

Leadership Strategies for “Ensuring Mathematical Success for All”

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Teaching Practices

x 17 Activity

You will have 2 minutes to solve the problems in your head. The standard algorithm is not allowed.

If you finish early, write down some notes about how you solved each problem.

Discussion

The background features a light gray, stylized illustration of a hand holding a pen, positioned as if writing. The hand and pen are rendered with soft, painterly strokes. Scattered throughout the background are various ink splatters and blotches of different sizes and shapes. In the bottom right corner, there is a faint circular pattern of small dots, resembling a decorative seal or a watermark.

NCTM Principles to Actions

Establish mathematics goals to focus learning.	Pose purposeful questions.
Implement tasks that promote reasoning and problem solving.	Build procedural fluency from conceptual understanding.
Use and connect mathematical representations.	Support productive struggle in learning mathematics.
Facilitate meaningful mathematical discourse.	Elicit and use evidence of student thinking.

Principles to Actions

National Council of Teachers of Mathematics

- 1989: First national level group to provide recommendations for content, instruction, assessments in any content area.
- 2000: Principles and Standards for School Mathematics including a Research Companion

Principles to Actions

National Council of Teachers of Mathematics

- 2006: Curriculum Focal Points for Prek-8
- 2014: Principles to Actions

There are also many other supporting documents.

Principles to Actions

Structure of the Document

Guiding Principles for School Mathematics

- Teaching and Learning
- Access and Equity
- Curriculum
- Tools and Technology
- Assessment
- Professionalism

Access and Equity

An excellent mathematics program requires that all students have access to a high-quality mathematics curriculum, effective teaching and learning, high expectations, and the support and resources needed to maximize their learning potential.

Equity Beliefs

There are cultural beliefs that need to be addressed in order to move forward with the vision for equity.

- Consider the Where does your building stand? sheet.
- Read each statement and consider a response for each pair.

Discussion



Guided Math Framework



Additional Resources

MCA Achievement Level Descriptors

MCTM Symposium

MCTM Spring Conference

NCTM Regional Conference November 11-13,
2015

Q&A

