Capacity Building Series

SECRETARIAT
SPECIAL EDITION #15

Primary Assessment

Lessons Learned from Kindergarten/Grade 1 Collaborative Inquiry

Why assess young children?

"If we attend to individual children as they work, and if we focus on the progressions in learning that occur over time, our detailed observations can provide feedback to our instruction."

(Clay, 2005, p.4)

In the early years, teachers watch children and listen to them in order to uncover their unique qualities, strengths and interests. And they do this naturally. But in order to gain the true benefits of assessment, it is helpful to take a more deliberate approach, collecting evidence of students' learning in order to design learning opportunities that challenge and extend their current understanding (Earl, 2004).

Many researchers recommend an assessment *for* learning approach which links where our students are now with the next steps for instruction. Assessment *for* learning approaches emphasize the importance of timely, specific and descriptive feedback as a way to move students forward (Black & Wiliam, 1998; Chappuis & Chappuis, 2008, Crévola, Hill, & Fullan, 2006). Assessment *as* learning approaches are also recommended by researchers (Earl, 2007). When students develop self-assessment skills, they become directly involved in the learning process, acting as the "critical connector" between assessment and improvement.

This monograph draws on both assessment *for* learning and assessment *as* learning approaches. It is based on the in-classroom research of the Kindergarten/Grade 1 Collaborative Inquiry, launched by the Literacy and Numeracy Secretariat in 2009 as a way to support teachers in exploring the impact of instruction and assessment on student learning and in building connections between Kindergarten and Grade 1. The **Voices from the field** in the pages that follow belong to members of some 60 district school board teams – teachers, principals, senior board officials and other experts – who worked together over the past year to identify approaches that create classroom environments in which young students flourish.

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Voices from the field

"When teachers introduced various open-ended materials, students began to engage in negotiation with one another around the materials. They did not have to be 'given' the language in order to engage in the explorations. Rather, the language emerged as students worked with one another … and talked through their understandings, conceptualizations and theories. This exploration was a clear example of emergent curriculum … Strands of science, math, language and personal and social development emerged as natural extensions of what the children were engaged in doing."

"The key context for our observations was the purposeful, planned oral language activities that focused on curriculum expectations allowing students to demonstrate oral language in both literacy and mathematics."

"Teachers reflected on how close observation allowed them greater insight into what students were thinking and learning. By remaining on the periphery, teachers were able to note students' ability to problem-solve, interact with others, manipulate materials, pose questions, make connections and apply and consolidate learning."

Making Learning Visible

"Teachers can adjust instructional strategies, resources and environments to help all students learn only if they have accurate and reliable information about what their students know and are able to do at any given time, and how they learn best." (Ontario Ministry of Education, 2009, p. 27)

The Ontario Ministry of Education's new assessment, evaluation and reporting guideline, *Growing Success* (2010a), emphasizes that teachers enhance the reliability of the data they are using to inform instructional decisions when assessment is based on a combination of:

- observation
- student-teacher conversations
- student products

In the early primary years particularly, teachers can ensure they are capturing accurate representations of student understanding by providing children with a wide variety of authentic ways to demonstrate their learning. These include students talking with peers and/or their teacher, constructing a model, demonstrating a particular process, engaging in a dramatic role-play or writing a "book" (Helm & Gronlund, 2000). All provide "windows on learning" (Helm, Beneke, & Steinheimer, 1998), making student thinking visible, both to students themselves and to the teacher. "When we become neutral observers and watch children in systematic and repeatable ways," writes Marie Clay, "we begin to uncover some of our own assumptions and notice how wrong these can sometimes be" (2005, p. 9).

The Kindergarten/Grade 1 Collaborative identified four clusters of assessment processes which support teachers in capturing student understanding and moving their learning forward.

1. Observation

"An understanding of child development frames the process and guides the focus of observation and monitoring." (Ontario Ministry of Education, 2010b, p. 2)

Observation is a purposeful means of gathering data/evidence of student learning that involves listening to, watching and interacting with students engaged in intellectually worthy and authentic tasks and conversations. It is a key component of all forms of assessment and is a planned part of everyday practice. To be effective, plans for observation need to include what will be observed as well as when and how this will take place. Observation needs to be deliberately planned, but open enough to take into account the unexpected.

Teachers carefully listen to and watch individuals and groups of children as they interact in a variety of contexts. At times, the teacher is an observer allowing the flow of student interaction to go on uninterrupted. At other times, the teacher may inject key questions planned in advance and comments to uncover, extend or challenge student thinking. Having a clear understanding of the learning goals linked to clusters of curriculum expectations, in addition to knowledge of the developmental stage of the child, allows teachers to design a repertoire of open-ended prompts that elicit the kinds of information that lead to a more comprehensive profile of the child.

2. Documentation

"... observations are captured through notes, pictures and videos and supplemented by the child's own representations." (Ontario Ministry of Education, 2010b, p. 28)

Documentation is the process of recording descriptive information from a variety of sources that accurately reflects student learning through what children say, do and represent. It provides a well-organized record of student thinking and learning that is collected over time. Documentation is frequent, systematic and purposeful and linked to learning goals and success criteria. It is important for it to be accurate and objective, reflecting the full range of student learning, leading to a complete picture of a student's progress. Teachers use their professional judgment and knowledge of the developmental continua to decide what to record in both planned and unexpected observations.

