

Research REPORT

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Assessment Literacy for School Trustees

by

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This resource was commissioned by the Saskatchewan School Boards Association to provide direction for boards of education in using achievement data in decisions to strengthen student learning. This resource is intended to strengthen school system capacity to collect and use achievement results to inform decision making to improve practice. Read this resource to learn more about:

- ✓ Current assessment practices.
- ✓ Frequently asked questions.
- A framework for effective school division assessment policies and practices

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A. Introduction

School division and provincial assessment practices have been an important part of school reform initiatives over the past decade or more in Canada and elsewhere in the developed world. The focus on assessment practices has been, in part, a result of two elements of school reform i) concern about school and school division accountability for student learning outcomes, and ii) improving student learning outcomes (i.e. academic achievement). This has led to an examination of the purposes and practices that provide educational policy makers (and the public) with the most useful and meaningful information on student learning in publicly supported schools.

The purpose of this paper is to provide an overview for the Saskatchewan School Boards Association (SSBA) on current practices used by teachers and educational policy makers to assess student learning in Saskatchewan schools. This information is fundamental to trustees' *assessment literacy* and is intended to assist the SSBA in three important tasks:

- First, to provide a comprehensive overview of the current practices used in schools to assess and evaluate student learning.
- Second, to develop models, sample policies, and administrative guidelines for boards' of education 'best practices' in assessment of student learning.
- Third, to identify resources and processes that can facilitate school board involvement in the provincial mathematics learning assessment program

Trustees knowledge and skill in assessment literacy can help strengthen a school division's capacity to use student achievement results to inform decision-making and to improve school and school division assessment practices. This paper provides an overview of assessment literacy for boards of education organized around the following themes and topics.

- The background information;
- Types of assessment practices;
- The principles of assessment literacy;
- A framework for school division policy on assessment; and
- The role of boards of education in student assessment.

B. Assessment Literacy-Background

Strategies and techniques to measure student-learning outcomes are based on generally accepted practices and processes that link curriculum, instruction, and assessment. Following is an overview of the basic assumptions about student learning that guide the policies, practices, and procedures used by teachers, school administrators, and school jurisdictions.

Generally, we think of the term 'achievement' as the best descriptor for the outcomes or results of learning. Typically teachers and policy-makers are interested in the extent to which students have achieved the intended learning

outcomes established by schools and the province as defined by the provincially approved curriculum. Expectations and learning targets for students are based on the Common Essential Learnings (CEL's) as defined by Saskatchewan Learning and can be categorized as "4 A's":

- academic performance that is, learning the curriculum-based subject matter (mathematics, language arts, etc.),
- attitudes developing positive views of oneself and others,
- aptitudes recognizing and enhancing students' personal skills and abilities, and
- attendance acknowledging the importance of not only school attendance but the process of attending to one's responsibilities to self and others.

Measuring student achievement is a way that educators can measure both student success and school success. It is important that such measures provide information on the full scope of learning (the four A's), not just academic performance. However, it can be argued that academic achievement is related to the other three 'A's to provide a well-rounded school program.

A basic assumption is that assessing student success is a responsibility shared by teachers, administrators, parents, and policy-makers. The term 'assessment' is used to describe how educators determine students' success in school and refers to the process of collecting, analyzing, interpreting, and reporting information about student learning outcomes. Recent theories of assessment differentiate the concepts of assessment *of* learning and assessment *for* learning. Assessment *for* learning is described as an integral part of classroom instruction and is sometimes referred to as *formative* assessment. Assessment *of* learning is described as *summative* and refers to evaluating student achievement for the purpose of promotion or graduation. Understanding and using such concepts is an important element of trustee assessment literacy. Following is a brief description of three elements of assessment literacy including:

- i) an overview of types of student assessment,
- ii) questions about the concept of assessment literacy, and
- iii) a framework for school division assessment policies.

Prior to reviewing the three main elements, it is important to note that teachers' responsibilities and duties with respect to the legal framework for assessing and reporting students' progress. Teachers and school principals are responsible for reporting clear and accurate assessment results to parents based on school division policies and practices.

