Early Reading

A Guide to Setting Targets for Student Achievement

2001

Contents

Introduction

The Ontario Early Reading Strategy marks the government's commitment to ensuring that every primary student is an effective reader by the end of Grade 3.

Starting in the 2001–02 school year, the Early Reading Strategy requires all school boards[1] in Ontario to set targets for improving the reading achievement of their students in Junior Kindergarten to Grade 3. Boards are accountable to the Minister of Education for ensuring that the strategy is implemented in their schools.

The purpose of this guide is to assist school boards in setting targets for student achievement in reading, as required by the Early Reading Strategy. It offers numerous suggestions that board administrators may find useful in setting targets at the board level and the school level. It provides advice on setting targets, on monitoring progress, and on reporting results to the school community and the Ministry of Education.

Although reference is made to techniques for effective planning, boards are not required to follow each specific suggestion in this guide. In addition, boards *should not* regard the target-setting process as a new and separate improvement-planning activity. Boards are encouraged to integrate the target-setting process with their other school-improvement initiatives.

The Ministry of Education continues to gather information on effective target setting that will complement and expand on the suggestions and advice contained in this guide. The ministry is also gathering the latest information on reading assessment instruments, reading interventions, and other topics related to the implementation of the Early Reading Strategy. This information will be shared with boards and others as it becomes available.

For additional resources related to data analysis, target setting, improvement planning, and results reporting, see "Suggested Resources" on page 23.

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1. In this document, *school boards* and *boards* refer to district school boards and school authorities.

1. Understanding the Ontario Early Reading Strategy

The Importance of the Strategy

Student achievement in reading is assessed by the reading portion of the Grade 3 Assessment of Reading, Writing and Mathematics – one of the province-wide assessments administered annually by the Education Quality and Accountability Office (EQAO). In the 1999–2000 school year, only 49 per cent of Grade 3 students met or exceeded the provincial standard for reading. Figure 1 shows that these results were only a slight improvement over the results of the previous two years.

Figure 1. **Grade 3 students who met or exceeded the provincial standard for reading in EQAO assessments, 1997–98 to 1999–2000**
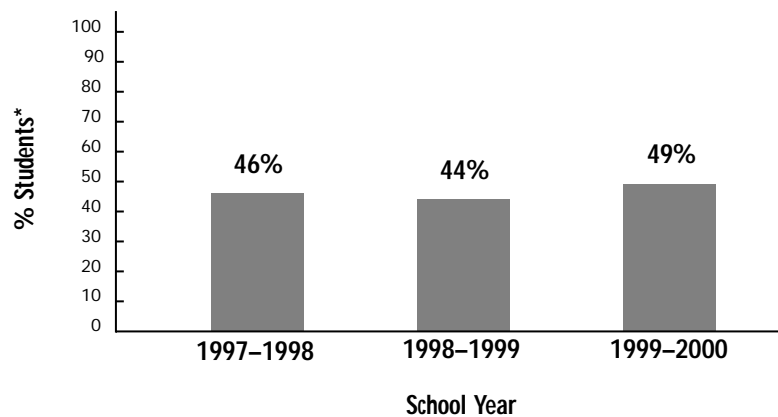
*The denominator used in the calculation is all students in the grade.

Source: Assessment results, Education Quality and Accountability Office

Children who cannot read by the end of Grade 3 are more likely to fall behind in other subjects and to experience low self-esteem. They lack a basic skill that they need to become independent learners in all disciplines. Research shows the following:

• A student's reading skills in Grade 3 can be a reliable indicator of the student's academic success in later years.

• Good reading skills help students to be effective learners throughout their school years.

• Effective target setting and school improvement planning can lead to higher levels of student achievement in reading.

The Targets

In the context of the Early Reading Strategy, a target represents **the percentage of Grade 3 students who will meet the provincial standard for reading in the EQAO reading assessment**. Boards will forecast targets for three years and update their targets annually. Each target is an informed prediction of the results that can be achieved by students, given the focused efforts of staff, parents, and students themselves.

Targets are the means to an end, not the end itself. The ultimate goal is to improve the reading skills of students so that they become successful learners throughout their school years and beyond.

The Target-Setting Process

Target setting is not new to Ontario. Some boards already follow similar practices, and they have shown that this approach is both practical and effective. For these boards, the Early Reading Strategy provides a way to build on their successes.

