Spotlight on…Assessment

What we've learned from
AISI

We went from the textbook … to the Program of Studies
from assessment as an afterthought … to backward design
from a fear of results … to the analysis of data to plan instruction
from individual effort … to collective success

What we have learned from AISI about assessment

Analysis of AISI Cycle 3 projects has shown that effective classroom assessment practices are most effectively implemented through school-wide and district-wide assessment plans.

Project showed that the following effective assessment practices engage students, make them partners in the assessment process, and improve their learning:

1. Teachers have a thorough understanding of the Program of Studies and detailed knowledge of the learner outcomes
2. Learner outcomes are communicated to students and parents using appropriate language and terminology
3. Teachers and students use rubrics, exemplars and criteria
4. Teachers and students use ongoing informal feedback
5. Teachers and students develop questioning skills that focus on learning
6. Portfolios showcase student growth and support conversations about their learning
7. Students develop self-assessment skills

What are the elements of successful assessment?

This issue of *Spotlight on…* highlights some of the discoveries AISI project teams have made about developing effective assessment strategies and practices that improve the engagement and learning of students. There were approximately 400 projects in AISI Cycle 3 that focused on assessment. An analysis of these projects found that effective assessment strategies were developed within an "assessment context" that typically had the following characteristics:

Summative Assessment—A variety of methods were used to collect evidence at the end of a unit, term or course in order to make valid judgements about students' learning.

Formative Assessment—There was widespread use of numerous formative assessment practices, or assessment for learning, to track student learning, to promote student learning while it was still in progress, and to adapt instruction to better meet students' learning needs.

> "I changed my way of looking at student learning. They know how well they are doing and where they are going. My job is to help them get there."

Strong links among assessment, teaching and learning —These links were typically characterized by "tighter connections between learning outcomes and teaching activities, greater student involvement in self-assessment, increasing student independence, and enhanced teacher responsibility for ensuring all students learn."

Successful Assessment for Learning Projects from AISI Cycle 3 (p. 1)

Collaborative involvement of students in the assessment process—The importance of students' being actively involved in their own assessment emerged as one of the most significant findings of AISI Cycle 3 assessment projects.

"A signature of successful assessment for learning projects has been the emergence of student voice, not simply as background noise in a system Pep Rally, but as the voice of reason and encouragement, evidence and conscience. In impressively increasing numbers, Alberta's students are showing us that they 'get it!' "

Successful Assessment for Learning Projects from AISI Cycle 3 (p. 36)

> *"Here's how teaching and assessment practices changed in our AISI project. First, we had to identify essential learning outcomes from the Program of Studies. Then, we made sure we shared those outcomes in many different ways, using student-friendly language. We offered students exemplars of good work to help them establish criteria and to participate in the development of rubrics. We used strategies, such as graphic organizers, structured questioning, journals, portfolios, self-assessment, cooperative learning, learning conferences and increased communication with parents, to make sure students had every opportunity to produce their best work. We gave them descriptive feedback tied to learner outcomes and we made it clear that there would be no zeroes, but there would be second chances.*
>
> *What do you think happened? Students, teachers and parents had a well-deserved feeling of accomplishment and there was a measurable growth in the achievement of learner outcomes."*
>
> *Successful Assessment for Learning Projects from AISI Cycle 3* (p. 14)

Successful assessment strategies

AISI Cycle 3 projects showed that the following assessment strategies engage students, make them partners in the assessment process, and improve their learning.

Teachers have a thorough understanding of the Program of Studies and detailed knowledge of the learner outcomes

Teachers' knowledge and understanding of the Program of Studies is essential for the deep connections among curriculum, assessment and instruction that are crucial to students' success.

Some projects developed a focus on outcomes in reporting and grading practices.

"An outcome-based report card was implemented in all elementary and junior high schools in the division. The elementary report card provided students and parents with the learner outcomes that were covered during the term and the level at which the student achieved each outcome. The junior high report card listed what learner outcomes were covered throughout the term and the students received an overall achievement mark for each subject.

