



Vista Newsletter #7  
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## ***Focusing on Math and Science from the Very Start***

A recent *Seattle Times* article highlighted Governor Chris Gregoire's nearly \$200 million dollar push to beef up math and science instruction in Washington's public schools. The sweeping proposal includes smaller middle and high school math and science classes, recruitment of more math and science teachers, increased professional development funding, and enhanced hands-on learning opportunities.

In a written statement, Governor Gregoire said, "The best way to grow our economy and secure a bright future for our students is to make comprehensive, smart, responsible and accountable investments in math and science now. With personalized instruction, rigorous coursework, expanded opportunities and consistent support and encouragement, we can fundamentally change Washington education so that students will improve their math and science skills to compete for jobs in the global economy."

Superintendent of Public Instruction Terry Bergeson added, "This is the level of investment we need to ensure that all our students get the math and science skills they need to be ready for college, work and life in the 21st century."

While these statements are distilled through a public school filter, the importance of high quality, relevant math and science instruction is a focus for all schools at all levels. From the early stages of its creation, Vista Academy has highlighted exceptional depth and challenge in math and science. Vista's program will help develop mathematical and scientific thinking, where students explore complex and advanced concepts through authentic investigations. The increased rigor and broadening scope of math and science that the governor describes as necessary to change Washington education have been fully imbedded in the fabric of Vista's educational philosophy since day one.

### **Math at Vista Academy**

Our advanced math program begins with a strong foundational study of pre-algebra and algebra, where students work with, among other things, linear functions, inequalities, polynomials, statistics, and quadratic equations. Mathematics is a process of thinking that involves building and applying abstract, logically connected networks of ideas. These ideas often arise from the need to solve problems in science, technology, and everyday life - problems ranging from how to model certain aspects of a complex scientific problem to how to balance a checkbook. Our challenging and accelerated math program includes both constructivist (learning that is initiated and directed by the student) and algorithmic (step-by-step) approaches. Students enjoy rich experiences with a variety of mathematical content.

### **Science at Vista Academy**

Vista students enjoy daily laboratory science. Our inquiry-based approach to science refers to the diverse ways in which scientists study the natural world and propose explanations based on the evidence derived from their work. Research confirms that students learn best in an environment where they can make discoveries and actively construct their own understanding of science concepts. Through a learning cycle of focusing, exploring, reflecting, and applying, students develop scientific literacy, while embracing the process of inquiry-based teaching and learning.

Vista's small class sizes, well qualified teachers, advanced curriculum, frequent off campus opportunities, and innovative investigative approaches allow students to equip themselves with the skills to be successful in all academic realms, not just math and science. In many cases, we are preparing our students for jobs not yet created, and we have a responsibility to, in the words of Superintendent Terry Bergeson, get them ready for college, work and life in the 21st century. I think she and the governor would be quite pleased with what's happening at Vista Academy.

Please know I am available to meet with you to discuss Vista Academy and answer any questions you may have.

I extend to you and your family warm wishes during this special season.

Tim Costello  
Middle School Head