for production of ideas
- Voice recognition software

Alternative Computer Access

- Keyboard with accessibility options
- Keyguard
- Alternative keyboard
- Dowel, mouth stick, headpointer with keyboard
- Word prediction, abbreviation/expansion to reduce keystrokes
- Alternative mouse (e.g., touchscreen, trackball, trackpad, joystick)
- Onscreen keyboard
- Switch with Morse code
- Switch with scanning
- Voice recognition software

Vision

- Eyeglasses
- Magnifier
- Large print books
- Closed circuit television
- Screen magnification software
- Screen colour contrast
- Screen reader, text reader
- Braille materials
- Alternate keyboard with enlarged keys
- Braille keyboard and note taker
- Refreshable Braille computer display

Hearing

- Pen and paper
- Computer/portable word processor
- Signaling device
- Closed captioning
- Real-time captioning
- Computer-aided note taking
- Flash alert signal on computer
- Personal amplification system/hearing aid
- Personal FM system
- Soundfield FM system

Communication

- Communication board with pictures/words/objects
- Eye gaze frame
- Simple voice output device
- Voice output device with sequencing
- Voice output display with multi message capability
- Voice output device with speech synthesis

Adapted from Penny Reed and Paula Walser, “Wisconsin Assistive Technology Initiative Assistive Technology Checklist” (Oshkosh, WI: Wisconsin Assistive Technology Initiative, 2000).

Adapted from *Chapter 9: Infusing Assistive Technology for Learning into the IPP Process, Individualized Program Planning* (2006)

Accommodating Student Assessment

Teachers need to read a learning situation accurately and adapt their assessment methods, strategies and tools to best serve the individual needs of all students. In identifying expanded, adjusted or alternative opportunities for student achievement of learning expectations, consideration may be given to the following aspects:

| Consideration | Expanded, Adjusted and Alternative Opportunities |
|----------------------|---|
| Content | <ul style="list-style-type: none"> • the amount of content may be reduced • the type of content may be adjusted or expanded • content may be presented more slowly, or in greater depth • visuals may be used to support presentation of content • abstract concepts may be simplified, presented more concretely or deleted |
| Process | <ul style="list-style-type: none"> • greater interaction with teacher and peers may be structured • more time may be allotted to complete tasks • alternative methods and strategies may be employed throughout the learning process • additional materials and resources to support and guide learning may be provided |
| Product | <ul style="list-style-type: none"> • a product or performance may be selected based on the strengths and learning styles of the student • the level of complexity of the task may be reduced • the design of the product or performance may be adjusted or altered to suit the learning needs of the student |
| Assessment | <ul style="list-style-type: none"> • a variety of methods and strategies may be provided • alternative or modified assessment tasks may be designed • additional time for assessment activities may be allotted |

Source: Toronto Catholic District School Board. (2001). *Assessment of Student Achievement in Catholic Schools*. p. 14

Appendix IV (continued)

Accommodations to programming and assessment will greatly serve the needs of individual students who have communication, behavioral, intellectual or physical exceptionalities and also for students learning English as a Second Language. Such accommodations or adaptations should be made to ensure the most accurate understanding of a student's performance as well as to impact positively on student self-esteem. Specific accommodations may include adjustments to the kind, breadth, depth, and pace of the assessment.

Accommodation Strategies that Respect Student Needs

| | |
|---|--|
| <p>Accommodation in Kind (Assessment Task)</p> <ul style="list-style-type: none"> • Familiarize students with methods being used • Use alternative test formats (oral tests, conferences) • Encourage student negotiation of performance task • Provide exemplary models • Allow students to rehearse/practice activity • Change short answers to multiple choice or fill in the blank format • Present tasks so that students can proceed from concrete to abstract • Permit use of tools such as calculators, word processors and magnifiers • Allow a buddy system | <p>Accommodation in Depth (Detail)</p> <ul style="list-style-type: none"> • Break down complex tasks into sub-steps • Provide written instructions in addition to verbal and an outline of process steps on the board • Include picture clues to support verbal instructions • Provide feedback (strengths, weakness, next steps) during and following an assessment activity • Modify appearance of test by having fewer questions per page or limit the overall number of questions • Teach students to attend to key command words in questions using a highlighter • Focus on few expectations and avoid excessive corrections |
| <p>Accommodation in Breadth (Volume)</p> <ul style="list-style-type: none"> • Reduce amount of reading/writing required • Reduce amount of content per assessment • Provide clear, simple directions of process steps to be followed during assessment activity • Allow use of 'crib' sheets or text during tests to assist student with poor recall • Provide opportunities to consolidate requisite knowledge and skills • Provide a set of reference notes • Monitor work to ensure deadlines are met | <p>Accommodation in Pace (Timing)</p> <ul style="list-style-type: none"> • Provide additional time to complete tasks and tests • Have students repeat and rephrase instructions • Allow student to complete test over several sessions • Co-ordinate extra time with the special education teacher to complete assignment • Reward effective behavior such as finishing on time and demonstrating commitment to task • Take into account improvement over time |

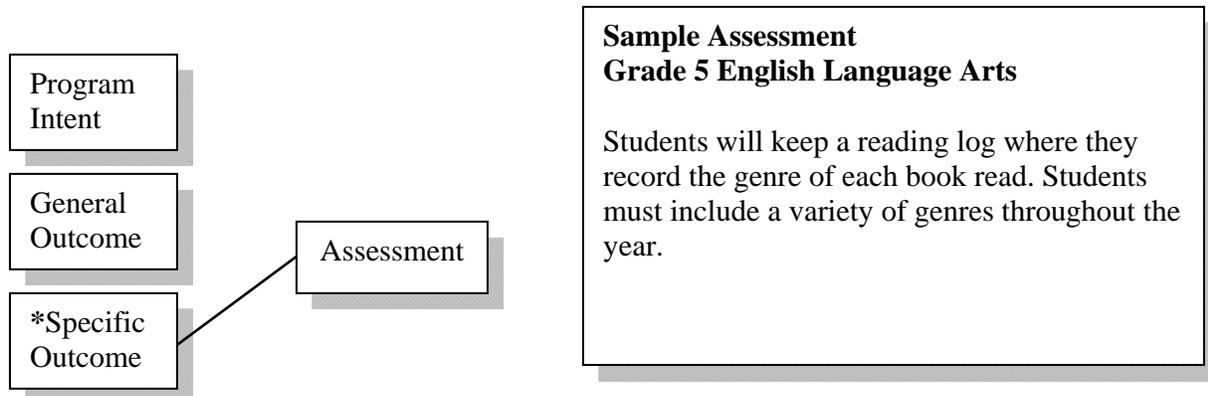
Source: Toronto Catholic District School Board. (2001). *Assessment of Student Achievement in Catholic Schools*. p. 15

