

THOMPSON SCHOOL DISTRICT

ALL MEANS
EACH AND EVERY

ONE



Thompson Teaching and Learning

DMI /Developing Mathematical Ideas

Developing Mathematical Ideas (DMI) is a staff support model to help teachers enhance their own techniques for understanding and teaching mathematics. DMI provides the structure for teachers to reach the depths of mathematical understanding. DMI supports the math curriculum at Thompson School District and has served as the core curriculum for programs designed for teacher leaders, administrators, parents and pre-service teachers. Such support is provided in a variety of ways including seminars, case discussions, videos, opportunities to explore math lessons led by facilitators and sharing and discussing the work of their own students. At Thompson, classes have also been offered to parents to assist them in understanding how their child might best approach math homework problems. Teachers in other content areas are now participating in this staff development. When teachers better understand concepts, they can better recognize key mathematical ideas with which their students are struggling.

Characteristics of DMI:

- Includes K-12 teachers and parents in many content areas
- Addresses critical thinking skills and questioning
- Provides a venue where teachers can think through the major ideas of K-8 math
- Examines how children develop those ideas
- Gives teachers an appreciation of the power and complexity of student thinking
- Asks questions of students that will help them deepen their mathematical understanding
- Helps define and select mathematical objectives for students
- Allows teachers to meet a student where he is along the mathematical learning continuum and adapt to that student's learning style

For information, visit <http://www2.edc.org/CDT/dmi/dmicur.html>

What takes place in the classroom:

- Open discussion between teachers and students
- Questions posed by students to teachers, teachers to students and students to students
- Problems solved in a variety of ways

MATH AND LITERACY ARE THE KEYS THAT OPEN THE DOOR TO THE WORLD AROUND US

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What teachers learn in the DMI classroom:

- Recognize key mathematical ideas with which their students may struggle
- Learn how core mathematical ideas develop across the grades
- Learn mathematical content
- Open discussion between teachers and students
- Questions posed by students to teachers, teachers to students and students to students
- Problems solved in a variety of ways

Teachers will:

- See better learning results for kids
- Identify obstacles in learning concepts
- Make more mathematical connections, which enhances their ability to help students do so
- Ask more of their students in how they are thinking about the math they do
- Obtain a closer look into their own students' thinking
- Create classroom settings and use teaching strategies that support increased development of student understanding
- Recognize they as well as their students are mathematical thinkers

For more information on DMI, visit
<http://www2.edc.org/CDT/dmi/dmicur.html>