

## enVision New Math Program for Grades K-5

Council Rock will implement a new math program, titled enVision, by Pearson Learning, in third through fifth grades during the 2010-2011 school year. Kindergarten through second grade will be added in the 2011-2012 school year. This two-stage phase-in of the program allows for greater Math Specialist support of the classroom teachers, ensures that all classrooms will have the needed technology (smart boards, projectors, etc) and spreads the cost over two budget years.

### **Selecting a Curriculum**

The last math curriculum, implemented ten years ago, was considered a success, but after a decade it was time to choose a curriculum to move Council Rock into the future. To begin this curriculum renewal process, a committee of over 30 staff members, consisting of math specialists, teachers from all levels, special education teachers and administrators, met from January-May 2009 and considered four possible programs. The committee saw presentations from each publisher and engaged in committee discussions. A parent committee was also formed in the spring of 2009 to review the findings and be brought into the discussion.

Math Curriculum Coordinator, Donna Pianoforte, had seen enVision in its developmental phase but was even more impressed once it was ready for release. Ms. Pianoforte feels that it represents comprehensive instructional methods and was pleased that enVision was authored by two presidents of the National Council of Teachers of Mathematics (NCTM).

enVision was selected for a number of reasons. They include:

- ✓ It is a 21<sup>st</sup> century product
- ✓ It is visual
- ✓ It strikes a balance between conceptual and skills based learning
- ✓ It contains a "bridge" sequence of pictures to present new concepts
- ✓ Technology is used throughout the program, including animated concepts
- ✓ It focuses on problem solving, a notch up from the "problem of the day" used now
- ✓ It has a literature connection
- ✓ Differentiation is integrated into the program (giving students the opportunity to learn at their own pace)
- ✓ The topics (not chapters) are shorter
- ✓ It includes a special education piece for intervention
- ✓ It is paced for state assessment tests and includes items specific to Pennsylvania's state tests (PSSA)

### **The Pilot Program**

enVision is being piloted this school year in 21 classrooms, representing both primary and intermediate levels at all schools. Teachers piloting were primarily those on the committee. Pilot teachers have representatives of Pearson Learning coming in to do enVision workshops with them. Teachers also meet monthly after school from 4:30-5:30 for pilot meetings.

A different math program, McDougal-Littel Course 1, was chosen for sixth grade because of its seamless transition to the new middle school curriculum, McDougal-Littel Course 2/3, which was introduced this year. There should be no problem transitioning students from enVision in 5<sup>th</sup> grade to the different 6<sup>th</sup> grade curriculum, as this happens currently.

### **Benefits of enVision to Students**

There are a number of pieces to this curriculum that were viewed as superior to the last program, such as:

- Technology – interactive visual and symbolic instruction “makes concepts come alive.” For example, a quarter can be shown on the screen and when tapped it will crack to produce 2 dimes and a nickel
- More sophisticated math vocabulary – the same vocabulary used at higher levels
- Contains “centers” activities
- Has more integration of math and language arts
- Contains electronic manipulations
- Organization and management of materials is much improved

enVision is easily accessed online, and projectors and smart boards are used for instruction. Grades 3-5 were selected for the initial implementation because those classrooms have greater access to the technology. For classrooms lacking smart boards and projectors, principals are dedicating funds from their buildings, and PTOs are assisting where they can.

### **enVision is Changing Math Education for Students**

Teachers of the pilot program have observed more enthusiasm for math in their classrooms and student grades have improved. Conceptual understanding is being developed. Kids are really learning instead of doing rote practice. As one math specialist stated “we are seeing 3<sup>rd</sup> graders doing math in their heads!”

Though textbooks are provided, students with internet access do not have to take textbooks home, because work can be done with the program online. Parents can help students with homework online as well. The program includes a “homework helper” where certain problems are represented and solutions explained. It also contains an error analysis piece where common mistakes are contained in a solution and the student must identify the mistakes.

Students can take quizzes online and the data is transferred to the teacher’s account. This allows data to be graphed and students having trouble are identified immediately. The program will generate individual worksheets tailored to a student’s weakness. This allows for an understanding of math, not just computation, through visual means.

### **Staff Development**

Due to the technology involved, there is a staff learning curve and staff development is planned. Staff members will be brought up to speed on using smart boards for this curriculum. A June or July workshop session will be held for all 3<sup>rd</sup> through 6<sup>th</sup> grade teachers along with a make-up session in August. Since a new math curriculum will now be in place from grades 3 through 8, a school opening in-service devoted to training math teachers will occur. Act 48 time (for continuing professional education) that the state requires all teachers to perform, will be used as well.

Elementary Math Specialists are the key to staff development, yet last year a Math Specialist was cut from the budget. **With all that the Math Specialists are tasked to do, as well as supporting a new curriculum, it is imperative to reinstate the Math Specialist position. Citizens believes that Math Specialist support for teachers and students is key to the success of enVision in Council Rock.**

### **Parent Development**

With enVision’s internet component, parents can reinforce in-class learning at home. Ms. Pianoforte and the Elementary Math Specialists are educating parents through presentations to

PTO groups which are being held now. There will also be fall meetings throughout the district for parents once the program goes live across all classrooms in grades 3-5.

### **The Cost of enVision**

The cost for the new curriculums in grades K-6 is \$435,000. There is also a minimal yearly cost for workbook worksheets in grades K-2. The cost includes product support for the life of the implementation, expected to be at least 6-7 years. Council Rock received a reduction of 20% off the normal price by having a signed contract by 12/31/09. We will receive all new materials and the newest edition of the program. CR also received shipping at a 2% rate, instead of the typical 10% because we used Pearson's new online ordering system.

**All told, there was a savings of close to \$150,000 thanks to negotiations by Ms. Pianoforte and her team, and a quick school board vote. Citizens For Education urges the administration and school board to spend a portion of these savings to reinstate the Math Specialist position cut in last year's budget.**

Citizens For Education thanks Math Curriculum Coordinator, Donna Pianoforte, and Math Specialists Julie Eastburn and Linda Morrin for spending time talking with Citizens about this new curriculum. Their enthusiasm for the new program is contagious and Citizens is excited to see such a dynamic, interactive curriculum beginning in Council Rock.