Appendix V

LINKING ASSESSMENT EXPERIENCES TO THE *PROGRAM OF STUDIES*

EXAMPLE ONE – English Language Arts 5

Assessment with a Connection to Only One Level of the *Program of Studies*



Minimal connections

Links to *Program of Studies*

General Outcome 2

Students will listen, speak, read, write, view and represent to comprehend and respond personally and critically to oral, print and other media texts.

2.2 Respond to Texts

Experience various texts

1* • Experience oral, print and other media texts from a variety of cultural traditions and genres, such as historical fiction, myths, biographies, poetry, news reports and guest speakers.

Discussion

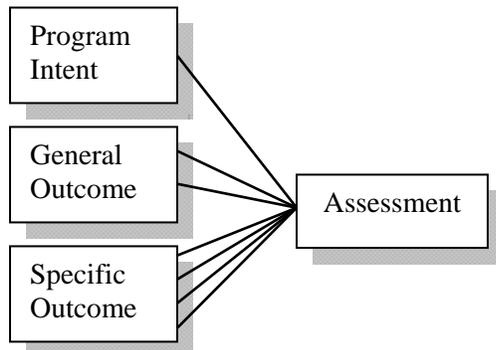
This example illustrates an outcome that is experiential in nature. Teachers gather evidence of students meeting this outcome as they view the reading log. However, it would be difficult to attempt to generate a score or a mark for this assessment as the outcome does not suggest a verb that aligns with any of the levels of thinking as identified by Bloom. Teachers could use descriptive feedback or a checklist to provide feedback to students regarding their progress.

It should also be noted that while the reading log may be an acceptable activity, it would only provide partial evidence of student participation relative to this specific outcome. The outcome includes a broader definition of text that includes oral and media texts in addition to print. In order to increase the assessment value of this task, it is necessary to pair this outcome with other outcomes that require higher level responses.

* In the *English Language Arts Program of Studies*, bullets (•) indicate Specific Outcomes and they are not numbered. They are numbered in this document for ease of identification.

EXAMPLE TWO – English Language Arts 5

Assessment with Connections to Multiple Levels of the *Program of Studies*



**Sample Assessment
Grade 5 English Language Arts**

Take the role of one of the main characters in the Canadian historical fiction novel. Select four historical events that influenced your life. For each of these write a journal entry in which you:

- Describe the historical event
- Describe how that event influenced your life.

Draw upon the information in the novel, but also use your imagination, to provide details that will help the reader understand how you were affected by the event.

Multiple connections

From the Front Matter:

“Through these texts, students experience a variety of situations, people and cultures, and learn about themselves... Students can respond personally to texts, by relating them to their prior knowledge, to their feelings and experiences, and to other texts. Through personal response, students explore and form values and beliefs.” (Program of Studies, p. 17)

General Outcome 2

Students will listen, speak, read, write, view and represent to comprehend and respond personally and critically to oral, print and other media texts.

2.2 Respond to Texts

Experience various texts

- 1 • experience oral, print and other media texts from a variety of cultural traditions and genres, such as historical fiction, myths, biographies, poetry, news reports and guest speakers
- 3 • make connections between fictional texts and historical events

Experience various texts

- 8 • describe and discuss the influence of setting on the character and the events

General Outcome 5

Students will listen, speak, read, write, view and represent to respect, support and collaborate with others.

5.1 Respect Others and Strengthen Community

Appreciate diversity

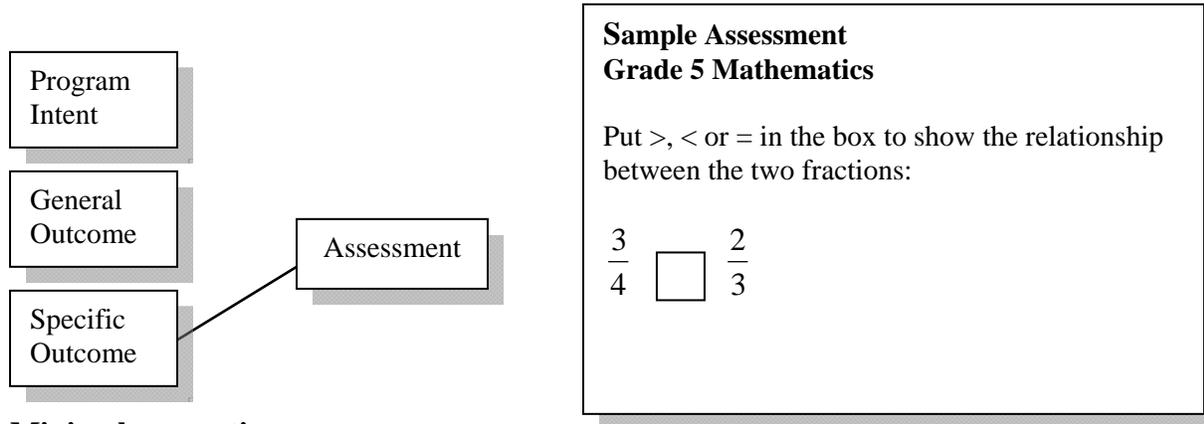
- 1 • discuss personal understanding of the lives of people or characters in various communities, cultural traditions, places and times portrayed in oral, print and other media texts

Discussion

In this assessment, the experiential outcome 2.2.1 is now paired with outcomes that require more depth of student response, thus creating a much stronger teaching/learning/assessment opportunity. The overview statement from the introduction to the general outcome provides an overarching perspective that highlights the importance of respect for culture and diversity. The overarching statement is brought to life as the specific outcomes identify actions students must take. As students link historical events to events in the novel and identify the effect the setting [including time] has on the characters, they are engaged at the analysis level.