Why document student learning?

- to provide a record of growth over time
- to reflect on teacher professional practice
- to inform the design of learning opportunities that will challenge and extend student thinking
- to support self and peer assessment
- to support the diverse ways that children learn
- to involve families in their child's learning
- to support dialogue with other professionals

What types of documentation can be used effectively in the early primary years?

- videotaping
- audio recording
- digital photos
- portfolios
- records of reading behaviour
- work samples
- focused observation/anecdotal notes/checklists
- journals
- transcriptions
- inventory of children's interests
- student self-assessments of performance and goals

3. Analysis and Interpretation

"After describing what the student shows us about student understanding/thinking/learning, professionals are then ready to analyze their observations ... looking for patterns in the student responses and hypothesizing cause and effect relationships between what they have done in their instructional practice and what the students actually know and can do as a result." (City et al. (2009), p. 86)

Once evidence of student learning has been documented with an appropriate tool, it can be used to identify "pupils' particular constellation of understandings, misconceptions, gaps or strengths in skills and their position in the process of connecting and organizing the pieces into more automatic and purposeful learning schema" (Earl 2004, p. 41). The first step is to engage in non-judgmental description of the evidence the student work provides; specifically, "What task were students given/what were they asked to do?" and "What did the students actually do/say in response?" (City et al. (2009), p. 84–88). Teachers engage in this component of their work individually, but working collaboratively to moderate student work has the potential to enrich instructional practice (Literacy and Numeracy Secretariat, 2007).

When teachers share their documentation of student thinking and learning and work collaboratively to identify trends and patterns, they are able to determine and design the intentional instructional responses that need to occur next. The closer the analysis occurs to the learning experience, the better positioned they are to respond in a timely manner. Teachers using video documentation found that reviewing the footage the same day allowed for timely adjustment and specific feedback to guide instruction the following day.

In a Collaborative Inquiry math unit, for example, grade partners implemented the three-part problem-solving lessons they had co-planned. In debriefing their observations of students during their initial lessons, the grade teams noted that the students kept looking at their teacher for answers. They suspected that they had often led the students to answers rather than allowing them to reason and wrestle with thinking. This kind of analytical thinking about the relationship between instructional practice and student results paved the way for determining the intentional instructional responses that need to occur next to support the development of student thinking.

Voices from the field

"Using video to capture student thoughts was very powerful. It gave us good insight into the language the students were using and a record of the prompts we used. We actually found that scribing can slow a student's thoughts down. Teachers may interrupt students to ask them to slow down or to wait for the teacher to catch up. Children can lose their train of thought or give superficial responses as a result."

"Using iPods to capture the recordings of student responses was excellent too. The iPods are easy to manage, are portable and motivating for students and teachers alike."

"We interpreted the analysis with relation to our inquiry question and determined, as objectively as possible, what observations were attributable to our work. We reflected on our findings to make decisions about our practice."

Voices from the field

"Participating as a play partner while extending, suggesting, demonstrating and questioning, provided just the right amount of scaffolding for students to further explore the learning opportunities."

"Conferences that were ongoing as the children were engaged in the act of writing ensured that the feedback was always given at the moment needed by the student. In this way, students had a greater probability of owning the feedback and internalizing it. Timely 'at-the-moment' conferences focused on each student's unique and present competencies and needs."

"By coming to know each child's strengths, a teacher can use the children themselves as a tool for facilitating growth in others. This can happen through purposeful and flexible grouping of children."

4. Responding: Taking Informed Action

Teachers respond in a variety of ways to what they learn from their analysis of student data/work regarding student strengths, needs and interests. Responses range from immediate "in the moment" interactions with students as they are learning, to more reflective responses as educators engage in planning instructional opportunities that move student thinking and understanding forward. These intentional actions can be framed as instructional decision points illustrated in the following chart.

Linking Assessment, Instruction and Learning Goals	
In-the-moment interactions with students	• timely, descriptive feedback directly connected to success criteria • reminders, scaffolding or example prompts to challenge and extend thinking • questions for clarification or to extend thinking
Reflective responses	• modification of the learning environment (e.g., resources, organization, co-construction with students) based on emerging student strengths/needs/interests • descriptive feedback directly connected to learning goals and success criteria • planned/intentional/focused instruction and/or learning opportunities responding to student strengths/needs
Longer-term planning	• intentionally designed learning cycles anchored in a cluster of curriculum expectations and responding to student interests/strengths/needs • planned changes to the learning environment reflecting the new learning cycle (e.g., centres, resources, organization, student choice)

Putting It All Together

Consider the range of documentation tools available to capture evidence of student thinking and learning. In what ways can you use these tools and subsequent documentation to assist in analyzing, interpreting and deciding on possible instructional responses?

Assessment *for* learning follows a cyclical pathway. Educators begin the assessment cycle by observing students and documenting evidence of their learning. The collaborative analysis of documentation informs action in response to student strengths, needs and interests. The cycle begins again as educators observe students while they work toward newly established learning goals. Analysis of the documentation of this new student learning provides data that informs practice and moves student thinking and learning forward. This cycle of observation, documentation and examination of student learning results in classroom instruction that is effective and precise.

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