

Teacher Survey
Virginia Earth Science Collaborative:
Developing Highly Qualified Teachers
(Revised 5/4/06)

1.0 Demographic Information

Name	
Address	
Home Phone	
E-mail	
School Division	
School (2006-07)	

2.0 Certification Information

- 2.1 Are you currently certified in Virginia? Yes No
- 2.2 Have you passed Praxis I (if required)? Yes No
- 2.3 Have you passed Praxis II in Earth Science (if required)? Yes No

2.4 In what subjects are you fully endorsed?

2.5 What subjects do you currently teach?

2.6 Check the category that is applicable to you.

- Unendorsed teacher currently teaching Earth Science that will complete requirements by September 2007
- Teacher endorsed in **biology, chemistry, or physics** that will complete the Add-On Earth Science Endorsement by September 2007.
- Middle school science or special education teacher committed to beginning requirements for the Earth Science Endorsement (can complete 18 of 32 hours through this grant)
- Special education teacher that works collaboratively with students in high school Earth Science.
- Middle school science or special education teacher that teaches Earth Science topics as part of the middle school curriculum.
- Endorsed Earth Science teacher from a school that **did not achieve** a satisfactory score on the Earth Science or applicable middle school science SOL
- Endorsed Earth Science teacher from a school that **did achieve** a satisfactory score on the Earth Science or applicable middle school science SOL.
- Other

2.7 For the areas listed in the table below, check the number of semesters of college courses that you have taken.

Area	Number of Semesters (check)					
	None	1	2	3	4	5 or more
Geology						
Astronomy/Space Science						
Meteorology						
Oceanography/Marine Science						
Environmental Science						
Scientific Research/Independent Study/ Thesis						

3.0 Needs Assessment Required for Grant Application

The grant requires an emphasis on increasing teachers' conceptual understanding and ability to effectively teach the concepts listed below as well as engage students in scientific inquiry. For these reasons, please rate yourself in the following areas.

Area	Very well qualified	Adequately qualified	Not well qualified
Understanding of Following Concepts			
Petrology and mineralogy			
Paleontology and historical geology			
Structural geology and tectonics			
Physical oceanography and marine geology			
Meteorology			
Astronomy			
Skill in Implementing Effective Instruction in Following Areas			
Petrology and mineralogy			
Paleontology and historical geology			
Structural geology and tectonics			
Physical oceanography and marine geology			
Meteorology			
Astronomy			
Preparedness to Help Earth Science Students			
Learn to evaluate arguments based on scientific evidence			
Use computers to demonstrate scientific principles			
Learn basic science concepts			
Use the Internet for general reference			
Learn about the relationship between science, technology and society			
Learn to use Global Positioning Systems (GPS)			
Prepare for further study in science			
Use calculators/computers for drill and practice			
Learn how to communicate ideas in science effectively			
Learn science process/inquiry skills			
Use calculators/computers for science learning games			

Area	Very well qualified	Adequately qualified	Not well qualified
Use the Internet for data acquisition			
Learn about the applications of science in business and industry			
Use computers for laboratory simulations			
Learn about the history and nature of science			
Learn to use Geographic Information Systems (GIS)			
Use calculators/computers to collect and/or analyze data			
Learn important terms and facts of science			
Use the Internet for collaborative projects with classes/individuals in other schools			

4.0 Interest in Specific Courses and Other Activities

Teachers with endorsements in an area of science, such as Biology, Chemistry and Physics, can obtain an add-on endorsement with appropriate coursework. For an add-on endorsement in Earth Science, a person must complete 18 semester hours with course work in geology, oceanography, astronomy and meteorology. To participate in this grant, a teacher must **complete the Earth Science Endorsement by September 1, 2007.**

Based upon the coursework that you have previously taken, which of the following courses would you be interested in taking?

- _____ Geology I: Introductory Geology Course
4 credits lecture/lab
- _____ Geology of Virginia for Teachers
(focus on historical and structural geology)
Pre-requisite: Geology I Course
3 credits
- _____ Oceanography
4 credits lecture/lab (depends on institution offering)
- _____ Meteorology
3 credits lecture/lab (depends on institution offering)
- _____ Astronomy
4 credits lecture/lab (depends on institution offering)

Depending on teachers' needs and their geographic location, there are a variety of ways that courses can be offered. For the following options, check the ones under which you would be willing to take a class.

- _____ Typical summer course of 2 to 3 weeks. Full days of classes, Monday to Friday, with modification during July 4th period. Lodging and food provided for those beyond a certain commuting time (typically 75 min). Required follow-up during the academic year such as 1 or 2 Saturday conferences.

_____ Typical semester course that meets for approximately 15 weeks after school (depending on sufficient teachers in a locality); some Saturday involvement for extended field trips or Saturday conferences (typically 2 to 3 days)

_____ Intensive residential summer experience, such as 1 week, with weekly classes over 4 to 6 weeks before or after the residential component. Lodging and food provided for those beyond a certain commuting time (typically 75 min). Required follow-up during the academic year such as 1 or 2 Saturday conferences.

5.0 Other Input

5.1 Some divisions have mentioned courses delivered on Friday afternoon (typically 5 pm to 9 pm and full-days on Saturday). Such courses typically span 5 to 6 weekends. Such a model is often used when participants are widely dispersed geographically. Would you participate in such a course model?

5.2 Should we consider offering a course for teachers that already have the Earth Science Endorsement, with the course focusing on effective strategies for teaching various areas of Earth Science and integration of new technologies?

Would you take such a course? _____ Yes _____ No

When would you prefer taking the course? _____ Summer
_____ After School
_____ Either OK

What topics and/or technologies would you like to see included?

5.3 We are considering offering mentoring of novice teachers specifically directed at the teaching of Earth Science.

Is this of interest? _____ Yes _____ No

Given all the demands on novice teachers, what are the most effective times and methods for assisting these teachers, e.g. during school day, after school, etc?

5.4 What are the greatest needs in Earth Science in your school? Please respond for high school or for middle school in which Earth Science is taught for high school credit.

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