

Partners in Geospatial Activities

The Virginia Space Grant Consortium (VSGC) is a NASA sponsored program that works to support and enhance science, technology, engineering and math education (STEM). The Virginia Department of Education (VDOE) has the primary responsibility to assist school divisions in meeting the objectives of the Virginia Board of Education.

The VSGC and the VDOE are engaged in a partnership to encourage the strong educational value of using geospatial technologies as a multi-disciplinary approach to teaching and learning that creates meaningful experiences in STEM activities. The OVERspace Professional Development Program is a standards-based education project that brings real world applications to the classroom. Geospatial technologies are used to generate excitement for teaching and learning results in and outside of the classroom.

Take advantage of this professional development opportunity and obtain further information about OVERspace. Arrange your workshop schedule by contacting us at the following:

**Virginia Space Grant Consortium
ODU Peninsula Center
600 Butler Farm Road
Hampton, VA 23666**

**757-766-5210
vsgc@odu.edu
www.vsgc.edu**



The Virginia Space Grant Consortium (VSGC) is a coalition of Virginia formal and informal educational partners engaging in a wide range of cooperative programming activities to build a strong American work force. The VSGC acts as an umbrella organization, coordinating and developing networks of educational and research partnerships. The VSGC promotes strong science, technology, engineering and math (STEM) education from elementary through university levels. The VSGC encourages an interdisciplinary approach to fields relating to aerospace and aeronautics while enhancing the public awareness of the benefits of their research and exploration. The VSGC supports the recruitment of women, underrepresented minorities, and the disabled for careers in Virginia's aerospace industry and research infrastructure.

Member Institutions

College of William and Mary
Hampton University
Old Dominion University
University Of Virginia
Virginia Polytechnic Institute and State University
NASA Langley Research Center
NASA Goddard Space Flight Center's
Wallops Flight Facility
State Council of Higher Education for Virginia
Virginia Community College System
Virginia Department of Education
Mathematics and Science Center
Science Museum of Virginia
Virginia Air and Space Center
Virginia Center for Innovative Technology



OVERspace

Offering Virginia Educators Resources in Spatial Practices
Across the Curriculum for Excellence

An Educator Professional Development Program in Geospatial Technologies and Applications

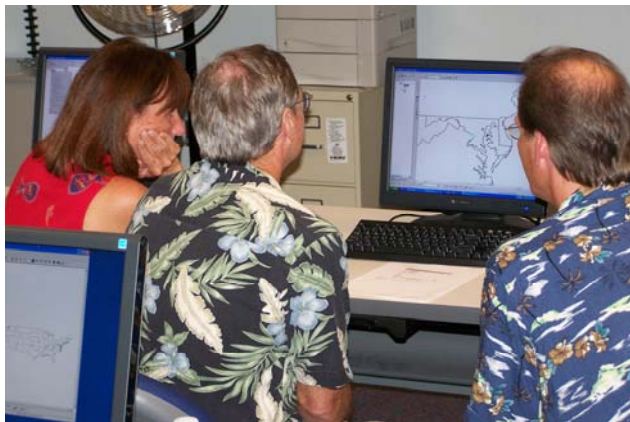


**Offered by the
Virginia Space Grant Consortium
In cooperation with the
Virginia Department of Education
For Virginia Teachers of Grades 4 -12**

OVERspace is an Educator Professional Development Program using problem based teaching and learning strategies and engaging the process of inquiry.

The program uses the applications of Geographic Information Systems (GIS) and other technology tools to help organize, develop, and communicate data in the form of maps that visualize information and develop spatial thinking.

GIS in the Classroom Equals Discovery



Providing geospatial technology in education is more than just adding GIS software to a classroom. It is about linking geography with science and inquiry thinking. It is about using technology tools such as global positioning systems (GPS) and the Internet to analyze spatial data. It is about engagement in the teaching and learning process that provides excitement by using investigations from the field and global perspectives. Geospatial tools promote spatial awareness and facilitate critical thinking to solve problems and answer questions.

OVERspace professional development workshops are conducted by a team of highly trained and motivated educators. Their goal is to empower workshop participants with the skills, teaching strategies, and instructional resources plus the follow-up support needed to effectively use geospatial applications and technologies in the classroom. All workshops are designed to demonstrate curricular integration and to correlate with the Virginia Standards of Learning (SOL).

Benefits of VSGC OVERspace Workshops



Participants will be trained in the latest geospatial applications and technologies using a problem based teaching and learning model engaging in strategies that focus on the inquiry method.

OVERspace workshops can be customized depending on the need to reinforce or implement standards based instruction. Participants will be able to bring the excitement and knowledge of space-age technology into the classroom “to inspire the next generation of explorers.”

About OVERspace Workshops

A typical OVERspace Workshop includes:

- Two to Four-days of hands-on training led by two OVERspace Educators.
- A GPS hand-held unit.
- Hands-on experience using a GPS to collect field data.
- Experience using GIS software to visualize, manipulate, and analyze data.
- Access to the OVERspace curriculum of standards-based lesson plans and activities for immediate classroom implementation.
- The textbook, *Mapping Our World*, containing classroom ready lesson plans and related data.
- Access to an educator support network of geospatial professionals.

OVERspace Workshop Costs

OVERspace workshops are provided at modest cost. Most costs can be underwritten by a school’s development and training funds. Training may also be sponsored by external grants as funding becomes available. Software is provided at no cost by the Virginia Department of Education through a statewide software license agreement.

Why Use Geospatial Technologies in the Classroom?

Do you engage your students by asking questions, helping them acquire resources, exploring data, analyzing information and then acting upon this knowledge?



Do Your Students Investigate or Study Topics Such As?

- | | |
|------------------------|----------------------|
| Watersheds | Construction |
| Earth Systems | Transportation |
| Climate/Storms | Business/Marketing |
| Tectonics/Soils | Crop Analysis |
| Disaster Management | Precision Farming |
| Public Health | Invasive Species |
| Toxic Spills | Visualize Data |
| Tracking Diseases | Energy Management |
| Carbon Cycles | Historical Sites |
| Geometry | Political Boundaries |
| Statistical Analysis | Water Management |
| Ecological Forecasting | Homeland Security |