Both elementary and junior high report cards separated achievement from student behaviour. The purpose of this was to accurately inform students and parents how the student achieved according to the learner outcomes without student behaviour distorting the achievement level."

Greater St. Albert Catholic Regional Division No. 29; Project 30278

Learner outcomes are communicated to students and parents using appropriate language and terminology

Projects created a broader role for parents in their children's learning and more meaningful engagement of students in their learning. The use of student-friendly language was important to clearly explain the learning expectations. Often, outcome statements were posted where students and parents had ready access to them.

"Assessment for learning has required staff, students and parents to make a shift in their thinking. Our teaching practice must constantly shift. In addition, we need to communicate with parents, to help them understand why the assessment practices they know and feel comfortable with have to change. We need to make thoughtful and meaningful small steps so that we can effectively add to our repertoire of assessment skills."

Successful Assessment for Learning Projects from AISI Cycle 3 (p. 29)

"Most references to such strategies as I CAN statements, rubrics, the display and use of outcomes, exemplars, criteria and self-assessment carried with them the assumption that they worked better when students and parents were more informed about them and, where appropriate, more involved in their development."

Successful Assessment for Learning Projects from AISI Cycle 3 (p. 20)

"Students are provided with detailed, action-based learner outcomes taken from the provincial curriculum. All assessment is based on these outcomes so that students know exactly what is expected of them."

New Horizons Charter School Society; Project 30185

"We did not start this project with a goal to change report cards. However, as a result of this project, teachers and schools have demanded change in reporting practice, including report cards and parent teacher interviews, as the old ones were not representative of true student assessment."

Black Gold Regional Division No. 18; Project 30088

"Reporting systems are under scrutiny because increasingly they do not reflect new assessment practices. One school changed its entire reporting scheme to better reflect whether students learned curricular outcomes by reporting as to whether a student exceeded, me, or did not meet a particular outcome."

Rocky View School Division No. 41; Project 30173

Many projects used I-CAN statements that clearly state what students are expected to know and be able to do to demonstrate their attainment of learner outcomes. It was found that these statements are an essential component of students' self-assessment of their learning and that they frequently change the way teachers think about student assessment.

> "When they know the learning outcomes and they have helped create the means of assessment, students are empowered!"

"… we were the first in the district to share our I-CAN statements. One of our teachers did so many Assessment for Learning presentations … that we had to get a semi-permanent sub for her."
Successful Assessment for Learning Projects from AISI Cycle 3 (p. 17)

"Our elementary students can create 'I CAN' statements as well as we can!"
Successful Assessment for Learning Projects from AISI Cycle 3 (p. 12)

Teachers and students use rubrics, exemplars and criteria

There was a growing understanding about the use of rubrics and stated assessment criteria. Teachers frequently involved students in the development of these assessment tools. It was found that students work harder and are motivated to do well when they know how they will be assessed.

> "The checklists made me see exactly what I needed to include. The marking guide helped me so I could make my work as good as it could be."
>
> High school student

"Focus on assessment is having an impact on student learning, especially through the use of rubrics and exemplars… students can read and actually see what different standards look like. Showing them exactly what a great exemplar looks like gives them a blueprint to demonstrate their learning."

Elk Island Public Schools Regional Division No. 14; Project 30033

Alberta
Freedom To Create. Spirit To Achieve.

"Involving students in the building of assessment criteria in advance, and holding students accountable for student-led interviews helped increase understanding of the expectations of demonstrating achievement."

"Where is the rubric? I can't start without it."

Gr 3 student

Parkland School Division No. 70; Project 30520

Teachers and students use ongoing informal feedback

Informal feedback, non-evaluative feedback, formative feedback and continuous feedback are terms that AISI projects used to describe how feedback encourages student engagement and how students use this feedback to improve their learning.

"It was exciting to see the increase in student motivation and achievement when teachers used more informal feedback, combined with student self-assessment at the high school level."

