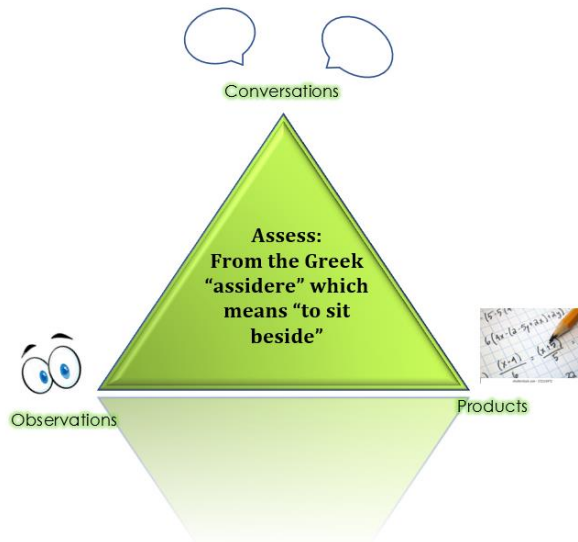


Assessment in Math Class



It is easy to have an overreliance on **products** in math. What are some ways of tracking **observations** and **conversations**?

It's only "data" if we respond to it. How is the teacher adjusting instruction to respond to assessment data?

CTTCS has a collection of “Observation Checklists” to be used for formative assessment. They can be found on the math blog, here <https://christtheteacher.ca/ctt/cttcmathhub/triangulating/>. Some curriculum indicators lend themselves to being assessed through observation. Wording of these indicators may include “Demonstrate”, “Model”, “Explain”, “Justify”, etc.

Note that a teacher would not assess everything on each outcome—these are just suggestions. Teachers could choose one two indicators per outcome to gather observational/conversational data.

The Math Makes Sense teacher guide also has a “Planning and Assessment Guide” that has templates for gathering formative assessment observations and conversations.

[illegible]

Formative Assessment

Effect Size for feedback:
0.75

One of the strongest practices in teaching is practicing regular formative assessment. Most teachers regularly seek information about student understanding and gauge their pacing and progress based on how well students are grasping concepts; however, the practice of formally recording this observational data, and using these observations to help our learners become self aware is not always evident in the classroom.

Effect Size for Formative Assessment: 0.90

Effect Size for metacognitive strategies:
0.69

self-

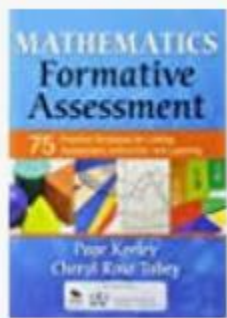
thinking about their learning.

Formative Assessment falls into two categories:

Assessment for learning helps teachers respond with more support or more challenges, more time or different approaches. Assessment as learning involves assessing, understanding their own progress, setting goals and

learners

Effect Size for self-reported grades and student expectation: 1.44



<https://www.amazon.ca/Mathematics-Formative-Assessment-Strategies-Instruction/dp/1412968127>

<https://www.prodigygame.com/main-en/blog/formative-assessment-examples/>

<https://www.duplinschools.net/cms/lib/NC01001360/Centricity/Domain/71/Formative%20Assessment%20Activities.pdf>

Not only do formative assessments inform the teacher and the student, they can also be fun activities! Many involve movement, dialog, and debate. Some also inspire deep learning, such as Frayer models and other concept attainment activities.

What formative assessments are happening? Are students taught to self assess? Does each student know where their ability is and what they need to do to improve? Do students set goals? How is formative assessment data tracked?

Summative Assessment

The final grading of K-9 students is done using the **CTTCS rubrics**.

The rubrics on the back of the Saskatchewan Common Math Assessments are not consistently aligned with our rubrics. While the assessments are useful and help to standardize grade-level proficiency, data from those assessments should be considered as *part* of student performance evaluated with the CTTCS Math Rubrics.

It is not advisable to use the preassessment as an assignment handed out before teaching. These preassessments test concepts kids are *about* to learn, not what they have already learned, and therefore students experience limited success. This was designed to show growth, and let students see what was coming up in the unit, but in some cases has contributed to math anxiety. Students felt tested on material they hadn't studied. Instead, preassments should focus on prerequisite skills from prior grades and units already taught. The SCMA pre—assessments can be used as assignments, tasks, entrance slips, or practice for summative assessment.

Students have the whole year to achieve outcomes.

Assessment criteria should be shared with students. They can have copies of rubrics, and parents can view rubrics.

 Christ the Teacher Catholic Schools Mathematics Grade 6 November, 2014				
Mathematics Grade 6				
Number (N)				
Outcome	1 – Little Evidence With help, I understand parts of the simpler ideas and do a few of the simpler skills.	2 – Partial Evidence I understand the simpler ideas and can do the simpler skills. I am working on the more complex ideas and skills.	3 – Sufficient Evidence I understand the more complex ideas and can master the complex skills that are taught in class. I achieve the outcome.	4- Extensive Evidence I have a deep understanding of the complex ideas, and I can use the skills I have learned in situations that were not taught in class.
N6.3 I can demonstrate understanding of the order of operations on whole numbers (excluding exponents) with and without technology. [CN, ME, PS, T]	I can apply the order of operations to a given, two-step expression involving whole numbers (excluding exponents) and sometimes get the correct answer, with or without technology.	I can apply the order of operations to a given, two-step expression involving whole numbers (excluding exponents) and get the correct answer, with or without technology.	I can apply the order of operations to a given, multiple-step expression involving whole numbers (excluding exponents) and get the correct answer, with or without technology.	I can apply the order of operations to a given, complex, multiple-step expression involving whole numbers (possibly including exponents) and get the correct answer, with or without technology.
	I can identify expressions for which I need to use order of operations to simplify them.	I can verify, using technology, that the simplification of an expression using order of operations is correct.	I can find and correct errors in the simplification of an expression involving multiple steps.	I can find and correct any errors in the simplification of a complex expression involving multiple steps.
	I can identify when there is a need for order of operations in a problem.	I can solve some basic problems involving the application of order of operations.	I can solve basic problems involving the application of order of operations and explain my reasoning.	I can solve complex, multiple-step problems involving the application of order of operations, explain my reasoning, and verify that my solution is correct.
Comments				