EXAMPLE THREE – Mathematics 5

Assessment with a Connection to Only One Level of the *Program of Studies*



Minimal connections

Link to *Program of Studies*

Specific Outcome
 N 9 Compare and/or order proper fractions and decimals to hundredths. [C, R, V]

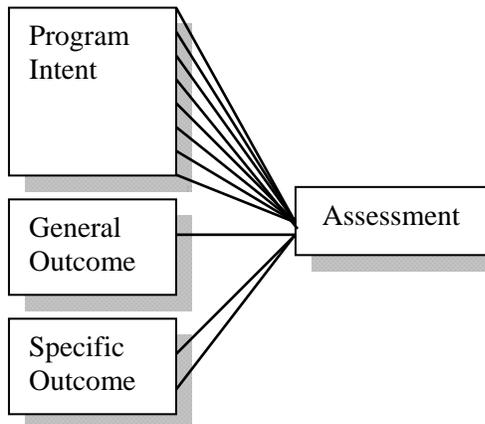
Discussion

This assessment provides meaningful evidence of the student learning relative to the Specific Outcome N 9 (order proper fractions). This is at the level of knowledge on Bloom’s Taxonomy. It requires the student to identify the appropriate symbol <, >, or =. After appropriate instruction it could be used in conjunction with other like items on a test to obtain evidence of achievement of this outcome.

It is important to note that while the specific outcome requires a response at the knowledge level, the specific outcome appears in the context of a broader expectation as indicated by [C, R, V] in the specific outcome. That broader expectation is referenced in the mathematical processes of Communication, Reasoning and Visualization, “number sense for whole numbers” from the general outcome and nature of mathematics statements from the intent of the Program of Studies. It is essential that students provide evidence of thinking beyond knowledge.

EXAMPLE FOUR – Mathematics 5

Assessment with Connections to Multiple Levels of the *Program of Studies*



Multiple connections

Sample Assessment
Grade 5 Mathematics

Put >, < or = in the box to show the relationship between the two fractions:

$$\frac{3}{4} \quad \square \quad \frac{2}{3}$$

Explain why you used the symbol.
 Support your thinking using diagrams with words to explain their relationship.

Links to *Program of Studies*

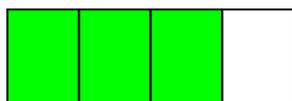
| | |
|---|--|
| The intent of the mathematics program is described by using two overarching sets of statements that the mathematics knowledge, skills and attitudes are to be developed within: | |
| Mathematical Processes: Communication [C], Connections [CN], Estimation and Mental Mathematics [E], Problem Solving [PS], Reasoning [R], Technology [T] and Visualization [V] | Nature of Mathematics: Change [CH], Constancy [CON], Dimension (size and scale) [D], Number [N], Pattern [P], Quantity [Q], Relationships [REL], Shape [S] and Uncertainty [U] |

| | |
|------------------|---|
| Processes | Communication, Connections, Reasoning and Visualization |
| Nature | Constancy, Dimension (size and scale) and Relationships |
| GO: | Demonstrate a number sense for whole numbers 0 to 100 000 and explore fractions and decimals. |
| SO: 7 | Represent and describe proper fractions concretely, pictorially and symbolically. [CN, R, V] |
| SO: 9 | Compare and/or order proper fractions and decimals to hundredths. [C, R, V] |

Discussion

In this assessment, students interact with multiple levels of the *Program of Studies*.

This assessment requires that the student provide an explanation about why “>” is the correct response. Further, the student is also required to use diagrams to support their thinking. Visualization, Communication and Reasoning processes are focused on. In the resulting discussion, students will need to establish that in order to compare common fractions; each fraction must use the same “whole”. This relates to the nature of mathematics idea of Constancy. The ideas of Dimension (size and scale) are also inherent. Consider the following diagrams:



The “whole” that is used to illustrate each of the fractions $\frac{3}{4}$ and $\frac{2}{3}$; is the same (Constancy).

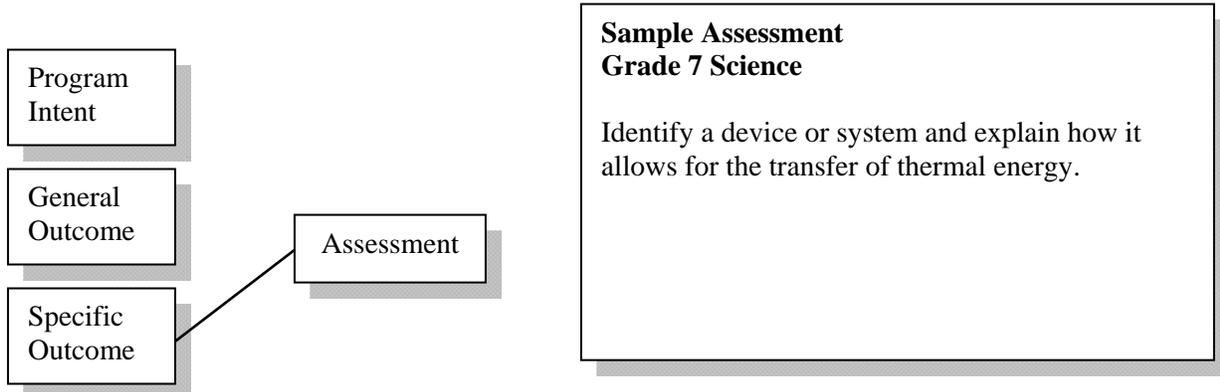
Because of the positioning of the diagrams they can be compared (Dimension (size and scale)).