"One student handed in her evidence claiming she was done. We went through the evidence providing feedback and found she had misinterpreted the criteria. With feedback, she became aware of her misinterpretation. She went back to her story to make changes and returned to the criteria sheet to cut and paste examples of her evidence. At this point she was indeed on track."

Black Gold Regional Division No. 18; Project 30088

"Teachers share responsibility with students' for their performance and are constantly communicating with parents and students, always inspiring them to perform better."

Lethbridge School District No. 51; Project 30044

"…when students were using visualization and concept mapping strategies, teachers were able to circulate and quickly identify which students did not understand the material. Teachers were able to use the strategies as "exit slip" activities to assess learning. This informal ongoing assessment helped teachers to know when to re-teach."

Golden Hills School Division No. 75; Project 30089

"My students have become expert in providing formative feedback to their peers. Peer assessment has taken on a whole new meaning in my classroom."

Many project teams reported that students were learning to make use of information from formative assessment to deepen their understanding and improve their work.

Giving students an opportunity to redo assignments was found to be an effective strategy. Not all students can demonstrate their learning at the same time and, by providing feedback with opportunities for reassessment, students are able to show their best work.

"…students [were encouraged] to come up with a plan on how to revise their work and to ask the teacher for assistance in areas where they struggled."

St. Albert Protestant Separate School District No. 6; Project 30001

Teachers and students develop questioning skills that focus on learning

Projects found that guiding questions can give students a focus in their work and help them become more purposeful in their learning. Questions can also encourage students to engage in self-assessment, reflection and metacognition. A principal noted that "*one of the most difficult aspects of questioning for teachers is to help students explain why something happens or how their thinking led them to a particular conclusion.*"

Many teachers and students developed the use of common terminology. Students were encouraged to ask questions using this terminology so that they could receive feedback about their learning or performance.

"Students started to use assessment for learning terms like "feedback" and "self-assessment". Students are asking for rubrics before beginning an assignment to clarify the criteria and levels of achievement."

Greater St. Albert Catholic Regional Division No. 29; Project 30278

Portfolios showcase student growth and support conversations about their learning

Student portfolios were used at student-led conferences to support more meaningful conversations with students about their learning. With increased access to electronic portfolios, a wider variety of ways become available for students to demonstrate what they know and are able to do.

"This year, students became even more involved in assessment as portfolios were introduced at each school by small groups of teachers. Students were responsible for collecting evidence of learning and annotating on the evidence using proof cards. On these cards they were asked to reflect on why they had selected the work to place in the portfolio and what it demonstrated in terms of their growth as a learner. In addition, based on the portfolio work, they were asked to set goals for themselves for the rest of the year. Students were excited to be able to showcase their learning and eager to share it with parents."

Lakeland Roman Catholic Separate School District No. 150; Project 30220

> "One student…pointed to the assessment poster on the bulletin board and said, 'Here is where I am now, but here is where I want to get to' [a much more advanced level]."

The use of student portfolios was a successful summative assessment strategy used in many schools.

"We have worked toward integrating portfolios as a key assessment and communication tool for student progress toward learner outcomes, including school-wide consistency for including learner outcome checklists, which link to assignments and assessments, evidence pieces including reflections, student work samples, tests, electronic records, etc."

Wolf Creek School Division No. 72; Project 30241

Students develop self-assessment skills

In all successful assessment projects, it was reported that students and teachers saw the value of self-assessment. It was found that students become more engaged in their learning when they are given the opportunity to self-assess.

"My students are evaluating their own work, deciding if all the elements we discussed are present or if they need to make changes. They are definitely more aware of what they are expected to know. They take greater pride in their work."

> "Students have become so competent at self-assessment they can explain to the teacher, and each other, the how and why of their assessments."

Elk Island Public Schools Regional Division No. 14; Project 30033

"Students are getting more metacognitive and are acting as self-advocates in their learning. Students use the language of assessment and this indicates a movement toward greater student ownership and engagement."

