

Multi-year study to report positive outcomes of Spectrum System



INITIAL RESULTS INDICATE BENEFITS IN SEVERAL CORE CURRICULUM AREAS **RESULTS**

Beginning in the 2001-02 school year, Phillippi Shores Elementary School implemented the Spectrum System as their core science curriculum for Grades K-5.

Peggy Krammes, Phillippi Shores science teacher, said the reason she chose Spectrum was because it tightly integrates the best ways to teach science in the elementary grades.

“Spectrum takes the best practices of the teaching of science such as hands-on learning, real discovery, collaborative small group work, and teacher-as-facilitator, and integrates all of these into one program for Grades K-6.”

To determine the impact of the Spectrum System on Phillippi Shores students, a multi-year study was started to analyze student performance. Though it’s too early to draw definitive conclusions about the impact of the Spectrum System, early indication from both test scores and teachers is positive.

“Spectrum provides a scaffolding of learning – kids are able to access prior knowledge because they build upon concepts from one year to the next.”

Early results from the study hint at gains in both math and science and they also indicate benefit from learning in the lab in consecutive years.

Early baseline data was collected on 100 third-grade students from the Fall of 1999 through their completion of the fifth grade in 2002. In addition, data was collected on a group of 80 third-grade students from the Fall of 2000 through completion of the fifth grade in 2003.

Among the results being analyzed are the Florida Comprehensive Assessment Test (FCAT) and the state and district science assessments.

The FCAT assesses reading, math, writing, and science skills for third, fourth, and fifth graders. State and district science tests assess second through fifth graders’ knowledge of Physical, Chemical, Earth, Space, Life, and Environmental Sciences, along with judging students’ scientific thinking.

One significant improvement at Phillippi Shores was their School Performance Grade. The grade is the equivalent of a school’s report card, based on specific student results from the FCAT, including learning gains for low achievers and overall learning gains in reading and math.

In the two years following adoption of the Spectrum System, Phillippi Shore improved its school accountability report card grade from a “C” to an “A.”

This two-year turnaround is a noteworthy achievement, showing a school-wide commitment to excellence. Though the role of the Spectrum System is not yet statistically evidenced in the test data, Spectrum teacher Peggy Krammes has no doubt the Spectrum System is contributing to student success.

“The whole beauty of the program is the fact that it does span from kindergarten through sixth grade and develops from year-to-year, increasing their knowledge based upon what their prior experiences have been in the lab.”

“Spectrum takes the best practices of the teaching of science...and integrates all of these into one program for Grades K-6.”

Peggy Krammes, Science Teacher
Phillippi Shores Elementary School
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