PRIME

Leadership for Equity

Leadership for Assessment

LEADERSHIP IN MATHEMATICS EDUCATION
NCSM NETWORK COMMUNICATE SUPPORT MOTIVATE

The **PRIME** Leader

"It is the PRIME leader who will close the 'knowing-doing' gap between our knowledge about how to enhance student achievement and the commitment to actions we must take as a result of that knowledge."

PRIME, p. 56

A Guiding Perspective

"A growing body of research makes it clear poverty and ethnicity are not primary causal variables related to student achievement … leadership, teaching, and adult actions matter. Adult variables, including the professional practices of teachers and decisions leaders make can be more important than demographic variables."

Reeves, 2006, p. xxiii

Vision of Equity Leadership

- Responsibility to seek out and erase biases and inequities
- Obligation to provide curriculum and experiences that prepare students for the future, whatever that may be.
- Move teachers away from private practice into collaborative environments
- Eliminate practices that begin tracking students in the primary grades.

Principle 1 - Equity

Ensure high expectations and access to meaningful mathematics learning for every student.

Equity Indicators

1. Every teacher addresses gaps in mathematics achievement expectations for all students.
2. Every teacher provides each student access to relevant and meaningful mathematics experiences.
3. Every teacher works interdependently in a collaborative learning community to erase inequities in student learning.

PRIME Stages of Leadership

- Stage 1 – Leadership of Self
  (Know and Model)
- Stage 2 – Leadership of Others
  (Collaborate and Implement)
- Stage 3 – Leadership in Extended Community
  (Advocate and Systematize)

Equity: Indicator 1 - Stage 1

- Identify and analyze student achievement for various populations.
- Develop and apply knowledge about how to meet the diverse needs of all student populations.
- Provide specific attention to those students farthest from expected standards of rigor and achievement.

Equity: Indicator 1 - Stage 2

- Engage teacher teams to collaboratively establish targeted benchmarks for improved student performance in each area of the mathematics program.

- Engage grade-level and course-based teacher teams in a process of analyzing student achievement data in order to monitor student achievement across all populations.

Reflecting on Leadership

- In pairs/groups, use the Self-Evaluation Rubric on p. 70 to discuss your progress on PRIME Indicator 1.

And finally….

There is

Assessment

Leadership for Assessment

So we've worked to ensure broad access to high expectations and high quality teaching of relevant and meaningful mathematics.

But how has it worked? Has it been monitored? Has it been successful? What needs to be changed?

Principle 4 - Assessment

Ensure timely, accurate monitoring of student learning and adjustment of teacher instruction for improved student learning.

So today …

- A guiding perspective
- Our vision
- Assessment “of” and “for” learning
- What we know
- Indicators and expectations
- Implications for me!
- Questions and comments

A Guiding Perspective

"The teaching profession is a calling, a calling with the potential to do enormous good for students. Although we haven't traditionally seen it in this light, assessment plays an indispensable role in fulfilling our calling. Used with skill, assessment can motivate the unmotivated, restore the desire to learn, and encourage students to keep learning, and it can actually create – not simply measure – increased achievement."

Stiggins, et al. (2006)

Our NCSM **PRIME** Vision

Assessment is the multifaceted process by which we gather information about students, teachers, schools, and districts to inform our decision-making, adjust our instruction, and revise our curriculum. Effective assessment is grounded in the retrieval and analysis of information about the quality and quantity of student learning….

Our NCSM **PRIME** Vision

As such, assessment connects the components of a mathematics program (alignment), informs ongoing instruction (formative), provides insights into the degree of success of the overall program (summative).

A balance of “of” and “for”

- Assessment *for* learning to make instructional decisions and monitor student progress;

- Assessment *of* learning to evaluate students’ achievement and overall programs.

This vision is attainable when …

- The mathematics that is taught, the way it is taught, and how it is assessed are deliberately and coherently aligned;

- Student answers, solutions, errors, questions, explanations, body language, homework, quizzes, and tests are seen as components of the formative assessment data used to make decisions about moving forward, re-teaching, intervening, and addressing individual and small-group needs

This vision is attainable when …

- Summative assessments are collaboratively designed and coherently aligned with learning goals;
- The student work that emerges from these assessments is carefully analyzed to make decisions about how and where improvements must be made.

Why? Because …

- Children who have the opportunity to learn the content on which they will be assessed score higher than children who do not learn this content before they are assessed;
- In successful schools, there is a strong focus on aligning curriculum with classroom assessments; and
- Analysis of student data, along with focused planning, also leads to improvement of student achievement.

And not incidentally:

Assessment is the primary means by which leaders quantitatively and qualitatively judge their “own” effectiveness.

All of which has been condensed into three PRIME Assessment Indicators:

Assessment Indicator 1

Every teacher uses student assessments that are congruent and aligned by grade level and/or course content.

Assessment Indicator 2

Every teacher uses formative assessment processes to inform teacher practice and student learning.

Assessment Indicator 3

Every teacher uses summative assessment data to evaluate mathematics grade-level, course and program effectiveness throughout a district, region or province.

Which means Stage 1 leaders will …

- Ensure that assessment measures important mathematics – mathematics that is relevant and serves as critical underpinning for future learning.
- Learn and model the use of formative assessment and its impact on student learning.
- Ensure that all assessments are constructed to maximize the likelihood students can demonstrate the mathematics they know.
- Recognize and model the importance of ongoing student feedback as part of the learning process.

Which means Stage 2 leaders will …

- Participate in and lead school and district-level teams in the development of common assessments and scoring rubrics.
- Assist teachers in developing and implementing formative assessments that optimize opportunities for every student to learn.
- Engage teachers and teacher teams in meaningful dialogue about assessment data and the use of this data.

Which means Stage 3 leaders will …

- Provide teachers and administrators with the necessary professional development to implement this vision.
- Engage in periodic review and updating of local and state/provincial assessments.
- Facilitate the use of local, state and national summative assessment data in evaluating the continuous improvement and effectiveness of the local mathematics program.

Implications for me

Given all of this, what I personally need to place on my to-do list for the coming year, is _____

Next Steps for NCSM

- How can NCSM help support mathematics education leaders in using PRIME?

PRIME Leadership Framework

Questions?

Comments?

Thank you!!