Rocky View School Division No. 41; Project 30173

> "At the beginning of Grade 2, I couldn't write very much. I always forgot my capitals and my words were not interesting. At the end of Grade 2, I was one of the best writers in my class. I love writing!"
>
> Grade 3 student

"When teachers give us feedback, the learning is more enduring. It's not just about what you're marked on but how you did it and why you did it and how to fix it. And that's something you can use every day." (Grade 9 student)

Successful Assessment for Learning Projects from AISI Cycle 3 (p. 9)

What do we know about improving assessment practices?

Implementing, improving and sustaining sound assessment practices is ongoing work. Successful projects all had significant supports in place to make this happen:"

A Plan—All projects established a school or school authority assessment plan to support the move forward.

Professional reflection—This powerful approach to professional learning was key to developing sound assessment practices.

> For the first time, we used current research to guide our decisions about assessment and our own data to make informed decisions about student learning. That had never happened before."

Teacher: *"It was apparent to me that the more successful teachers were those who engaged in more reflection on teaching."*

Teacher: *"One teacher at a time, reflection eventually became a common practice during Cycle Three."*

Principal: *"Reflective practice requires both trust and vision. A persistent focus on student learning outcomes in our project proved to be a catalyst for reflective practice."*

Successful Assessment for Learning Projects from AISI Cycle 3 (p. 22)

Community engagement—Successful projects "fostered the support of students and parents who were active partners in the formation of project plans…strategies…measures and…reports."

Successful Assessment for Learning Projects from AISI Cycle 3 (p. 33)

It became clear during Cycle 3 that more effective and successful assessment practices and tools are developed when students and teachers work collaboratively, often adopting a common language to talk about classroom assessment.

"…students are becoming partners in the assessment process."

> "I was amazed at how much information we received from student focus groups."

Alberta Initiative for School Improvement, Cycle 3: Improving Student Learning
Highlights from the Provincial Report, Cycle 3, 2006-2009

> "Our team has developed learning partnerships with students."

"Our school culture has changed. The new culture has students involved in [discussion about] criteria, exemplars, rubrics, etc. … Teachers say they agree wholeheartedly with the research on assessment and they have changed their teaching practices more than ever before.

Teachers say the changes work, they like them, the students want them and ask for them. The teachers [say] they are now part of their long-range plans, their unit plans and their daily plans."

Successful Assessment for Learning Projects from AISI Cycle 3 (p. 16)

{Un}anticipated delights!

Many school authorities were surprised by the sheer scale of the positive changes brought about by innovative assessment practices in Cycle 3! The following excerpts give a glimpse of the powerful, even joyful, sense of discovery that so many people in the school community experienced as students made massive improvements in their attitudes about their capacity to learn, in their ownership for learning, in their ability to reflect, and in their achievement.

"One of the most powerful unanticipated results of the implementation of our AISI work has been the more meaningful conversation with students and their learning. This has led us to a [more purposeful] development of student portfolios and student-led conferences as we seek to empower students to take charge of their learning."

Successful Assessment for Learning Projects from AISI Cycle 3 (p. 19)

"We are excited by the reaction of the teachers that they believe they can do their job better because of what they have learned which directly impact student achievement.

The teachers' expectation for student achievement is higher because they set short-term goals and measure achievement on a regular basis. The teachers set higher goals because they feel they have developed higher skills as teachers."

Lloydminster Public School Division; Project 30231

"We anticipated that students would be more engaged when provided with questions that were open-ended and had multiple correct answers. However, teachers reported that they were surprised by HOW much more involved students were in their learning and how much further the students took the work than what the teacher had planned."

Golden Hills School Division No. 75; Project 30090

"Assessment practices are developing the data I need to develop differentiated lessons that better address my students' learning needs. The changes that have been made in assessment have significantly improved student learning."

Medicine Hat Catholic Separate Regional Division No. 20; Project 30205

"Students, as they grew in their ability to voice how assessment worked for them, became better able to center upon how they were learning differently, express more clearly what they were enjoying, and eventually become able to work with teachers to create their own assessment rubrics."