As students consider the implications of the diagrams, the following justification is often provided by students – since the “3” from $\frac{3}{4}$ is greater than the “2” from $\frac{2}{3}$ the correct symbol is “>”. It is an opportunity to talk about the mathematical concept that it is the relationship between the areas that is important, not the value used for the numerators.

This assessment links two specific outcomes, the concept of number sense from the general outcome along with a variety of processes and nature of mathematics statements to place the assessment in the area of Bloom’s level of analysis which is a higher level of thinking than that in the earlier example.

EXAMPLE FIVE – Science 7

Assessment with a Connection to Only One Level of the *Program of Studies*



Minimal connections

Link to *Program of Studies*

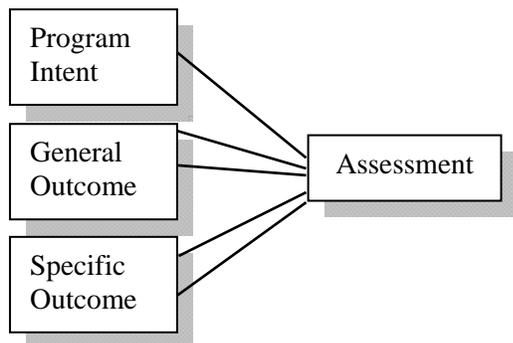
| | |
|------------------------|---|
| STS & K 1.3 | Identify and explain uses of devices and systems to generate, transfer, control or remove thermal energy. |
|------------------------|---|

Discussion

This assessment provides evidence of student learning relative to the specific outcome. This task is at the level of comprehension on Bloom’s Taxonomy. This assessment, used in isolation only, will provide partial evidence of student understanding based on the intent of the curriculum and general outcomes. In order to increase the assessment value of this task, it is necessary to pair this outcome with other outcomes that require higher level responses. As the assessment is broadened the intent of the *Program of Studies* can be reached.

EXAMPLE SIX – Science 7

Assessment with Connections to Multiple Levels of the *Program of Studies*



Multiple connections

Sample Assessment Task

Grade 7 Science:

Use your knowledge of controlling thermal energy to describe how you should dress to go snowboarding in temperatures of -21°C with a wind of 10 km/h. Justify your choice of clothing given the extreme weather conditions.

Information about wind chill can be found at: http://www.msc.ec.gc.ca/education/windchill/index_e.cfm

Links to *Program of Studies*

From the Front Matter:

The **intent** of the secondary science program is guided by the principle of life-long learning through the process of scientific inquiry. It is through a hands-on inquiry project that students develop scientific literacy and acquire knowledge, skills, and attitudes needed to solve real-life problems and make decisions. [*Program of Studies*, p.1]

Unit C – Heat and Temperature

| | | | |
|-------------|---|------------------------|---|
| GO 1 | Illustrate and explain how human needs have lead to technologies for obtaining and controlling thermal energy and to increased use of energy resources. | STS & K 1.3 | Identify and explain uses of devices and systems to generate, transfer, control or remove thermal energy. |
| GO 3 | Apply an understanding of heat and temperature in interpreting natural phenomena and technological devices. | STS & K 3.3 | Compare and evaluate materials and designs that maximize or minimize heat transfer. |

Appendix V (continued)

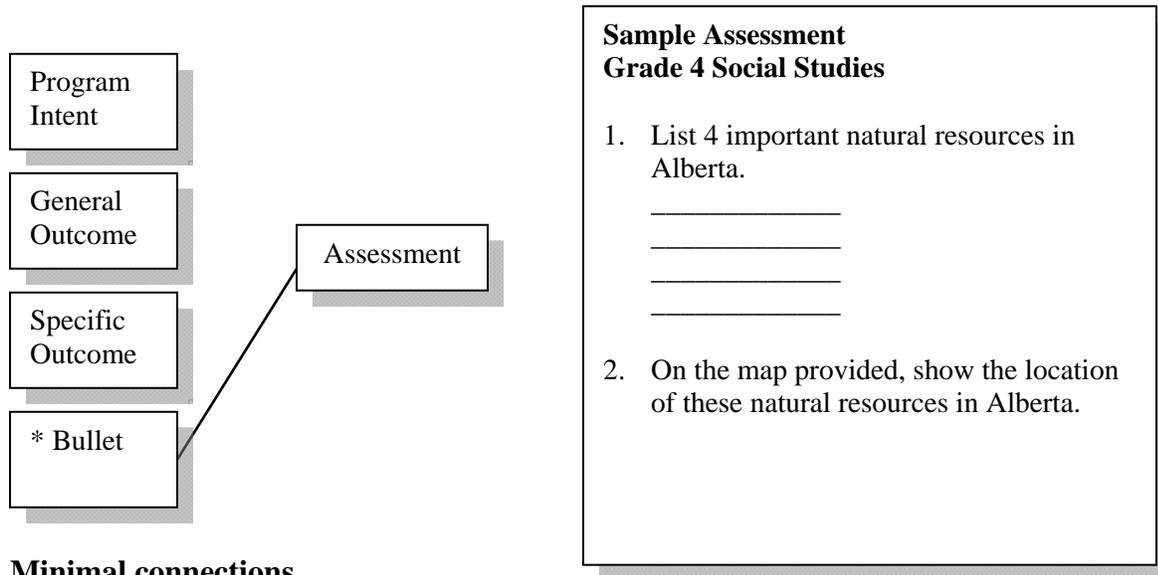
Discussion

In this assessment, students interact with multiple levels of the *Program of Studies*. The task relates to Canadian life and is extended beyond outcome STS & K 1.3 by being paired with a second outcome that requires a more in-depth student response, thus creating a much stronger teaching/learning/assessment opportunity. Providing students with some choice creates an opportunity for students to demonstrate links between science and the community at large.