The provincial Education Act states this responsibility as follows:

Principals are required to i) " *establish in consultation with staff, the procedures and standards to be applied in evaluation of the progress of*

pupils and in making promotions" E. A. Sec. 175 (2) (k) and ii) " to conduct, in cooperation with the staff, a continuing program of planning and evaluation with respect to the objectives, curriculum, pedagogy, and effectiveness of the instructional program of the school". E. A. Sec. 175 (2) (h). In addition, it is the teacher's duty to: "advance or promote pupils in their work in accordance with the promotion policies of the school and under the general supervision of the principal." E. A. Sec. 231, (2) (b).

Thus it is clear, in the law, that assessing student success and progress is primarily the responsibility of school-based personnel. However, boards of education are responsible for the overall operation of the school system and for ensuring an ' appropriate education for all students'. Use of assessment information is implied in this responsibility.

It should also be noted that, although not a legal requirement, teachers are expected to be aware of, and to utilize, a set of guidelines for assessment developed by a Canada-wide interagency panel representing school boards, teacher organizations, and universities from across the country. The guidelines are called *Principles for fair and accurate student assessment. (1993)* and is available on the SSBA website under *Drawing Value from Evaluation*.

C. Types of Student Assessment

Student assessment is defined as the process of collecting, interpreting and using information on students' school success. It is a comprehensive process that includes three distinct but related types of assessment practices:

- classroom assessment,
- large-scale assessment, and
- special education assessment.

Following is a description of each of these types of assessment and how they can be used by teachers and educational policy-makers. Each type of assessment measures student learning in specific ways and provides information to be used in specific contexts.

1. Classroom Assessment

Classroom assessment is primarily the responsibility of the classroom teachers and is focussed on the success of individual students. Teachers are expected to measure student learning (academic, attitudes, aptitudes, and attendance) particularly with respect to the provincial curriculum objectives as determined by Saskatchewan Learning. This type of assessment is called *criterion-referenced* because it is expected that teachers use the provincial curriculum goals and objectives as the basis for making decisions on student success. The curriculum also ought to guide the development of instruments that teachers use to assess student learning. Teachers are expected to use assessment practices that best provide clear, accurate, consistent measures of student success. Examples of some of these assessment practices include:

- Tests
- Portfolios
- Performance assessments
- Observations
- Individual and group projects
- Peer and self assessment

Teachers have the responsibility to choose the best assessment practice for their students and most teachers develop their own assessment instruments (tests, checklists, quizzes, etc.). Student success is typically reported as a 'grade'. This could be a letter grade, a numerical (percentage) grade, a written descriptor, or a scale developed by a teacher or a group of teachers. Following are some examples of grading scales used by classroom teachers:

- Raw scores;
- Numerical percentages;
- Letter grades
- Verbal descriptors;
- Rubrics (performance standards).

The process of reporting assessment results may vary from school division to school division or indeed from school to school within a division. The exception to this is in Grades 10-12; assessment results for these grades must be reported (as a percentage grade) to Saskatchewan Learning.

Using classroom assessment results. Classroom assessment results are used for several purposes. In primary and early elementary grades the results provide information on students' strengths and weaknesses and help teachers, principals, and parents make decisions about student promotion. In that sense classroom assessment results are intended to *improve* learning not to compare individuals or groups. (That is the purpose of large-scale assessment.) Assessment results used to provide information to parents, students, teachers, and others is assessment *for* learning (*formative assessment*). Results used to determine a student's grade placement are assessment *of* learning (*summative assessment*). Still other results are used to determine students' strengths and weaknesses, that is, *diagnostic assessment*.

It is expected that teacher training prepares teachers to conduct effective (fair, accurate and consistent) student assessment. It is also expected that teachers will keep abreast of developments and new techniques of student assessment through various types of professional development. In the case of high school, the province prepares final exams for some courses at the grade 12 level and the

final grade is a combination of the teacher's assessment and the provincial test results. The exceptions to this are teachers who, through special in-service training, are designated as *accredited*. Accredited teachers assign a final grade independent of provincial exams.