Little Bits of Goodness: How the Alberta Initiative for School Improvement inspires educators to explore, challenge inquire and imagine better schools (p.56)

> *"[When teachers give us feedback] the learning is more enduring. It's not just about what you're marked on but how you did it and why you did it and how to fix it. And that's something you can use every day." Gr 9 student*

"Teachers who implemented assessment for learning strategies into their lesson plans reported an increase in student engagement and reduced discipline/attendance issues."

Calgary School District No. 19; Project 30275

Challenges

AISI projects identified a number of challenges in implementing new assessment strategies. Educators and researchers made the following observations:

Data Collection and Analysis
The regular gathering of data and the consistency in its interpretation between schools was often seen as problematic. There were sometimes regrets that more qualitative data had not been gathered because of how important it turned out to be when looking at student learning.

Alignment with School Authority's Reporting Practices

A sense seemed to emerge that the new assessment theories and practices regarding formative and summative assessment were not matching the jurisdictions' current summative reporting instruments.

Challenges were also identified in the following areas and reported in *Successful Assessment for Learning Projects from AISI Cycle 3* (p.25-30).

Smaller schools and school authorities

"The size of our jurisdiction makes collaboration very difficult."

"Many schools did not have enough teachers at each grade level to form an effective team; inter-school collaboration did not work very well."

Leadership

"Although we have made some good progress, there is a need to help our principals to develop more skills to lead this [sort of] school improvement work."

"Some administrators are not yet willing to take the lead on assessment change."

"We did not have [the right structure] for a jurisdiction as big as ours. Our AISI coordinator had to wear too many hats."

Teacher buy-in

"Changes in assessment practices require all of us to rethink how we teach. In my experience, that happens best through collaboration. I know some teachers can make effective changes on their own, but most teachers can benefit from working with others."

"Reluctance to change [for a small minority of] staff has created flashpoints [of conflict] because it can be very personal for teachers."

"Grading practices at the high school level are still inconsistent."

Staff turnover

"Another challenge was the transient nature of teachers in our district. We had a significant increase in the number of first year teachers who only stayed in the district for one year."

"High staff turnover presents a continuing challenge every year."

"There was a disjointed feel … because leadership was disrupted several times when coordinators left their AISI positions."

Teachers out of classrooms

"Teachers want more time to collaborate in teams and participate in enriching PD, but they also want time to implement all the wonderful ideas in their own classrooms."

"Some principals felt that teachers were out of their classrooms too much."

"The high number of professional learning opportunities provided to teachers was a definite challenge. We continue to search for ways we can work most efficiently and effectively with teachers to reduce their time away from the classroom."

Substitute teachers

"The lack of qualified substitute teachers has impacted the number of days we have been able to schedule PD activities and our ability to collaborate within and between schools."

"Diploma Exam teachers were very reluctant to attend PD sessions during the day because they did not have qualified substitute teachers to take their classes."

"Maybe we need a different form of AISI for our high schools."

The number of initiatives

"Many teachers are feeling overwhelmed with the high learning curve in assessment, as well as having [to deal] with a number of new initiatives … and an increasing number of special needs children in their classrooms."

Students find their "assessment voice"

Ecole Dickinsfield School, Fort McMurray

The story of Ecole Dickinsfield School's assessment for learning project is featured in *Little Bits of Goodness*, Ch 15. The school has about 600 K to 8 French Immersion and English students. During the project, students became more knowledgeable about how they learn and how they could better engage in learning, and they developed their "assessment voice".

"Students, as they grew in their ability to voice how assessment worked for them, became better able to center upon how they were learning differently, express more clearly what they were enjoying, and eventually became able to work with teachers to create their own assessment rubrics."

"Over the three-year cycle of AISI, students grew in their abilities to lead discussions about their own learning, create portfolios of their best work, and to both talk about and show their own growth. No longer was assessment something done to them, but became something they could use to understand and track their own progress. They came to own their own learning, because a growth in student voice equates with a growth in student meta-cognition. Now only did they know how they would be assessed, they came to relish assessment."