This assessment is in the spirit of the intent of the science program. Students are involved at more than one level of Bloom's taxonomy. As they describe how they would dress, they demonstrate knowledge of the transfer of thermal energy. Given a wind chill factor of -28°C , students are required to evaluate their choice of clothing based on an understanding that exposed skin will freeze in about 30 seconds. Furthermore, students will have to consider the impact of moving through the cold air while snowboarding will have on the transfer of thermal energy.

EXAMPLE SEVEN – Social Studies 4

Assessment with a Connection to Only One Level of the *Program of Studies*



Minimal connections

Links to *Program of Studies*

Specific Outcomes
▶ **Knowledge and Understanding**
4.1.2 Students will critically examine the physical geography of Alberta by exploring and reflecting upon the following questions and issues:
4* • What are the significant natural resources in Alberta and where are they located (e.g., mineral deposits, coal, natural gas and oil, forests)? (ER, LPP)

* Bullets are not numbered in the *Social Studies Programs of Study*. They are numbered in this document for ease of identification.

Discussion

This task provides evidence of student learning relative to bullet 4 of Specific Outcome 4.1.2. This outcome bullet is at the level of Knowledge on Bloom's Taxonomy. It requires students to identify (list) significant natural resources and tell or show where they are located. After appropriate instruction accompanied by formative assessment, this item could appropriately be used on a test to obtain evidence of student attainment of this bullet.

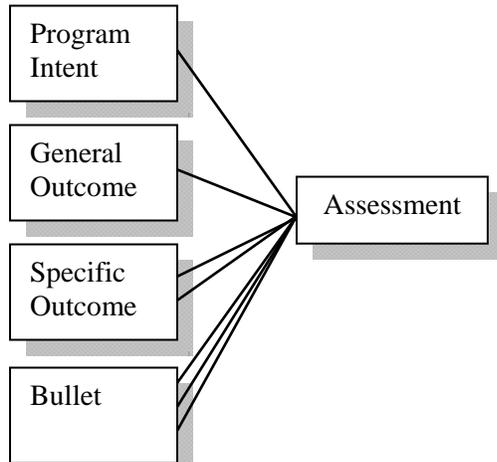
It should be noted that in the *Social Studies Program of Studies* outcomes, any item in brackets listed as e.g. indicates an optional component, whereas any item in brackets listed as i.e., indicates a required component (*Social Studies Program of Studies*, 2005: 7 – 8). Thus, while bullet 4 from Specific Outcome 4.1.2 lists five natural resources, it is possible that other resources that are of interest to the local community have been included in the course of study and could be considered as a correct answer to the test question.

It is important to note that while the bullet requires student response at the level of Knowledge, the specific outcome from which the bullet emerges, requires student response at the level of Analysis (critically examine). While this task will meet the intent of the bullet, additional assessment experiences will be required to meet the full intent of the specific outcome.

This assessment item relates to the Strands of Economics and Resources and The Land: Places and People.

EXAMPLE EIGHT – Social Studies 4

Assessment with Connections to Multiple Levels of the *Program of Studies*



Multiple connections

**Sample Assessment
Grade 4 Social Studies**

1. On the map of Alberta, show where forestry resources are located.
2. Why are forests important to Albertans?
3. Complete the following T-chart:

| What problems does the forestry industry create for Albertans? | How can these problems be solved? |
|--|-----------------------------------|
| | |
| | |

Links to *Program of Studies*

Grade 4 Program Overview

Grade 4 students will explore the geographic, cultural, linguistic, economic and historical characteristics that define quality of life in Alberta. They will appreciate how these characteristics reflect people’s interaction with the land and how physical geography and natural resources affect quality of life. Through this exploration, students will also examine how major events and people shaped the evolution of Alberta.

General Outcome 4.1

Students will demonstrate an understanding and appreciation of how elements of physical geography, climate, geology and paleontology are integral to the landscapes and environment of Alberta.

Specific Outcomes

► **Knowledge and Understanding**

4.1. Students will critically examine the physical geography of Alberta by exploring and reflecting upon the following questions and issues:

4 • What are the significant natural resources in Alberta and where are they located (e.g., mineral deposits, coal, natural gas and oil, forests)? (ER, LPP)

4.1.4 Students will analyze how Albertans interact with their environment by exploring and reflecting upon the following questions and issues:

2 • How are natural resources used by Albertans (i.e., agriculture, oil and natural gas, forests, coal)? (ER, LPP)

Appendix V (continued)

Discussion

In this task, students interact with multiple levels of the *Program of Studies*. This assessment could still be used in a testing situation, yet it requires much more depth of response from students than the previous example.

Students work with the Program Overview and General Outcome 4.1 as they consider the landscape and environment of Alberta, how people interact with the land and how natural resources affect quality of life for Albertans. The Specific Outcomes require students to work at the analysis level. Students are working at Bloom's level of Comprehension (4.1.2 bullet 4, 4.1.4 bullet 2) and Analysis (4.1.4 bullet 3) as students link challenges with possible solutions.

This task links to the Strands of Economics and Resources; The Land: Places and People; Power, Authority and Decision Making; as well as the core concept of Citizenship.

Appendix VI

TYPES OF ASSESSMENT STRATEGIES

There are many sources of information about student achievement, and no one source is necessarily better than another. Each can provide useful and different information about student achievement. However, interpretation of the findings is valid only when linked to the circumstances under which performance was assessed. The most accurate profile of student achievement is based on the findings gathered from assessing student performance in a variety of contexts. The key is the match between the specific learner outcomes and the selected assessments to ensure reliable (consistent) and valid (trustworthy) results.