High quality assessment strategies are based on a number of principles that help guide teacher decisions including but not limited to:

- Assessment strategies that support student learning;
- Knowledge of the curriculum expectations;
- Fair, unbiased, accurate, reliable instruments;
- Awareness of achievement standards for a particular grade or course;
- Based on students opportunity to learn the knowledge, skill or attitude being assessed.
- 2. Large-Scale Assessment

Students' success in school is also measured using instruments developed by experts –not by the classroom teachers. These tests are designed to measure basic skills that would be common across a large population, such as a province, a country or for some tests worldwide. These assessment strategies are usually called 'large-scale assessments'. Samples of Saskatchewan students have been involved in a number of large-scale assessments, including:

- 1. The Programme for International Student Assessment (*PISA*) Organization for Economic Cooperation and Development (OECD) (2004, 2001);
- 2. School Achievement Indicators Program (SAIP) (2004, 2001, 1993, 1994);
- Provincial Learning Assessment Program (*PLAP*) (Saskatchewan Learning, 1996-1999);
- 4. Saskatchewan Department of Learning Assessment for Learning Project (2004, 2003).

Following is a brief description of each of the student assessment programs with the Website for each program.

 PISA. is a set of three tests (literacy, mathematics, and science) involving fifteen-year-olds in 32 countries. The first tests were administered in the year 2000, with the first results for literacy reported in December 2001. Human Resources Development Canada (HRDC) and the Council of Ministers of Education Canada (CMEC) produced a preliminary report, *Measuring up: The performance of Canada's youth in reading, mathematics, and science (2001).* The tests were administered under the auspices of the Organization for Economic Cooperation and Development (OECD) See http://www.oecd.org/pages/

- SAIP uses tests in reading/writing, mathematics, and science are achievement tests developed by the CMEC in cooperation with provincial/territorial ministries of education. The tests were administered to samples of 13 and 16 year old students across Canada (mathematics, 1993; reading and writing, 1994; science, 1998). http://www.cmec.ca/saip/indexe.stm
- 3. The **Saskatchewan Department of Learning** has conducted a regular large-scale provincial assessment program since 1993. *The Provincial Learning Assessment Program* (PLAP) involved large-scale tests in mathematics, language arts, and science. The tests are administered to samples of students across the province, typically at grades 5, 8, and 11. The results of PLAP are also used as information for curriculum evaluation. More recently the department has developed a new approach to large –scale assessment called the *Assessment For Learning Program*; information on that program is included in the Appendix.
- 4. The **Saskatchewan Department of Learning Indicators Program** is a report produced by Saskatchewan Learning that presents information on various dimensions of education in Saskatchewan.

The purposes of large-scale assessment results are usually different from those of classroom assessment results and typically focus on academic achievement only. Such large-scale assessments provide information that allows comparison among groups, for example, PISA results compare mathematics results among countries and among provinces; SAIP results compare results among provinces. When results are used for such comparisons, the instruments are typically described as *norm-referenced*, whereas classroom assessments are, as described earlier, *criterion, or curriculum-referenced*, that is, based specifically on the Saskatchewan curriculum.

Large-scale assessments are designed by experts in educational measurement to ensure accuracy and consistency in the results and are either commercially produced or developed by an organization such as a department of education. Such instruments usually use a multiple choice or, in some cases, performancebased format to enhance the accuracy and reliability of scores. Some largescale (norm-referenced instruments) are also "standardized" and are assessments used to provide information on individual students or on groups of students, such as a grade level. In Saskatchewan the test used for the PLAP such as the 2001 Math pilot for grades 5,8 and 11, and the 2002 Grade 8 Math pilot are examples of using the results for norm-referenced and criterionreferenced purposes.

The results of large-scale assessments are usually reported as a score such as a percentile or a standard score. Those who use and interpret standardized scores

need to be trained in the statistical procedures used to report such assessment results.

Using Large-Scale Assessment Results. Teachers and principals are encouraged to be aware of the purposes and processes involved in administering large-scale assessments and in using large-scale assessment results. The guidelines for doing so include:

- knowledge of how the instruments were developed (e.g. how is the test related to the school and provincial curriculum? what Knowledge, Skills, Attitudes were tested?)
- knowledge of how the tests are scored (e.g. is the score number correct? percentage? percentile? etc.); and
- ability to interpret basic statistical information such as mean score, standard deviation, standards, benchmarks, grade equivalents, exemplars.

The current Mathematics Assessment for Learning project developed by Saskatchewan Learning is an example of a provincial large-scale assessment project. The tests are administered to grade 5, 8 and 11 students and the results are then provided to interested school divisions to use as a way to monitor mathematics performance in a school division in the context of provincial results. Saskatchewan Learning is experimenting with ways for teachers and administrators to best use the results to improve student achievement in mathematics. In 2005 the Department of Learning will introduce large-scale Reading tests for grades 4, 7, and 11.

3. Special Education – A 'Special Case' for Assessment

A large number of Saskatchewan students receive some form of individual or small group instruction as part of the provincial special education programs and services. Assessment in special education combines components of both classroom and large-scale assessment in that the attention is on individuals (as in classroom assessment) but usually uses norm-referenced tests (as in largescale assessment).

Instruments used to assess and make diagnoses about individual students with special needs are usually commercially available tests developed by experts in some aspect of student learning, aptitudes, or attitudes. Such tests are usually standardized measures that compare students' knowledge, skill, or aptitude to a generally accepted standard. Intelligence (cognitive ability) tests, achievement tests, and behaviour are typical of such diagnostic measures. To administer and score these tests the teacher or consultant must be certified to do so and the results are used typically to make decisions about the student's program of study or for some form of intervention.

4. Combined (complementary) Assessment Practices.

Some school jurisdictions are taking the position that it is preferable to combine results of classroom assessment and large-scale assessment. This means, for example, that a student's scores on a provincial math test would be combined with the results of the student's teacher grades to produce an overall achievement score.

In summary, the most common strategies and techniques used to assess student learning are developed by classroom teachers. This type of assessment (classroom assessment) is an integral part of the teaching-learning process. The focus in classroom assessment is on helping students become better learners by ensuring they achieve the intended learning outcomes outlined in the provincial curriculum. Assessment practices that can be used to compare individuals or (more often) groups of students are common in large-scale assessments. Assessment instruments for students with special needs must be commercially prepared and professionally administered.

D. Assessment Literacy – Frequently Asked Questions

The process of assessing student success and of reporting and using assessment information can be somewhat confusing to those not directly involved in school and classroom instruction. At the same time educational policy makers should be aware of the principles of assessment literacy that guide teachers' and principals' decisions. Following are some questions frequently asked by parents, boards of education and policy makers.

1. Are teachers trained in assessment practices?

Most pre-service teacher training programs include courses in *classroom assessment* though not always as a requirement. Use of individual *special education assessment* instruments (such as standardized intelligence or achievement. tests) is limited to teachers or others with specific training in individualized assessment who are also responsible for interpreting and reporting the results. Most *large-scale assessments* (PISA, SAIP, PLAP) are be guided by teachers with specific instructions provided by the test developer.

2. What are the most common classroom assessment practices used by teachers?

There is a wide range of assessment practices available to teachers (tests, portfolios, projects, quizzes, performance assessments etc). A recent study of high school teachers Showed that teachers used the following *types of assessment practices*.

- a. Strategies *commonly* used were
 Assessments designed primarily by the teacher
 Major exams
 Projects completed by individual students
 Objective assessments (e.g. multiple choice, matching, short answer)
- b. Strategies used *somewha*t included: Performance quizzes Essay-type questions Performance assessments (e.g. structured teacher observations or ratings of performance such as a speech or paper) Projects completed by individual students
- c. Least used strategies were Authentic assessments (e.g. "real world" performance tasks) Projects completed in teams of students Assessments provided by publishers or supplied to the teacher (e.g. in instructional guides or manuals) Oral presentations

It is important to note that there are factors that can influence what practices teachers use. Those factors include: the subject matter (Mathematics, Science, Language Arts, etc.), class size, teacher training, and student attributes.

3. How are assessment results reported?

Report cards are only one aspect of reporting *classroom assessment* information to parents and students. Teachers' records and parent-teacher conferences are also part of the process of assessing student success, for example:

a. Teachers are responsible for completing report cards and providing information to parents on student success. Parents are expected to review report cards with their children and if there is a need for clarification, to contact the teacher.

b. Record keeping. Teachers are also responsible for keeping accurate records of student performance.

c. Parent -Teacher Conferences. Although not mandated by the Education Act, it is expected that teachers communicate effectively with parents.

Large-scale assessment results are reported in various ways including i) using standardized statistical scores, such as frequencies, averages (means, medians) ii) reporting standard scores or iii) or providing descriptive statistics such as percentile ranks.

4. How is classroom assessment and large-scale assessment results used by schools and school divisions?

As pointed out earlier, classroom assessment information provides some of the most useful information on the school success of individual students. Large-scale assessment (PISA, SAIP, PLAP) provides assessment information that is useful for comparing the success of groups of students (a classroom, a grade, a school, a school division, a province).

Interpretation of large-scale assessment results requires training in data analysis because the results are usually reported using statistical information that may be unfamiliar to teachers. However, workshops on data interpretation are available to assist those wishing to better understand and to use such information. For example, Saskatchewan Learning has developed a workshop to assist teachers and administrators in developing ways to use the provincial mathematics assessment results, such as the recent Mathematics and Reading pilot programs. Appendix A provides an overview of how these workshops are organized and conducted. School divisions wishing to use assessment information should establish guidelines (or formal policies) that provide a framework for interpreting and using assessment data. Section E is an outline of how such a procedure or policy may be presented.

E. A Framework for Effective School Division Assessment Policies and Practices

- 1. Principles
 - Recognize the unique dimensions (or differences) between classroom assessment and large-scale assessment.
 - Recognize that assessment can serve as assessments for learning and/or assessments of learning. This includes understanding the different purposes of:
 - 1) formative,
 - 2) summative, and
 - 3) diagnostic assessment.
 - Expect that assessment procedures be based on the intended learning outcomes established by Saskatchewan Learning.
 - Use information in ways that serve to improve student success in school.
 - Ensure that teachers and principals are trained in contemporary assessment practices.
 - 2. Procedures
 - Describe clearly the professional roles and expectations of the teaching and support staff in the assessment process.

- Establish a workable data reporting and record keeping process for schools and the school division.
- Determine the school division expectations with respect to the types of assessment practices.
- Transparency. Inform parents of school division policy and practice.
- 3. Practices
 - Systematic assessment procedures such as regular testing programs.
 - Systematic data collection procedures.
 - Measuring the full scope of learning.
 - Sources of data (classroom, province, combined, other).
 - Level of assessment aggregation.
 - Interpreting data (statistical implications).
 - Level and type of reporting (school, community etc).
 - Follow-up. Tracking future performance of graduates.

F. Student Assessment: The Role of Boards of Education

This paper has provided a brief overview of some of the basic principles and practices of student assessment as it is defined and implemented in contemporary K to 12 classrooms in Saskatchewan. Knowledge of these principles and practices is basic assessment literacy for boards of education. In addition to knowledge of assessment principles and practices, assessment literacy provides a framework to assist trustees and others in using assessment results. The current SSBA policy on assessment of student achievement helps to clarify the boards of education in guiding assessment policies and practices in a school division (see Appendix B).

It is generally agreed that student assessment information can be used to help improve student learning or as a form of monitoring (i.e. accountability) of the educational system. *Accountability* is one of the recent emphases in education and is generally considered to be an important element of contemporary educational reform and is often associated with the role of leadership in education. Large-scale assessment results, as described earlier, are an important component of such monitoring and or accountability. Indeed, the concepts of assessment *of* learning or summative assessment can be considered as a useful framework to assist in interpreting data for measuring system accountability. An important role of educational policy-makers is to clarify the extent to which large-scale assessment results should be used to monitor school and school division effectiveness

In addition to understanding the role of large-scale assessment as a form of assessment literacy, boards of education need to be aware of the role of teachers' classroom assessment practices which provides both summative and formative information on students' school success. Typically, as described earlier, most teachers' day to day classroom assessment are considered as formative assessment or as assessment for learning, the purpose of which is to improve student learning and to monitor student, school and school division progress. Using classroom assessment practices and results to improve learning is another fundamental principle of assessment-based school reform. Thus assessment literacy for trustees involves clarifying the nature and function of each of assessment for learning and assessment of learning. Boards of education should ask for achievement information to be presented to the board to oversee this critical component of their mission. A schedule outlining 'what information' and 'when' is helpful to ensure routine monitoring of achievement results. Interpretation panels or committees are frequently established to engage professional staff in bringing the achievement information and recommendations for policy action to the board

In summary, it is important to emphasize the role of boards of education in supporting school and school division assessment practices that are based on the principles and practices described in this paper. As part of the monitoring function of a board of education, there is specific information that trustees ought to be aware of in their schools and school divisions.