Target setting works best as part of regular planning to improve student achievement. An effective process involves the following steps in a continuing cycle:

- **Gather** appropriate information about student achievement and about the context of the board and its community.

- **Analyse** the information in context – looking at individual students, groups of students, grade levels, schools, and the board – to take stock of the current situation, establish an expectation for future achievement, and identify where improvement is needed.

- **Set** clear and measurable achievement targets as part of the regular school-year cycle.

- **Use** achievement targets to guide improvement planning. This involves:

  - identifying strategies and resources to help reach the targets;

  - monitoring progress towards the targets;

  - refining the targets and improvement strategies on the basis of experience and results.

- **Report** targets and results to ensure accountability.

The Accountability Cycle

The target setting and reporting required by the Early Reading Strategy serve to focus boards on planning for improvement and monitoring their improvement strategies. These activities are part of an ongoing cycle. Boards work with their elementary schools to set targets for improvement that cover a three-year period. They then establish and implement a set of strategies and interventions to achieve progress. Success is measured by the results in the annual EQAO province-wide Grade 3 assessment. Goals are adjusted and refined following the results. Figure 2 describes the cycle.

Figure 2. **The accountability cycle**

When	Who	What
May	EQAO	Administers the Grade 3 reading assessment to students
October	EQAO	Releases assessment results
October–December	Board	Sets achievement targets for reading over the next three years
December	Board	Reports to the Ministry of Education the reading achievement targets and the results for the board as a whole and for individual schools
Spring	Board	Reports board action plans (also called board improvement plans) to the EQAO

It should be noted that the EQAO, in some instances, withholds aggregate assessment results for specific schools because it would be easy for anyone looking at the results to deduce, from the aggregate, the achievement of individual students at those schools, and this would violate personal privacy. (Parents of children in these schools may request their individual child's results.) Because the aggregate results for these schools are not reported, the ministry does not expect boards to report targets for these schools, since targets are only meaningful in relationship to results. But boards are expected to continue working towards the goals of the Early Reading Strategy, ensuring that primary students in all of their schools have the best possible opportunity to become effective readers by the end of Grade 3.

2. Gathering Information

The first step in target setting is to gather information about the level of student achievement and the reasons why students are achieving at that level. Clear, reliable, specific, and regular measures can point boards to what is working and what needs improvement.

Kinds of Data

Broadly speaking, two kinds of data can help boards set targets: (1) data on *student achievement*; and (2) data on *the schools and their community context*. Information about student achievement is essential. Information on the schools and their community context can help boards understand other factors that may influence students' level of achievement.

Data on Student Achievement

The EQAO assessment measures how well children have met the learning expectations of the elementary curriculum.

For the purposes of the Early Reading Strategy, data may be gathered on the reading achievement levels of students in Junior Kindergarten, Kindergarten, Grade 1, and Grade 2, as well as Grade 3. Today's Junior Kindergarten students will reach Grade 3 in a few short years. Now is the time to lay the groundwork for their future reading achievements.

Student achievement data is derived from three main sources: from the EQAO's province-wide assessments; from teachers, who gather it at the classroom level; and from boards.

Province-wide assessment data

The EQAO conducts province-wide assessments to determine how well Ontario students are performing. There are four levels of achievement within the EQAO assessment, level 1 being the lowest. A student who performs at level 3 meets the provincial standard. Performance at level 4 surpasses the standard.

Figure 3 on page 8 shows the requirements for reading at level 3 as set out in the EQAO's 2000–2001 Grade 3 Assessment of Reading, Writing and Mathematics.

Figure 3. **The provincial standard for reading in Grade 3 (level 3)**

Categories/Criteria	Achievement at Level 3
[The student:]	
Reasoning • selects and describes relevant information using information related to the text to show understanding • interprets and analyses ideas and information from the text	• demonstrates general understanding by using ideas of some complexity, beginning to make inferences, and responding with information that is consistently related to the text
Communication • relates ideas from reading to [his or her] own knowledge and experiences and to other readings	• demonstrates the ability to use ideas in different contexts by clearly and precisely supporting them with personal knowledge/experience
Organization of ideas • identifies and describes different forms of text • uses knowledge of the organizational conventions and characteristics of different forms of writing to enhance understanding	• demonstrates general understanding of different forms of text by identifying the use of characteristics and organizational elements of some complexity
Application of language conventions • understands the conventions of written texts (spelling, grammar, punctuation, and style) • identifies various conventions (spelling, grammar, punctuation, and style) of texts and explains their use	• demonstrates general understanding of most of the required conventions by correctly identifying and explaining their use

Source: Education Quality and Accountability Office, *Grade 3 and Grade 6 – Administration Guide for Teachers and Principals, 2000–2001*

The EQAO provides individual student results of its annual Grade 3 Assessment of Reading, Writing and Mathematics to parents and teachers, and it releases board-by-board and provincial results to boards, the ministry, and the public. The EQAO also provides contextual data – such as a breakdown by gender – that boards can use to interpret the results.

EQAO data can be used for target setting in at least two valuable ways:

• to establish the starting position ("How well are our Grade 3 students doing in reading?")

• to identify, through further analysis, specific areas that need attention

Classroom data

Information gathered by teachers may be used to help predict how well students will perform on the upcoming EQAO assessment. Examples of these sources of information follow:

- *Assessment instruments* that teachers may use in class measure a student's ability at a point in time. In some cases, this data may also indicate a course of action that could advance the student's learning. The data may be summarized to describe the status across classrooms, schools, and boards.

- *Tests and quizzes*, developed by teachers and administered periodically, are linked to stages in the curriculum and to the provincial levels of achievement. Results can be used to analyse reading achievement in a class and, to the extent that the tests and quizzes are standardized across a school or board, to gauge progress and to identify broad areas that need attention.

- *Student work* in portfolios and projects can be compared with student work in the reading exemplars developed by the ministry or the board. (Exemplars provide samples of student work that demonstrate achievement of the provincial expectations at levels 1 through 4.)

- *Recorded observations* can measure a student's level of engagement, understanding, and participation in discussions, and the quality of a student's responses to questions. This type of information can help show whether individual students' needs are being met. It may also elaborate on why students are or are not meeting reading expectations. Finally, it can show patterns in the classroom and point to areas that need attention.

- *Tracking records maintained by teachers and schools* could include attendance records or student responses to a particular unit or teaching method. These records can be linked to assessments conducted in the classroom to identify types of students who may need special attention.

- *Report card marks* can show individual and class progress by subject or by teaching unit.

Board data

Boards may have access to additional sources of information, such as the following:

- assessment instruments that boards may be applying systematically to measure students' ability

- aggregate data based on teachers' tracking records, report cards, etc.

Data on the Schools and Their Community Context

Information about the schools and their community can help boards understand the level of their students' reading achievement – why students are, or are not, making progress. It can also help boards understand the factors that they may consider when setting achievement targets and the supports they need to improve achievement.

Examples of this contextual data include the following:

- *information on students*, such as:
    - familiarity with English (Is English a student's first or second language?)
    - mobility, as measured by transfers in and out of the school and board
    - attendance
- *information on the community*, such as:
    - languages that are spoken in the home
    - parental involvement
    - average family income

Many boards have developed district (board-wide) profiles and many schools have developed school profiles. Some schools have also developed profiles at the classroom level, which allow them to draw on a range of contextual information such as behaviour incident reports and results of parent satisfaction surveys. All of this information is helpful in the target-setting exercise.

3. Analysing Information

Boards can use information gathered from standardized and non-standardized sources to identify:

- current levels of achievement;
- areas that need to be addressed to improve levels of achievement;
- strategies needed to address areas of deficiency (the improvement plan);
- the likely outcome of those strategies – in other words, the level of achievement that might be expected after the improvement plan is appropriately implemented.

Effective Use of Data

The following guidelines are intended to help boards ensure that they have reliable data to work with and that they use it appropriately:

- Gather the data consistently, using instruments and methods that allow valid comparisons.
- Review the data regularly in order to make timely and informed decisions.
- Consider the quality of the data.
  - Is the data clear, measurable, and consistent?
  - What is the size of the student population (cohort) being measured? Is it large enough to make generalizations?
  - How far back in time can you go to uncover trends?
- Give appropriate weight to the data. For example, give less weight to data that is not standardized or comparable.
- Avoid comparisons that don't make sense. (Compare apples to apples and oranges to oranges.)
- Protect the privacy of individuals. Don't publish any information that might identify children or their families, either directly or by implication.