| Source of Information | Strategy | What It Measures |
|--------------------------|--|--|
| Observations | <ul style="list-style-type: none"> • Anecdotal records • Conferences | immediate evaluation and feedback of learning, focus on specific learner expectations, social skills and behaviors, teamwork, interactions, knowledge into context, levels of understanding, relationships, attitude, oral language skills, listening skills, ability to synthesize, cooperation, leadership skills, tolerance, respect |
| Learning Logs | <ul style="list-style-type: none"> • Reflective journals • Personal response journals • Dialogue journals | understanding, written ability, conventions, organization, pre and post comparisons, feedback to teachers, personal connections, social skills, connection to concepts in literature, understanding of story elements, internalization of literature, personal experience, goal setting, understanding process, affective mode, background knowledge |
| Performance Tasks | <ul style="list-style-type: none"> • Simulations • Demonstrations • Labs • Video productions • Presentations – drama/music/dance • Computer-based software | creativity, understanding, end product, public speaking and performing, group work, organization skills, application of skills to new situations, reasoning skills, analysis, real-life application, process, procedures, ability to handle equipment |
| Projects | <ul style="list-style-type: none"> • Models • Experiments • Work samples • Investigations • Surveys • Scrapbooks | knowledge, application, motor skills, planning and research skills, demonstration, organization, process, procedures, formulating and testing hypotheses, perseverance, ability to gather and process information to create meaning, cooperation |

Appendix VI (continued)

| Source of Information | Strategy | What It Measures |
|-----------------------------|--|--|
| Tests | <ul style="list-style-type: none"> • Multiple choice • True/false • Short answer • Paper and pencil • Matching • Extended response | pre and post test of knowledge, content mastery, ability to make inferences, recall, recognition, memorization, content, problem-solving abilities |
| Written Language | <ul style="list-style-type: none"> • Lab reports • Essays • Research papers • Script • Brochure • Word puzzles • Articles • Stories • Proposals | logical organization, ability to make hypotheses, comprehension, ability to follow directions, writing skills, use of logic, interpersonal relations, expression, vocabulary, style, understanding different writing structures/genres, research skills, evaluation, initiative |
| Oral Language | <ul style="list-style-type: none"> • Retelling • Debate • Story boards • Interviewing • Poetry reading • Questions/responses • Audiotapes • Teaching a lesson • Games | comprehension, ability to synthesize and paraphrase, speaking and listening skills, substantiation of positions, development of counter argument, reasoning, assessment of background knowledge, perspective, organization, decision-making skills, personal information, attitude, ability to analyze, memorization, interpretation, composure, confidence, enunciation, articulation |
| Visual Communication | <ul style="list-style-type: none"> • Story boards • Illustrations • Design • Advertisements • Photographs • Videotapes • Dioramas • Collages • Maps | assessment of background knowledge, comprehension, organization, creativity, growth and maturity level, depth of conceptualization, application, ability to synthesize, process, application of knowledge and skills, equipment use, decision-making abilities |

Source: *A Framework for Student Assessment 2nd edition* (2005), used with permission

Student Grade Level of Achievement Data Collection Format

Instructions for Compiling GLA Data

STUDENT

Legal Surname and Given Name(s)—must be completed and cannot contain more than 25 characters each.

Alberta Student Number (ASN)—must be completed and valid, and contain 9 characters.

Enrolled Grade—is the grade to which the student is assigned. Enter a value between 01 and 09, inclusive, or enter ‘UG’ for ungraded.

STUDENTS ON GRADED PROGRAMS OF STUDY

Provide a Grade Level of Achievement (GLA) for English Language Arts, Mathematics and, if applicable, French Language Arts for each student in your class that is on Graded programs of study. If a student is not enrolled in French Language Arts this field is left blank.

Grade Level of Achievement (GLA) – “At, Above or Below” – this new method restricts reporting GLA as “at, above or below grade level” using a two character alpha set as follows: **AT** = at grade level; **AB**= above grade level; or **BE** = below grade level.

For each student in grades one through nine who is following the graded programs of study, the GLA fields must contain one of the three alpha sets: , AT, AB or BE or ‘NA’ if not applicable (i.e., if the student is not enrolled in a subject or there is insufficient information to judge GLA). The fields must be left blank for each student who is coded with severe or mild/moderate disabilities **and** is not following the graded programs of study.

The GLA code you provide for each subject is based on your judgment and interpretation of all of the classroom assessment activities throughout the school year for your students in English and/or French Language Arts and for Mathematics. In some school boards, there is a standard test or battery of tests used to determine grade level of achievement—if that is true for your board, consider that assessment in relationship to the full range of assessment information available to you, including classroom assessment marks, in making a professional judgment of the student’s grade level of achievement. Remember, grade level of achievement refers to the learner outcomes defined in the programs of study in relationship to the student’s enrolled grade.

Grade in which English LA is introduced for French students only (i.e., those enrolled in either a French as a First Language program or in a French Immersion program)—This field is completed for all students who have a GLA in French Language Arts. It contains a number typically between 01 and 03. This field is left blank for all other students.

“Met IPP goals and objectives” fields—must be left blank for students on graded programs of study.

Appendix VII (continued) – Updated January 2008

Illustrative Examples:

Student A is enrolled in grade 4. Her Language Arts program is based on the grade 4 learner outcomes defined in the English Language Arts K–9 Program of Studies. The overall assessment results demonstrate she has achieved the outcomes for Language Arts grade 4 so **AT** “at grade level” is entered.

Student B is enrolled in grade 8. He has been coded as having a mild learning disability. His Mathematics program is based on the grade 6 learner outcomes defined in the Mathematics K–9 Program of Studies. The overall assessment results demonstrate he has achieved the outcomes for Mathematics grade 6, so **BE**, “below grade level” is entered.

Student C is enrolled in grade 2. He has been coded as having a moderate learning disability. His Language Arts program is based on developing language arts readiness skills and on many of the grade one learner outcomes defined in the English Language Arts K–9 Program of Studies. The overall assessment results demonstrate he has not yet achieved the learner outcomes for Language Arts grade 1 so **BE** is entered.

Student D is enrolled in grade 4. He has been coded as having a severe emotional/behavioural disability. His Mathematics program is based on the grade 3 learner outcomes defined in the Mathematics K–9 Program of Studies. The overall assessment results demonstrate he will continue to study the learner outcomes for Mathematics grade 3 next year, so **BE** is entered.

