



HJR 90

Science, Math, and Technology
Education in the Commonwealth

2008 Interim

HJ 90 Continuing Requirements

1. Review the curriculum of existing public schools in the Commonwealth, including Governor's Schools, and other specialized public schools devoted to math, science, or technology.
2. Study accessibility to specialized public schools by students throughout the Commonwealth;
3. Review and recommend innovative ways to interest students in science, math, and technology;
4. Identify the key points during the K-12 education experience that will determine whether a student will become interested, and maintain that interest, in math, science and technology.
5. Examine potential partnerships between public schools, institutions of higher education and business and research entities in the Commonwealth.

[HJ 90 New Requirements]

1. Ascertain the factors contributing to the shortage of science and engineering graduates and recommend alternatives to mitigate the effect of such factors.
2. Determine the current supply and demand for science and engineering graduates in Virginia; and project the need for such graduates in the next decade.
3. Examine ways to promote and encourage collaboration between science and engineering programs at the institutions of higher education and science- and technology-based businesses in Virginia, including tax incentives.
4. Assess the feasibility of using the collaboration between the Virginia Community College System and local businesses in the Lynchburg area as a model for institutional partnerships.
5. Identify incentives designed to attract and retain more students into science and engineering programs.

[2006 Executive Summary Overview]

- 4 meetings; no formal recommendations made
- Extensive background on innovative programming in math, science, and technology at the Elementary, Secondary, and Undergraduate levels
- Application process for establishing a Governor's School
- Information on Project Lead the Way
- Visit and panel discussion at Thomas Jefferson High School for Science and Technology
- Micron Technology support of higher education programs

2007 Executive Summary Overview

April 30

- Dr. Robert Starr, Program Manager for the NASA Digital Learning Network – demonstrated the digital learning network connecting with the Johnson Space Center
- Ms. Eva Hardy, Executive Vice-President of External Affairs & Corporate Communications, Dominion Virginia Power; and member of the State Council of Higher Education for Virginia – expressed the need for qualified engineers at Dominion

July 16:

- Dr. Hayden Griffin, Department Head of Engineering Education, Virginia Tech – provided an overview of the program
- Mr. Jim Batterson, Special Assistant on Loan from NASA to the Secretary of Education -- discussed content standards in physics, chemistry and engineering
- The Virginia Math and Science Coalition voiced concerns and recommendations regarding math and science education, including the need for more support of the math specialist program

2007 Executive Summary: Continued

October

- Onsite at Mountain View Elementary in Haymarket
- Observed an in-class demonstration of an education outreach program sponsored by Micron Technologies about the different states of matter and the process of sublimation (transformation of a solid to a gas)
- Superintendent of Public Instruction overview of three STEM related initiatives at the Department of Education

November

- Discussed and voted on final recommendations

2007 Executive Summary: Continued

Final Legislative Recommendations:

- Amending § 22.1-290.01 to qualify students specifically agreeing to teach in a math or science field for the Virginia Teaching Scholarship Loan Program (HB 1165)
- Creating a math specialist pilot program in six geographically diverse school divisions (HB 984)
- Creating a Project Lead the Way matching start-up fund (HB 494)
- Resolution endorsing and supporting Project Lead the Way (HJ 127)
- Adding a requirement for the Center for Innovative Technology to survey Virginia's technology industry every two years on the demand for graduates in STEM fields and to report findings to institutions of higher education, the General Assembly, and JCOTS (HB 497)
- Resolution encouraging school boards to form exploratory groups to establish academic year Governor's Schools (HJ 185)
- Continuing resolution (HJ 90)



Legislative Update

2008 Session of the General Assembly

- All bills and resolutions except for HJ 90 continuing the study were left in their respective committees
- HB 506/SB 169 – Virginia Teaching Scholarship Loan Program enhancement – expands the program by providing award scholarships to students in an approved teacher education program leading to an endorsement in career and technical education. \$708,000 was appropriated for the entire program for 2008-2009 and 2009-2010.

[Housekeeping]

- Maximum of four meetings for 2008 interim.
- All meetings must be completed by November 30, 2008.
- Executive summary and a report of the joint subcommittee's findings must be completed no later than the first day of the 2009 Regular Session of the General Assembly.



Questions?

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