Aggregate Data

Board and school administrators, teachers, and parents are accustomed to thinking about student achievement at the individual level; they may be less accustomed to looking at data in an aggregated form, where the achievements of a group of students are summarized. Aggregate data can be used to track the progress of a class, school, or cohort of students for the purposes of predicting outcomes in later grades and identifying areas for improvement.

Data on High-Achieving Schools

To be thorough when analysing data, a board may examine not only the EQAO assessment results for the board and for the province, but also the results for area schools that have similar characteristics – especially schools that demonstrate high levels of achievement. This information can offer a benchmark for target setting and can hint at strategies for achieving those targets.

Patterns in Data

Good data analysis will reveal patterns and explain why they appear. The real story is in the patterns, not the raw numbers.

Boards can look for these patterns and analyse them to identify issues affecting groups of students. It may be that a group of students would benefit from a similar kind of intervention, and that this kind of intervention would be an important element for a classroom, grade-level, or school-wide strategy.

Boards may consider the following questions:

- Which groups of students are making slower progress than expected? For example, are achievement levels different for boys and girls? How, and why?

- In which components of reading has student achievement risen or fallen significantly over time, and why?

- Which types of student needs are not being well met?

- What measures are in place to address the learning needs of at-risk students?

Trends

To identify trends in school performance, boards may consider the following steps:

- *Graph the data.* Graphed data can indicate the direction and consistency of a trend. Boards can see how close they are to achieving their targets by putting the targets on the graph.

- *Note the direction and consistency of trends.* Is there a general or consistent trend in the data? Is the trend positive, negative, or holding steady? In some cases, the data may indicate a shifting trend; for example, the trend may hold steady for three years and then begin to move upwards.

- *Be cautious about concluding that a trend exists where there are only a few data points and the changes are small.* Results often fluctuate from year to year without signifying a clear trend. This random fluctuation may occur because of measurement error – that is, inaccuracy in collecting and reporting the data. However, change that persists over several years clearly indicates a trend.

- *Check for contextual forces, such as demographic changes, that may be responsible for the changes.* It is tempting to conclude that an upward trend in the data is the result of the improvement strategies that the school implemented. However, it can be difficult to link cause and effect, since student achievement may be influenced by a complex mix of context and practices. Similarly, a downward trend in the data may not mean that the school's improvement strategies have failed.

The following questions may help boards investigate the factors that affect student achievement:

- *What caused the trends in the data?* What factors may have contributed to the results being observed? What important inputs or practices have changed?

- *How have improvement strategies been implemented?* If improvement strategies may have contributed to the trends, boards could review how the strategies were implemented in specific schools. Were they implemented in the way intended? Do all teachers understand and apply the new practices or improvement strategies in the same way? Is the school supporting implementation of the new practices or improvement strategies as initially planned?

- *How can we be confident that the improvement strategies are working?* Is there enough information to understand the trends in the data? What additional information is needed? Is there strong evidence to support changing the current course of action?

4. Setting Targets

Targets provide a goal. The success of improvement strategies can be measured against them, and they can help raise a board's and its community's expectations of what can be achieved.

Under the Early Reading Strategy, boards set board-wide targets for the percentage of Grade 3 students who will meet the provincial standard over each of the next three years.

Effective Targets

Research shows that target setting is most effective when the targets are clearly expressed, specific, measurable, time-limited, and ambitious but achievable. Boards may wish to ensure that these criteria are observed when setting targets for early reading achievement.

Evidence-Based Targets

Target setting is accomplished when a board works in partnership with its community to consider all the available evidence – including student achievement data and data on the schools and their community context – and then chooses a target that balances the ambitious with the achievable.

Figure 4 describes the target-setting process.

Figure 4. **Board target-setting process**

- Using the selected assessment instrument, assess how well students in Junior Kindergarten to Grade 3 are reading now.
- Analyse all available data.
- Identify the instructional strategies and interventions to be used, tailoring them to students' needs.
- Estimate the effect of those strategies on reading achievement levels in the school – in particular, on the results of the EQAO Grade 3 assessment.
- Set targets based on the estimated effect of the strategies.

The board may set its overall targets for Grade 3 reading achievement in *either* of the following ways:

• Set board-wide targets and direct schools towards these goals.

• Weigh the aggregate effect of individual school targets in order to determine appropriate board-wide targets.