Student E is enrolled in grade 5. He has been coded as being gifted. His Mathematics program is based on the grade 6 learner outcomes defined in the Mathematics K–9 Program of Studies. The overall assessment results demonstrate he has achieved all of the learner outcomes for Mathematics grade 6, so **AB** is entered, i.e., ‘achieved above grade.’

Student F is enrolled in Grade 4. The overall assessment results demonstrate that as of the end of the current school year he has met the learner outcomes in the Program of Studies for grade 4 Language Arts, so **AT** would be entered for Language Arts, indicating ‘achieved at grade’; however, the student has not met the learning objectives in Grade 4 Mathematics, only those of Grade 2 Mathematics. Thus **BE** “achieved below grade” would be assigned in Mathematics.

Student G is enrolled in French as a First Language program and is following the graded programs of study. For this student both a grade level of achievement is reported for his French Language Arts program and for his English Language Arts program (at the end of the year that English Language Arts instruction is initiated – this may range from grade 1 to 9 but typically English Language Arts is introduced in grades one, two or three). If English Language Arts has not been introduced yet, then the ELA data field is left blank. The grade level of achievement for Mathematics is reported independent of the language of Mathematics instruction.

Student H is enrolled in a French Immersion program and is following the graded programs of study. For this student report both a grade level of achievement for her French Language Arts program and for her English Language Arts program at the end of the year that English Language Arts instruction is initiated (may range from grade 1 to 9) and in subsequent years. Report a single grade level of achievement for Mathematics.

STUDENTS WITH DISABILITIES WHO ARE NOT ON A GRADED PROGRAMS OF STUDY

Each student is either in this category or in the previous category ‘STUDENTS ON GRADED PROGRAMS OF STUDY’. To be in this category, the student must be coded as a student with a severe or mild/moderate disability and must not be following the graded programs of study. **Not following a graded programs of study** means that you are reporting student outcomes based on an IPP that outlines programming in which the learner outcomes are significantly different from the learner outcomes defined in the programs of study and are specifically selected to meet students’ special education needs. Results are reported in the categories of life skills, foundational skills or academic readiness skills as defined below and on page 23 of this Handbook. While students within this category may have a some IPP goals in the category of academic readiness that are related to learner outcomes at the grade 1 level or above, students within this category are not studying a comprehensive or articulated curriculum based on the programs of study.

For students within this category, the “**Grade Level of Achievement**” fields and the “**Grade in which English LA was introduced for French students**” field must be left blank.

Reporting for students within this category is completed along the following three skill areas:

Foundational Skills—refers to communication, classroom behaviour, gross motor and fine motor skills.

Academic Readiness Skills—refers to readiness skills to prepare the student for learner outcomes in the programs of study in Grade 1 and subsequent grade levels.

Life Skills—refers to skills that will assist the student in developing independence in the home, school and community.

For each of the three skill areas, indicate the degree to which the student has met the goals and objectives in his/her Individualized Program Plan (IPP), i.e., whether **all, most, some** or **none** of the goals have been met. If there have been no goals set for one or more of the skill areas, indicate **not applicable** for those areas. Thus, for students who are coded with severe or mild/moderate disabilities and who are not on graded programs of study, each of these fields must contain one of the following codes:

- ‘A’ = **All;**
- ‘M’ = **Most;**
- ‘S’ = **Some;**
- ‘N’ = **None;** or,
- ‘NA’ = **Not Applicable**

Illustrative Examples:

Student J (Adapted programming)

Ken, who is enrolled in grade 5, is a student with a mild cognitive disability. During the school year, Ken has been enrolled in an age-appropriate grade 5 learning group where the majority of students are working towards the learner outcomes of grade 5 language arts. Ken's teacher, Ms. Jackson, has been adapting language arts programming for Ken as she is aware that he is not ready to challenge the learner outcomes at the grade 5 level. Ken's previous teacher documented that Ken is now ready to work towards the grade 2 learner outcomes in language arts. Based on the progress Ken has been demonstrating, Ms. Jackson is fairly confident that Ken will be at a grade 2 level of achievement by the end of the year and will be ready to challenge the grade 3 language arts learner outcomes in the next school year. A GLA indicator of **BE** "below grade level" is entered. Throughout the school year, Ken's parents have been kept informed of what grade level of the Program of Studies Ken is working toward, so there will be no surprises at the end of the year.

Student K (Modified programming)

Carla is enrolled in grade 2 and is a student with a moderate cognitive disability. Her current programming focuses on the development of functional literacy and numeracy skills as well as life skills. The goals and objectives outlined in Carla's Individualized Program Plan (IPP) indicate that she is working toward achieving skills typically observed in children prior to beginning kindergarten. Because Carla is not working towards the learner outcomes of the graded programs of study at this time, a grade level of achievement will **not** be assigned at the end of the year for any course of study. Rather, her teacher will report her achievement relative to the goals specified in her IPP.

Student L (Modified programming)

Leslie is currently enrolled in grade 8 and is a student with a severe cognitive disability. The learner outcomes she is working toward are specifically related to her special education needs, and are significantly different from the provincial programs of study. Because Leslie is not at this time working toward the learner outcomes of graded programs of study, a grade level of achievement will **not** be assigned at the end of the year for any course of study. Rather, her teacher will report her achievement relative to the goals specified in her IPP.

TRANSMITTING GLA DATA

School staff must submit their GLA data to their central office. Central office staff transmit GLA data to Alberta Education for all schools in the jurisdiction with grades 1-9 enrolment. A ***GLA Edulink Manual*** is available to assist with data transmission to Alberta Education and may be located on the Alberta Education website @ <http://education.alberta.ca/admin/resources/gla.aspx>
Assistance may also be obtained from the Alberta Education Help Desk at (780) 427-5318 or cshelpdesk@gov.ab.ca.