"Although teachers consistently identified reporting student progress using the present report card as a challenge, reflection sheets indicated teachers found using assessment for learning advantageous for reporting growth and progress. Use of rubrics, setting criteria, identifying outcomes and varied assessment tools all resulted in students having better understanding of their own progress and when asked what assessment for learning has changed for them, many teachers reported it facilitated communication of student progress with parents."

Other positive changes during the project included the following:

- The school became a "happier community".
- Students became more engaged in their own assessment.
- There was a decrease in behaviour problems.
- Teachers created their own professional learning opportunities.
- The school began to train its own learning coaches.
- The teachers became a stronger teaching community.

Fort McMurray Public School District. Project 30199

County Central High School, Vulcan

Little Bits of Goodness also tells the story, in Chapter 4, of Tracy and Lucy—two senior high teachers from Palliser School Division who visited schools in the Edmonton area where assessment for learning was being used. The two teachers came back saying, "This is what I want to do. This is the way I want to teach…it was like the door opened to a whole new world of teaching and assessing."

Tracy and Lucy began a new journey of teaching, becoming "revitalized teachers, passionate about teaching and, more importantly, passionate about student learning, and they both claim that they owe it to Assessment for Learning" (p.19). Transformational changes to teaching and learning took place in the teachers' classrooms and in the whole school community:

- Students are becoming "more meta-cognitive about their own learning…more engaged as they become aware of what they know and what they still need to learn."
- "…students are encouraged to take risks in regard to their learning."
- "…students seek and use self, peer and teacher feedback to improve their learning."
- "…a new marking system that encourages learning rather than being punitive."
- "… it encourages and provides parents and teachers the opportunity to communicate about the student as a learner rather than just their mark."
- "… it encourages an entire school community to work together, even across curriculums."

"They have changed the way they assess students, using both formative and summative assessments. The effect? … students have responded positively. They have a far better sense of what is expected; they learn from each other; and they are taking ownership of their learning."

"… teacher and student engage in a directed conversation about the concepts missed, an assessment of the student's facility with those missed concepts, and a negotiated plan for coming up to speed…students see schoolwork as a chance to be successful and to demonstrate that success. Students have also started looking at the content of their teachers' evaluation instead of stopping at the mark itself."

"Perhaps the biggest jumps in learning and engagement have come from students who were once self-defined as 'weaker.' Without penalties, and with a myriad of directed second chances, the response has been a movement from 'penalty to performance'."

Palliser Regional Division No. 26. Project 30282

Additional AISI resources and sources

The following resources are available on the AISI website, at http://education.alberta.ca/aisi :

The University of Lethbridge (2009). *Successful Assessment for Learning Projects from AISI Cycle 3, Alberta Education*

Alberta Education (December 2010). *Alberta Initiative for School Improvement, Cycle 3: Improving Student Learning, Provincial Report Highlights for Cycle 3, 2006-2009*.

Alberta Education (2010). *Supporting the Literacy Learner II, Promising Literacy Strategies in Alberta from Cycle 2 and Cycle 3 AISI Projects*.

The University of Calgary AISI Research Findings (2008). *The Role of Parents and Community in Supporting Student Success, A Review of AISI Cycles One, Two and Three Projects (2000-2008), Alberta Education*.

The following texts are available from the Learning Resources Centre, at http://www.lrc.education.gov.ab.ca :

Parsons and Kelly Harding, University of Alberta (2009). *Little Bits of Goodness: How the Alberta Initiative for School Improvement inspires educators to explore, challenge inquiry and imagine better schools.*

This book is available for $9 from the Learning Resource Centre at http://www.lrc.education.gov.ab.ca . Product # 758922. To order now, click here.

The University of Alberta's Faculty of Education AISI Team (2006). *Celebrating School Improvement, Six Lessons Learned from Alberta's AISI Projects*, Edmonton Alberta: School Improvement Press.

Note: This text is in the process of being reprinted. LRC Product # TBD.