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Preface

Until the 1800s, the astrolabe was considered an amazing navigational instrument for determining a ship’s position and for charting a course to its destination. When the sextant was invented, it gave navigators a more accurate tool, by measuring celestial objects in relation to the horizon rather than itself. The recent development of the GPS (Global Positioning System) has given us a whole new capacity to measure where we are on this planet. Using feedback information relayed from three orbiting satellites, the distance is calculated by trilateration to give a phenomenally accurate gauge of time and position. This ability to see ourselves from a global perspective has become a paradigm for how we relate to our lives.

Recently, leaders are developing new tracking systems for determining the path of education, with an eye for the future. Traditional assessment and reporting systems no longer meet the needs of teachers or students in preparing them for their learning journey. Today young people must be independent and self-directed in their education, since they are more likely to have many careers throughout their lifetime. Involving them in the classroom assessment process gives them the tools to chart their own learning course.

Research has shown that involving students in classroom assessment results in considerable gains in achievement, “amongst the largest ever reported for educational interventions” (Black and Wiliam 1998, p. 61). Because of this, educators are seeking new tools to help them identify where students are on their learning journey and give them the information they need to take their next steps. Quality classroom assessment uses triangulation of evidence and feedback from teachers, parents, and students themselves to help educators and students assess the learning that is taking place (assessment for learning). Furthermore, it gives information for taking next steps, as well as collecting the evidence needed to account for learning (assessment of learning).

Leading the Way to Assessment for Learning: A Practical Guide is important because it describes the principles of assessment for learning in the classroom and in our work as leaders. Knowing what
classroom assessment looks like, sounds like, and feels like in the classroom is important to the work of principals, assistant principals, curriculum coordinators, assistant superintendents, and CEOs, such as superintendents or directors. Lead learners know that although their job assignment may not bring them into the classroom on a daily basis, it is still critical to deeply understand the teaching and learning process so they can use assessment for learning to support the learning of adults, schools, and the system as a whole.

As you consider supporting teachers in refining and renewing their classroom assessment practices, don’t be deceived by how simple it appears to be to involve students in assessment for learning. The ideas themselves are simple, but implementing them in today’s busy classrooms will take some time. One of your roles is to assure teachers that the time spent improving classroom assessment will be well worthwhile in terms of student learning and achievement.

*Leading the Way to Assessment for Learning: A Practical Guide* is important because it describes the principles of assessment for learning in the classroom and in our work as leaders.

Each chapter includes:

- A detailed description of assessment at the classroom level
- Indicators of the classroom-based application of key assessment for learning principles
- Strategies to support classroom teachers in their learning
- Ways to consider modeling key principles in your own work as a lead learner
- Ways to continue to learn how to better “walk the talk”

On a CBC Radio broadcast, Canadian journalist and author Rita Shelton Deverell (1994) defined an expert as “a person who has a deep understanding of his or her own personal experience.” As you work with the ideas in this book, consider yourself invited to develop your own expertise in the area of assessment for learning, so you can help those around you grow. While you are thinking through the issues, becoming familiar with the research, making your decisions, and working with your students, your teachers, and your leadership team, you will find your own ways to make assessment for learning work.
The journey to better quality classroom assessment is too important to miss. 

*Leading the Way to Assessment for Learning: A Practical Guide* involves the following steps:

- Build a foundation for assessment (chapter 2).
- Help learners understand what they are to learn (chapter 3).
- Use samples to show what the learning could look like (chapter 4).
- Decide what counts as evidence (chapter 5).
- Involve learners in classroom assessment (chapter 6).
- Make assessment–learning connections (chapter 7).
- Involve learners in collecting, organizing, and presenting evidence (chapter 8).
- Involve learners in communicating about learning (chapter 9).
- Rethink evaluation and reporting (chapter 10).
- Deepen our own and others’ understanding about assessment for learning (chapter 11).

This book, along with its companion, *Transforming Schools and Systems Using Assessment: A Practical Guide*, can help you to put into practice the principles and big ideas of assessment for learning. Whether your system is a school, a cluster of schools, a department, or an entire district or system (state, province, territory, or country), we invite you to actively take on the role of learner—to allow assessment for learning not only to help guide your leadership of others, but to experience the journey on your own learning path.
Assessment in the Service of Learning

“In a time of drastic change it is the learners who inherit the future. The learned usually find themselves equipped to live in a world that no longer exists.”

Eric Hoffer

Transforming information into knowledge is a key task of leadership. Leaders need to know how to use all kinds of assessment information and processes in support of learning. Leaders need to understand and use information appropriately. One source of information for leaders is large-scale assessment information data, such as PISA, TIMSS, and state or provincial assessments. These are lagging indicators, which tell you the impact of the decisions made after it is too late to change. The lessons of the Great Depression, the latest economic downturn, stock market crash, or big business failure arrived too late for the people impacted by them. Moreover, the actual events and decisions that led to these disasters will never be repeated again in exactly the same way or in the same context. Therefore, although history has much to teach us, the lessons of the past will never be a road map to the future.