Selected Bibliography and Webography

Selected Bibliography

- Alberta Assessment Consortium. *A Framework for Communicating Student Learning*. Edmonton, AB: AAC, 1999.
- Alberta Assessment Consortium. *Smerging Data: Grading... More Than Just Number Crunching*. Edmonton, AB: AAC, 2001.
- Alberta Assessment Consortium. *A Framework for Student Assessment 2nd Edition*. Edmonton, AB: AAC, 2005.
- Alberta Assessment Consortium. *Refocus: Looking at Assessment for Learning. 2nd Edition*. Edmonton, AB: AAC, 2005.
- Alberta Education. *Guide to Education: ECS to Grade 12*. Edmonton, AB: Alberta Education, 2005. <http://www.education.gov.ab.ca/educationguide/>
- Alberta Education. *Policy, Regulations and Forms Manual*. Edmonton, AB: Alberta Education, 2006. <http://www.education.gov.ab.ca/educationguide/pol-plan/polregs/toc.asp>
- Alberta Education. *Individual Program Planning (IPP): ECS to Grade 12*. Edmonton, AB: Alberta Education, 2006. http://www.education.gov.ab.ca/k_12/specialneeds/ipp.asp
- Asp, E. *Developing and Using a Body of Evidence*. a paper presented during the Annual Fall Conference of the Alberta Assessment Consortium, Oct. 2001.
- Assessment to Promote Learning. *Educational Leadership*, ASCD: Alexandria, VA: Nov. 2005.
- Black, P., et al. *Assessment for Learning: Putting It into Practice*. Berkshire, U.K.: Open University Press, 2003.
- Black, P., and D. Wiliam. *Inside the Black Box: Raising standards through classroom assessment*. London: King's College, 1998.
- Brody, L. E. and Persson Benbow, C. "Accelerative Strategies: How Effective are they for the Gifted?" *Gifted Child Quarterly*, 3 (3), 1987: 103 – 109.
- Burger, J. M. and M. Krueger. "A Balanced Approach to High Stakes Achievement Testing: An Analysis of the Literature with Policy Implications," *International Electronic Journal for Leadership in Learning*. 7(4), 2003.
- Davies, A. *Making Classroom Assessment Work*. Merville, BC: Connections Publishing, 2000.
- Guskey, T. R. "How Classroom Assessments Improve Learning." *Educational Leadership*, ASCD: Alexandria, VA: Feb 2003.

- Guskey, T. "Reporting on student learning: lessons from the past – prescriptions for the future," *Communicating Student Learning: ASCD Yearbook 1996*, edited by T. R. Guskey, ASCD: Alexandria, VA. 1996.
- Guskey, T. and Bailey, J. *Developing Grading and Reporting Systems for Student Learning*. Corwin Press: Thousand Oaks, Ca 2001.
- Jensen, E. *Teaching with the brain in mind*. Alexandria, VA:ASCD. 1998.
- Jimerson, S. "Meta-analysis of grade retention research: Implications for practice in the 21st century". *School Psychology Review*, 30 (3), 2001: 420 – 437.
- Joint Advisory Committee. *Principles for Fair Student Assessment Practices for Education in Canada*. Edmonton, AB: Centre for Research in Applied Measurement and Evaluation, University of Alberta, 1993.
- Joint Committee on Standard for Educational Evaluation. *The Student Evaluation Standards*. Thousand Oaks, CA: Corwin Press, Inc. 2003.
- McTighe, J. "What happens between assessments?" *Educational Leadership*, ASCD. Dec. 1997.
- O'Connor, K. *The Mindful School: How to Grade for Learning*. Skylight: Arlington Heights, IL. 1999.
- Popham, W. J. *The Truth about Testing: An educator's call to action*. Alexandria, VA: ASCD, 2001.
- Rogers, K. B. and Kimpstom, R. D.. *Acceleration: What We Do Versus What We Know*. *Educational Leadership*, Oct. 1992.
- Shepard, L. A. and Smith, M.L. *Flunking grades: Research and policies on retention*. London: Falmer Press, 1989.
- Stiggins, R. "Assessment, Student Confidence, and School Success." *Educational Leadership*, ASCD, Nov 1999.
- Stiggins, R. *Student-Involved Classroom Assessment (Third Edition)*. Upper Saddle River, N.J.: Merrill Prentice Hall, 2001.
- Stiggins, R. "Assessment Crisis: The Absence of Assessment for Learning". Phi Delta Kappan, Phi Delta Kappa International, June 2002.
- Stiggins, R., et al. *Classroom Assessment for Student Learning: Doing it Right – Using it Well*. Portland, OR: Assessment Training Institute, 2004.
- Stiggins, R. and T. Knight. *But Are They Learning?.* Portland, OR: Assessment Training Institute, 1998.
- Sutton, R. *The Learning School*. Salford, U.K.: RS Publications, 1997.

Sutton, R. *Assessment for Learning*. Salford, U.K.: RS Publications, 2001.

Toronto Catholic District School Board. *Assessment of Student Achievement in Catholic Schools*, 2001.

University of Cambridge School of Education. *Assessment for Learning: Beyond the Black Box*: London: University of Cambridge, 1999.

Western and Northern Canadian Protocol for Collaboration in Education. *Rethinking Classroom Assessment with Purpose in Mind*. Manitoba Education, Citizenship and Youth Cataloguing in Publication Data, 2006.

Wiggins, G. and J. McTighe. *Understanding by Design; Expanded 2nd edition*. Alexandria, VA: ASCD, 2005.

Selected Webography

Alberta Assessment Consortium (AAC)
www.aac.ab.ca

Alberta Education. *Classroom Assessment Tool Kit for the Information and Communication Technology (ICT) Program of Studies*. www.learning.gov.ab.ca/k_12/curriculum/bySubject/ict/

Alberta Education. Background and related information on Grade Level of Achievement Reporting. <http://www.education.gov.ab.ca/ipr/GLA/>

Principles for Fair Student Assessment Practices for Education in Canada
www.education.ualberta.ca/educ/psych/crame/files/eng_prin.pdf

Tomlinson, C. "Differentiating Instruction For Advanced Learners In the Mixed-Ability Middle School Classroom", *ERIC EC Digest #E536*, October 1995.
http://www.kidsource.com/kidsource/content/diff_instruction.html