Questions that boards of education might ask regarding assessment practices in a school or school division include, but are not limited to:

- 1. What was the assessment measuring? (knowledge, skills, attitudes).
- 2. Who were the intended participants? (grade level, subject)
- 3. Who developed, administered, scored the tests? (national, provincial, school, classroom)
- 4. What is known about the validity (accuracy) and reliability (consistency) of the data?
- 5. How are the test results to be interpreted? (norm-referenced, criterion-referenced, self-referenced)
- 6. What was the purpose of the test and how are the results to be used? (summative or formative or both)
- 7. How are the results to be reported? (division, school, classroom)
- 8. Are there legal or ethical considerations in using or sharing the data? (privacy)

Appendix A

Assessment for Learning: Improving learning in Saskatchewan schools

This paper has attempted to outline the knowledge and understanding necessary for trustees to be considered 'assessment literate' and has emphasized that there are a number of different purposes for, and interpretations of, student assessment results. The *Assessment for Learning Program* developed and implemented by Saskatchewan Learning is an example of <u>one</u> type of assessment program that produces results that could be used by trustees and boards of education. Details on the program are available on the Assessment for Learning website.

(http://www.sasked.gov.sk.ca/branches/cap_building_acct/afl/aflindex.shtml).

The provincial assessment program has been in effect for over ten years and has included several important initiatives. Two of these have been the Provincial Indicator Program and the Provincial Learning Assessment Program (PLAP). The former has provided regular reports on many elements of the Saskatchewan school system and is somewhat unique among provincial education systems across Canada. The PLAP has provided more specific indicator information on academic achievement (Language Arts, Mathematics, Science), students' technological literacy, and students' personal and social skills and values.

Assessment for Learning: An overview

Recently the Department of Learning undertook an *Assessment for Learning* (AFL) initiative designed to provide teachers and policy makers with assessment data that could be used to improve student learning (that is, formative assessment). The purpose of this new program is:

Assessment <u>for</u> Learning involves using assessment data to improve student learning. This improvement focus differs from assessment <u>of</u> learning, which measures what learners know or can do, largely for accountability purposes. The end result is that assessment will become a key tool for teachers to use in strengthening the teaching learning process. To achieve this end, the engagement of staff and the school community is vital for the intended success: improvement in learning. (Saskatchewan Learning. Assessment for Learning. Information Package for the Mathematics Pilot Project, Fall 2003, p.1)

The Assessment for Learning Program was implemented in 2001 first using a mathematics test in Grades 5, 8, and 11 field-tested in the Northwest region of the province. Subsequently the tests were extended to be a provincial grade 8 mathematics test in 2003, and a second grades 5, 8, and 11 test in 2004. In 2005 a provincial reading test will be administered to grades 4, 7, and 10

students. This Assessment for Learning approach to assessment literacy has been adopted because it provides a process for teachers, administrators, and others to obtain school and school division data that can help them plan for changes (where needed) to school programs. An important component of the program is that parents and boards of education are provided information on the purposes and procedures used in the program and results are made available to school staffs. In addition to providing data on student achievement the Assessment for Learning Program collects other related information from teachers and students. That information relates to factors that may affect student performance such as opportunities to learn.

Implementation of AFL

A systematic plan to develop, conduct, and evaluate a province-wide AFL program was recently developed and implemented by Saskatchewan Learning. The implementation plan can be described in three stages i) developing high quality tests and other data gathering instruments, ii) administering, scoring and reporting the results of the tests, and iii) helping teachers and others use the test results to improve student learning. Following is a brief description of the three stages.

a. Developing large scales assessment instruments. Developing good tests is a time-consuming and rigorous process that requires knowledgeable and experienced teachers and other measurement experts. The process involves developing a framework of intended learning outcomes that would be appropriate for the age-grade of the students who will write the test. Steps are taken to ensure the tests measure what students ought to know about a curriculum area (such as Mathematics) and tests are usually field-tested to ensure that they are that they are fair, valid, and reliable. Most such tests include multiple choice, open-ended questions, and other types of questions to ensure a full range of the curriculum is tested.

b. Administering and scoring tests. In the first years of the AFL program tests were given to school divisions that volunteered to administer the tests to a specific grade(s) in the case of the mathematics test to grades 5, 8, and 11. Because AFL is a large-scale testing program, large numbers of students participated (i.e. several thousand at each grade level). The tests are usually administered by the classroom teacher or by another school staff member who has been trained to give instructions to participating students. The tests are then scored by that person and the results submitted to Saskatchewan Learning for follow-up analysis and reporting. The results of the AFL tests for each school and school division are then shared with schools and school division with suggestions as to how the results can best be used by teachers, principals, and others.

c. Using assessment data. Results of the AFL program are intended to be used to improve student learning, therefore teachers and principals are

encouraged to develop skills in data management. Identifying strengths and weaknesses in their students' performance provides a starting point for changing instructional practices where necessary or for reinforcing current best practices. School divisions are expected to provide the leadership and resources for their staff to develop effective practices that result in improved student learning.