Large-scale assessment provides leaders with a history lesson. By the time those large-scale assessment scores arrive, the opportunity to change the learning for individual students has passed. Time spent analyzing the data may yield some general ideas about how to improve the learning for groups of students; however, the information won’t make a difference for those students who have now moved on. Nor is it likely to make a difference for future students, unless the data are carefully analyzed. Consider the following example.
Here is a set of large-scale assessment scores from an anonymous large jurisdiction reported between 2005 and 2009 for more than 125,000 students at one grade level:

<table>
<thead>
<tr>
<th>Chart of Published Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Year A</strong></td>
</tr>
<tr>
<td>Reading</td>
</tr>
<tr>
<td>Writing</td>
</tr>
<tr>
<td>Mathematics</td>
</tr>
</tbody>
</table>

First, notice how little change has taken place over four years at a cost of between $32–50 million per year. This system can claim a 0–4% increase in reading (1% change), writing (4% change), and mathematics (0% change). In fact, looking only at these numbers, one might think the teachers and schools in this jurisdiction aren’t working hard enough to improve. Leaders know the difference between politics and pedagogy. We refrain from making a judgment since the table in this report doesn’t give enough information. The technical reports explain the accuracy and “error of measurement” for this same information/data. They show that individual student scores range in accuracy from .79 to .82. Notice that these “error of measurement” rates are less accurate than the latest political poll your news station reports. What kind of decisions can a leader make based on this information?

**Research Connection:**

Ask yourself whether the $32–50 million spent annually over the past 14 years this jurisdiction has been engaged in large-scale assessment could have been used in better ways. Research shows that investing in classroom assessment has a greater impact on student learning (Crooks 1988; Black and Wiliam 1998), and further, that informed teachers’ professional judgment is more reliable and valid than external assessment (ARG 2005).
Now there are two problems emerging. First, individual student scores may show mastery (or not) in error. For example, if a score of 50 represented mastery, then a typical error of measurement rate tells us that the actual score could have been anything from 46 to 54. This means that decisions can only be based on actual student scores. Second, if the reported data are lumped together—that is, “Writing” rather than specifics such as “Ideas, Meaning, Organization, Voice, Word Choice, or Conventions”—then you won’t have enough information to know where you need to target your action. The feedback is too general to be of use in making a difference.

What does this mean to leaders? It means that when you are analyzing large-scale assessment data for your school or for different classrooms, you have to be very careful. Given the typical reported error of measurement, any score within the range reported could be the right one. Yes, it’s true. Your arbitrarily selected score for any student from the possible range, given error of measurement, is just as likely to be correct as the reported score. That is the impact of error of measurement. Further, the failure to accurately report and consider the impact of the error of measurement is inadvertently compounded by leaders. Leaders don’t have good information until they analyze it. The procedures used to gather the information data are not free of error, and therefore the scores are not accurate unless reported as a range of possibility.

Researchers have continued to document that this type of large-scale assessment data is wrong “one out of five times” (ARG 2006). The information you need is in the fine print of the technical reports that accompany large-scale assessments. This means that a student score of 68 might actually have been 64 or as high as 72. No one knows. All large-scale assessment data have similar problems. To be the kind of leader you need to be in these times, you must read the technical reports that explain how your jurisdiction’s information data are being collected. Look for reported accuracy rates. What is the error of measurement? Do the simple arithmetic to calculate the range of the scores of your students and report the information as close to the actual content of the standard or outcome as possible—avoid general feedback. Research from many sources shows general feedback does not lead to learning (Davies 2004; Hattie 2008; Hattie and Timperley 2007; Shute 2008).
Educators can make use of the information that comes from large-scale assessment when it comes to trends and patterns across a system, as long as leaders use individual student data very carefully. Leaders do need to know that large-scale assessment data do not give the kind of information that informs the day-by-day or month-by-month work of classrooms, schools, and groups of schools.

On the other hand, assessment for learning, when done well, is truly assessment in the service of student learning. Classroom assessment data inform the minute-by-minute, day-by-day, and month-by-month work of schools. They have the greatest impact on student learning of any educational innovation ever documented (Black and Wiliam 1998). The data show that all students improve, with struggling learners—the ones who have the greatest learning needs—showing the greatest gains.

To put this into perspective, large-scale assessment, as documented by the jurisdictions, could be reported as giving leaders the wrong data one out of five times at a cost of billions. That means, if you have a class of 25 students, you could get wrong information about the learning of five of them, if you rely only on large-scale assessment results. Further, only classroom teachers know which five students, and only if they’ve collected evidence of learning from multiple sources over time. When leaders spend time supporting teachers to improve their professional judgment, the quality of information data improves (ARG 2006).

In order to use all information well, a leader needs to know the strengths and weaknesses of each kind of data. In general, classroom assessment provides frequent information that can inform the work of all adults in support of student learning; large-scale assessments can provide periodic information that tells you the trend and pattern across large numbers of students.

Used well, classroom and large-scale assessment can work together to provide balance and serve leaders by providing the kind of information leaders can turn into knowledge.
School and system leaders need to support teachers to use the process of assessment *for* learning day-by-day to support their students’ learning. Also, it is important that leaders work with teachers to use classroom information—collected formally and informally—to inform decision making for both individuals and groups at frequent intervals.

When it comes to classroom assessment, the terms *assessment* and *evaluation* are often used interchangeably, but they have different meanings. When teachers engage in *assessment*, they are gathering information about student learning that informs their teaching and helps students learn more. This may involve an assessment task or examining student work (looking at products, observing process, and listening to and talking with students). Teachers may teach differently, based on what they discover as they assess.

*Evaluation* is a process of reviewing the evidence and determining its value. When teachers evaluate, they decide whether or not students have learned what they needed to learn and how well they have learned it. They make a professional judgment. This process is also referred to as “summative evaluation”—summing up the achievement. This professional judgment is often communicated to others in the form of grades on student work, or on report cards at the end of the term.

The importance of using classroom assessment data and using it well needs to be emphasized. To illustrate the difference between classroom assessment and classroom evaluation, the following scenario was originally developed by Michael Burger: