Everyday Mathematics Curriculum Features

There are a number of features that distinguish the Everyday Mathematics curriculum. These include:

Real-life Problem Solving

Everyday Mathematics emphasizes the application of mathematics to real world situations. Numbers, skills and mathematical concepts are not presented in isolation, but are linked to situations and contexts that are relevant to everyday lives. The curriculum also provides numerous suggestions for incorporating mathematics into daily classroom routines and other subject areas.

Balanced Instruction

Each Everyday Mathematics lesson includes time for whole-group instruction as well as small group, partner, or individual activities. These activities balance teacher-directed instruction with opportunities for open-ended, hands-on explorations, long-term projects and on-going practice.

Multiple Methods for Basic Skills Practice

Everyday Mathematics provides numerous methods for basic skills practice and review. These include written and choral fact drills, mental math routines, practice with fact triangles (flash cards of fact families), daily sets of review problems called Math Boxes, homework, timed tests and a wide variety of math games.

Emphasis on Communication

Throughout the Everyday Mathematics curriculum students are encouraged to explain and discuss their mathematical thinking, in their own words. Opportunities to verbalize their thoughts and strategies give children the chance to clarify their thinking and gain insights from others.

Enhanced Home/School Partnerships

Daily Home Links (Grades K to 3) and Study Links (Grades 4-6) provide opportunities for family members to participate in the students' mathematical learning. Study Links are provided for most lessons in grades 4-6, and all grades include periodic letters to help keep parents informed about their children's experience with Everyday Mathematics

Appropriate Use of Technology

Everyday Mathematics teaches students how to use technology appropriately. The curriculum includes many activities in which learning is extended and enhanced through the use of calculators. At the same time, all activities intended to reinforce basic computation skills are clearly marked with a "no calculator" sign:

Frequently Asked Questions Regarding *Everyday Mathematics*

How can I help my child with homework when I don't understand the way the content is being taught in class?

Family Letters

At the beginning of each *Everyday Mathematics* unit, a Family Letter is sent home. This letter contains:

- an overview of what will be taught in the unit
- sample problems
- new math vocabulary that will be introduced
- a list of "Do Anytime" activities to reinforce new content and concepts previously taught in other units
- games the children will play in class to help learn content and practice basic facts
- most of the answers to the Home Links or Study Links that will be sent home as homework during the unit

To help families stay organized, each unit's Family Letter and Study Links will be contained in a bound booklet that can travel back and forth from school to home.

Hopefully this will help when students and parents are working together to complete homework.

Student Reference Books

Students should be encouraged to bring home their *Student Reference Book* (SRB) when they have a Study Link. Each Study Link has an "SRB" icon that designates the page numbers that correlate with each assignment. The SRB contains the steps, examples and practice problems for each topic.

My child is spending a lot of time trying to do math homework.

Children should not spend hours trying to complete math homework. The purpose of the Study Link is to reinforce the topic taught during class – not to create anxiety and stress for children and parents! It is recommended that students in grade 5 should spend no more than 25 minutes on a Study Link.

If the child is unable to complete the assignment in this amount of time, parents should write a note to the teacher on the Study Link noting the time that was spent on the assignment and requesting help for their child at school the next day. This information helps teachers to better understand how students did on each assignment.

I am concerned that *Everyday Mathematics* is not helping my child learn basic facts. Why are there not frequent timed math facts tests?

Timed fact tests are an assessment tool. They measure a student's ability to quickly calculate math facts. They do not help students learn facts. It is what happens during math class and between fact tests that will help children learn basic facts. In *Everyday Mathematics*, students regularly practice math facts in math boxes, on Study links, during the mental math portion of the lesson and in the games component of the program. Teachers are able to assess fact knowledge through these components, not only through timed tests.

Research shows that students are more engaged when playing a math game versus working with flash cards or through rote recitation of math facts. This is why *Everyday Mathematics* has such a strong game component. Students actually practice more facts through the games than they would if completing a worksheet with 20-30 problems. Additionally, the games allow children to check one another's work and help one another. If parents and/or teachers are concerned about assessing a child's knowledge of facts, recording sheets should be consistently used when playing the games. Additionally, parents are encouraged to play the games at home to provide additional practice on facts.

The March 13, 2008, report by the National Mathematics Advisory Panel (NMAP) states the need for a "focused, coherent progression of mathematics learning, with an emphasis on proficiency with key topics," and that "any approach that continually revisits topics year after year without closure is to be avoided." Isn't that what *Everyday Mathematics* does – go from topic to topic without mastery learning?

The *Everyday Mathematics* program does introduce a variety of topics that children are not expected to master on the same day in which they are introduced. The program revisits concepts regularly through math boxes, games and mental math.

In contrast to the NMAP report findings, *Everyday Mathematics* does have end of year mastery objectives for which teachers are continually collecting assessment data to ensure that students meet these end of year mastery goals. So while some material is introductory or exploratory in nature, the content for which students are responsible for mastering is defined by end of year goals that are based on the Michigan Grade Level Content Expectations (GLCE's).

Why is my child learning all of these alternative ways to add, subtract, multiply and divide?

The procedure or set of rules used to solve a mathematics problem is called an *algorithm*. The *Everyday Mathematics* program includes a variety of algorithms to:

- promote conceptual understanding and mental flexibility;
- help students learn about our base-ten place value system of numbers;
- and to encourage problem solving ability.

Alternative algorithms can help students understand place value, compose and decompose numbers, and develop number sense. While traditional algorithms may be more quick and efficient, the focus algorithms taught in *Everyday Mathematics* are often easier for children to understand and learn. In addition to the focus algorithm, children are encouraged to use other methods to solve math calculations, including the more traditional algorithms that parents or siblings may teach them at home. The end goal of the *Everyday Mathematics* program is for all children to know at least one reliable method for solving each mathematical operation.