Appendix B

Assessment of Student Achievement: SSBA Policy Position Statement

The board of education as the governing body accountable for the education of children has a critical interest in student achievement. Boards of education require valid and reliable information concerning student achievement to inform decisions and the allocation of resources for the improvement of student learning within the school division.

Student achievement data collected is used primarily for purposes of improving student learning. The information gathered is used:

- o to help educators plan instruction and improve instructional decisions,
- o to direct professional staff development,
- to provide information for making decisions about students' educational needs and program improvement,
- o to provide information to parents and guardians, and
- to recognize strengths and honour accomplishments.

Boards of education and their Association work together to strengthen the capacity of school systems to establish policies and procedures to:

- 1. Adopt clear expectations for student achievement to focus school system resources on the improvement of student learning.
 - Student achievement is broadly defined to include the learning we want for our children as outlined in the Saskatchewan Goals of Education.
 - Student achievement expectations are based on the Goals of Education of the Province of Saskatchewan, the authorized curriculum, the needs of the students, and the wishes of the parents and public, as established in the approval program of studies for each school.
- 2. Monitor student achievement data on a predetermined timeframe from several perspectives:
 - in comparison to Saskatchewan curriculum objectives and Goals of Education,
 - o in comparison to the board's approved program of studies,
 - in comparison to achievement in the division over a period of time, and

- o in comparison to provincial, national, and international norms.
- 3. Support professional staff in the work of appropriately assessing and reporting student achievement information to ensure:
 - o assessments are fair to students,
 - o assessments are consistent and valid,
 - learning assessments are aligned with the learning objectives and the philosophy of the curriculum,
 - students understand the expectations for each assessment and the criteria for evaluating their work,
 - appropriate adaptations are made to assess the achievement of a diverse population of students including students with special needs, and
 - students (at an appropriate age) are engaged in setting personal goals, assessing their own performance, and participating in parent-teacher conferences.
- 4. Support professional staff in the planning and organization of increasingly effective programs and learning environments designed to further strengthen student learning.
- 5. Ensure appropriate administrative procedures are established for collecting, analyzing, reporting, and using assessment data to monitor and improve student achievement.
- 6. Ensure student achievement information is communicated to students and parents in a format that is easily understood, accurate, and of practical value.
- 7. Ensure achievement information is reported to the public in a clearly written and illustrated format to display significant change-over-time.
- 8. Ensure records for individual students and school division achievement are maintained appropriately.

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Appendix C

Selected Resources

1. Saskatchewan Learning: Assessment for Learning Unit <u>http://www.sasked.gov.sk.ca/branches/cap_building_acct/afl/aflindex.shtml</u>

This website includes detailed information on Saskatchewan Learning policies and initiatives related to student assessment in Saskatchewan. It includes background information and reports on Saskatchewan students' participation in international (PISA), national (SAIP) and provincial assessment projects. As well it includes reports on provincial curriculum evaluation projects and information on indicator projects.

2. Principles for fair student assessment practices for education in Canada (1993)

http://www.bctf.bc.ca/education/assessment/FairStudentAssessment.pdf

This website includes the principles of fair student assessment developed through collaboration of educational partners across Canada

3. Books about classroom assessment.

There are a large number of books and articles written about the principles and practices of classroom assessment. Some examples include:

- Montgomery, K. (2001). *Authentic Assessment: A guide for elementary teachers*. New York. Longman
- Stiggins, R.J. (2001). *Student-involved classroom assessment*. Upper Saddle River. Merrill-Prentice Hall.
- McMillan, J. H. (2001). *Classroom Assessment: Principles and practices for effective instruction*. Toronto. Allyn and Bacon.
- Gronlund, N.E. & Cameron, I.J. (2004). *Assessment of Student Achievement*. Toronto, ON: Pearson

4. Research. In addition to the web-based information and published books, there is a much research on student assessment being reported in journals on educational research and development. Sources such as University libraries are helpful in locating such research.