In either case, the board must assure itself that all targets are ambitious but achievable. This assurance will come about naturally from good communication and a high level of cooperation.

Boards may wish to address the following points:

• ways to document the progress of students who are now in Junior Kindergarten as they proceed through the school to Grade 3

• methods used to set targets

• ways to align targets with available resources

• measures to be used to track student progress

• communication with parents

Targets alone will not bring about improvement. Most boards across Ontario have had several years' experience with improvement planning, and many excellent resources on improvement planning exist in the province. Examples of improvement plans, as well as the EQAO's *Ontario Report and Guide on School Improvement Planning, 1999–2000*, can be downloaded from the EQAO's website, at www.eqao.com. Additional resources are listed in "Suggested Resources", on page 23.

Effective Improvement Plans

An effective improvement plan should consider past performance, set targets for improvement, and articulate the strategies for meeting those targets. It could include a comprehensive review of data at all levels and put this information in context.

Like effective targets, effective improvement plans are clearly expressed, specific, measurable, time-limited, and ambitious but achievable.

Strategies and Resources

Data gathering and analysis can reveal how well students are doing now. They can also be used to predict future levels of achievement. Improvement planning attempts to show how boards will cover the distance between the status quo and the desired level of achievement.

In trying to bridge this distance, boards could consider the following questions:

- What priority areas need to be addressed to achieve the target?
- What strategies will help students reach the target?
- Who will be responsible for ensuring that these strategies are implemented?
- What resources can be focused on making these strategies work?
- When and how will these strategies be put into effect?
- What milestones can be set, so that progress can be monitored?
- How will success at each milestone be measured?
- At what point in the process will targets, strategies, responsibilities, and resources be revised?

Monitoring and Evaluation

An essential step in the improvement process is the monitoring and evaluation of improvement strategies. Boards might ask themselves regularly if their strategies are working for students, and they can look for evidence in their student achievement data.

Monitoring and evaluation needs to occur on an ongoing basis. It involves:

- identifying the factors that are critical to success;

- gathering information on the factors that may be helping and hindering progress;

- considering the implications of the data.

Reviews and Refinements

The evidence gathered through an ongoing program of monitoring and evaluation helps boards determine whether their targets are appropriate and whether their strategies and supports are effective. Equipped with this information, they can review their targets and improvement goals annually and refine them for future years.

6. Reporting Targets and Results

Accountability is central to the target-setting process. All partners in the education system – the ministry, boards, schools – demonstrate accountability by communicating regularly with the public about student achievement, targets for improvement, and plans for reaching the targets.

Requirements for Reporting

The Early Reading Strategy requires boards to submit an annual report to the Ministry of Education showing *overall board targets* and *targets for each school in the board* for reading achievement in Grade 3.

This reporting process complements established accountability practices, which include the following:

• Boards are required to report school-by-school assessment results to the community. They are encouraged by EQAO to submit board improvement plans (also called board action plans) to the EQAO and the community.

Sample Report Template

A sample report template for the 2001–02 school year appears in figure 5. The final layout of the report template may vary from this sample, but the information required will be the same. As the sample indicates, each year the report will include an additional year, so that targets for at least three years will be reported at a time, as well as the previous years' results.

More information about completing the report follows the sample template.

For a copy of the final layout of the report template, contact the appropriate Ministry of Education district office.

Figure 5. **Sample report template for boards**

Report of Grade 3 Reading Assessment Targets and Results for 2001–02

Please specify:

- Number of schools in the board that offer JK to Grade 3 _____
- Number of schools for which EQAO data is withheld from public
  release, according to EQAO rules _____

PART A. This report contains:

❏ **Board** overall targets and results for _____

<div align="center">[Name of board or school authority]</div>

   or

❏ **School** targets and results for _____

<div align="center">[Name of school]</div>

PART B. Students achieving at level 3 or better *(complete both methods)*

School year ending	Method 1 based on Grade 3 students eligible to participate (total enrolment for Grade 3)						Method 2 based on Grade 3 students actually participating/likely to participate (excluding absences, exemptions, and deferrals)					
	TARGET		ACTUAL		DIFFERENCE		TARGET		ACTUAL		DIFFERENCE	
	$\frac{\#}{\text{Total}}$	%	$\frac{\#}{\text{Total}}$	%	%		$\frac{\#}{\text{Total}}$	%	$\frac{\#}{\text{Total}}$	%	%	
2001												
2002												
2003												
2004												

Requirements for Completing the Report

EQAO assessment results are an important source of information for improvement planning. However, when analysing assessment data and drawing conclusions from it, boards need to take into consideration the participation rate of their students in the EQAO assessment. Because of the importance of this information, boards are asked to express their achievement targets in two ways, using two methods. These methods correspond to the two methods used by the EQAO in reporting its assessment results.

- **Method 1** expresses the target as a fraction or percentage of the total number of students *eligible* to participate in the Grade 3 assessment in a given year – in other words, the projected Grade 3 enrolment.

- **Method 2** expresses the target as a fraction or percentage of the total number of students *likely* to participate in the assessment. This number excludes students who are projected to be absent, deferred, or exempt.

The steps for both Method 1 and Method 2 are given below. (Note that boards are asked to state their targets in two ways: as the *number of students* and the *percentage of students* achieving the provincial standard.)

Method 1	Method 2
1. Report actual results from the previous year. To do this, boards will need: • the number of students who achieved level 3 or higher in reading in the previous year • the **total enrolment** for Grade 3 at the time of the assessment, *including* those who were exempt and those who took part in the assessment but did not produce enough work to score Enter the actual achievement as a fraction of the total enrolment in the Actual # column and as a percentage of the total in the Actual % column.	**1. Report actual results from the previous year.** To do this, boards will need: • the number of students who achieved level 3 or higher in reading in the previous year • the **total number of students participating** – that is, the number of students who actually participated in the assessment, *excluding* those who were exempt and those who took part in the assessment but did not produce enough work to score Enter the actual achievement as a fraction of the participants in the Actual # column and as a percentage of the participants in the Actual % column.

Method 1 (cont.)	Method 2 (cont.)
2. Calculate the difference between the targeted percentage and the actual percentage of students who achieved level 3 in the previous year. (This calculation cannot be made for 2001, because schools will not have targets for the previous year. Start calculating the difference in 2002.) Enter the difference in the Difference % column.	**2. Calculate the difference** in the same way as Method 1.
3. Forecast the total enrolment for Grade 3 for each of the coming three years. To do this, schools will need actual enrolment numbers from earlier grades. For example, to forecast the number of students who will be eligible to participate in the Grade 3 assessment in 2003, use Grade 1 enrolment for 2001.	**3. Forecast the total number of students who are likely to participate** in the EQAO assessment for each of the coming three years. To do this, use the enrolment forecasts obtained in Method 1 and multiply each year's forecast by the **average participation rate** for students in all previous years of the EQAO assessment. (The participation rate is the number of students who participated in the test as a percentage of the total enrolment.) To calculate the **average participation rate**, add up the rates (percentages) from all the previous years of the EQAO Grade 3 assessment and divide by the number of years. For example, for 2001–2002: Participation rate for 1997–1998 Participation rate for 1998–1999 Participation rate for 1999–2000 + Participation rate for 2000–2001 Sum of participation rates for all years Sum of participation rates ÷ number of years = **average participation rate** To calculate the forecast for the **total number of students likely to participate** in future years, multiply the **total enrolment** from Method 1 by the **average participation rate**. Do this for each of the coming three years.

Method 1 (cont.)	Method 2 (cont.)
4. Set the achievement targets for each of the coming three years.	**4. Set the achievement targets** for each of the coming three years.
To express the target as a fraction, use the **total enrolment** for the denominator and the number of students targeted to achieve level 3 or greater for the numerator. Enter the target for each year as a fraction in the Target # column.	To express the target as a fraction, use the **total number of students likely to participate** for the denominator and the number of students targeted to achieve level 3 or greater for the numerator. Enter the target for each year as a fraction in the Target # column.
From the fraction, express the target as a percentage of students who are expected to achieve level 3 or greater, and enter this number in the Target % column.	From the fraction, express the target as a percentage of students who are expected to achieve level 3 or greater, and enter this number in the Target % column.

Remember, meeting a target is cause to celebrate and recognize the efforts of all who have contributed to the students' achievement! Not meeting a target is reason to reflect objectively on the results and look for ways to improve achievement in the future.

Suggested Resources

Alberta Learning. *Guide for School Board Planning and Results Reporting.* Edmonton: Alberta Learning, 2000.

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