

Virginia Board of Education Agenda Item



Agenda Item: C

Date: May 23, 2013

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| Title | Final Review of Proposal to Establish the following Governor’s Health Sciences Academies: 1) Albemarle County Public Schools Governor’s Health Sciences Academy; 2) Chesterfield County Public Schools Governor’s Health Sciences Academy; 3) Cumberland County Public Schools Superintendents’ Region 8 Governor’s Health Sciences Academy; 4) Fairfax County Public Schools Governor’s Health Sciences Academy at Falls Church High School; and 5) Fairfax County Public Schools Governor’s Health Sciences Academy at West Potomac High School. | | |
| Presenter | Ms. Lolita B. Hall, Director, Office of Career and Technical Education Services | | |
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Purpose of Presentation:

Other initiative or requirement. Specify below:

Final Review of the Proposals to Establish the following Governor’s Health Sciences Academies: 1) Albemarle County Public Schools Governor’s Health Sciences Academy; 2) Chesterfield County Public Schools Governor’s Health Sciences Academy; 3) Cumberland County Public Schools Superintendents’ Region 8 Governor’s Health Sciences Academy; 4) Fairfax County Public Schools Governor’s Health Sciences Academy at Falls Church High School; and 5) Fairfax County Public Schools Governor’s Health Sciences Academy at West Potomac High School.

Previous Review or Action:

Previous review and action. Specify date and action taken below:

Date: April 25, 2013

Action: First Review

Action Requested:

Final review: Action requested at this meeting.

Alignment with Board of Education Goals: Please indicate (X) all that apply:

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| X | Goal 1: Accountability for Student Learning |
| | Goal 2: Rigorous Standards to Promote College and Career Readiness |
| X | Goal 3: Expanded Opportunities to Learn |
| | Goal 4: Nurturing Young Learners |
| | Goal 5: Highly Qualified and Effective Educators |
| | Goal 6: Sound Policies for Student Success |
| | Goal 7: Safe and Secure Schools |
| | Other Priority or Initiative. Specify: |

Background Information and Statutory Authority:

Goal 1: The Academy must meet rigorous criteria established by the Board of Education under the Governor’s Science, Technology, Engineering, and Mathematics Academy Program. Students progress in academic and technical knowledge and skills; and their employability knowledge and skills are monitored and measured annually to ensure successful transition to college and career.

Goal 3: The Academy is designed to expand options for students’ health science literacy and other critical knowledge, skills, and credentials that will prepare them for high-demand, high-wage and high-skill health sciences careers in Virginia.

On September 7, 2012, the Virginia Department of Education announced planning/implementation grants in the amount of \$10,000 each for establishment of Governor’s Health Sciences Academies in the eight superintendents’ regions. The Governor’s Health Sciences Academy shall consists of partnerships of one or more public school divisions or multiple schools within a school division, healthcare institutions, business and industry, and higher education institutions; and offer rigorous academic content with career and technical instruction. The Academy must include specialty programs within the five career pathways.

Health Sciences Career Cluster

| Career Pathways | General Description |
|--|---|
| Therapeutic Services | Care and treat patients to improve their health over time. Counsel patients and provide them the tools needed to live a healthier and problem-free lifestyle. |
| Diagnostic Services | Use tests and evaluations to aid in the detection, diagnosis and treatment of diseases, injuries or other physical conditions. |
| Health Informatics | Manage health care agencies by overseeing all patient data, financial information and technological applications to health care processes and procedures. |
| Support Services | Assist health care professionals with a range of administrative and maintenance duties to ensure that the health care environment is maintained. |
| Biotechnology Research and Development | Discover new treatments and medical technologies to improve human health and advance the overall health science field. |

At least two of the health sciences career pathways must be implemented initially. The remaining three pathways must be fully articulated and implemented within the next three years. Also, the Academy must agree to participate in the Governor’s Exemplary Standards Award Program.

As required by the Board of Education, the State Council of Higher Education for Virginia (SCHEV) has reviewed the attached proposals and recommends that the Board approve each proposal. Staff members of the Virginia Department of Education (VDOE) have reviewed the proposal in the context of the established criteria. An executive summary of the proposal is in Attachment A. Attachment B is the report from the review by SCHEV and Attachment C is the report from the review by the VDOE. Attachment D is the complete proposal.

Currently, there are two Governor’s Health Sciences Academies in Virginia. They are as follows: 1) Divisionwide model, located at Bethel High School, Hampton City Public Schools; and 2) Regional model, located at Warwick High School, Newport News City Public Schools and Bruton High School, York County Public Schools.

Summary of Important Issues:

1) Proposal to Establish the Albemarle County Public Schools Governor's Health Sciences Academy

The proposed Albemarle County Public Schools Governor's Health Sciences Academy will be located at Monticello High School. It will be available to students in all high schools within Albemarle County and when fully implemented it will have the capacity to enroll 200 students, grades 9-12. To enhance learning experiences for students, the Academy has established extensive partnerships with Charlottesville/Albemarle Technical Education Center, University of Virginia, University of Virginia Healthcare System, University of Virginia School of Medicine, University of Virginia Innovations, Piedmont Virginia Community College, Martha Jefferson Hospital, Virginia Biotechnology Association, Defense Intelligence Agency, Albemarle County Economic Development, Hemoshear, Phthisis Diagnostics, Afton Scientific, Orange Family Physicians, and Charlottesville Sedation Dentistry.

Beginning in 2013-14, the career pathway programs for Biotechnology Research and Development and Therapeutic Services will be implemented. The three additional pathway programs will be implemented in subsequent years: Health Informatics in 2014-15; Diagnostic Services in 2015-16; and Support Services in 2016-17.

The curriculum is designed to prepare students for health-related programs leading to bachelor's degrees, two-year associate degrees, apprenticeships, and employment. The health sciences pathways plans of study (Appendix C) will provide the core academic, technical, and employability skills, and credentials necessary for successful transition to postsecondary education and careers such as dentistry, nursing, pharmacy, emergency medicine, radiology, and infection control. Students will engage in case study work, as well as participate in job shadowing, internships, and clinical experiences. Students will explore core content with technology through integrated projects, and focused learning experiences. The curriculum delivery will include dual enrollment and advanced placement coursework.

Data from the Virginia Employment Commission supports the need for the Academy. Short-term and long-term projections in the healthcare industry indicate a great increase in need for health-related occupations in the Charlottesville Metropolitan Statistical Area Community Profile. Projected job growth in several healthcare fields is expected to increase by 26 percent for registered nurses, dentists, physical therapists, pharmacists, and optometrists.

2) Proposal to Establish the Chesterfield County Public Schools Governor's Health Sciences Academy

The Chesterfield proposed Academy is a multi-campus model located at the Chesterfield Technical Center, Cosby High School, and Monacan High School. This model combines resources from the high schools' Health Science Specialty Center Programs at the high schools with the health science offerings at the technical center to provide students selected from the 10 high schools in the division opportunities in a broad range of programs within the five career pathways. The Academy will have the capacity to enroll 400 students, grades 9-12.

The proposed Chesterfield County Public Schools Governor's Health Sciences Academy has established partnerships with Chippenham-Johnston Willis Medical Center, Virginia Commonwealth University, John Tyler Community College, Virginia Tech, ECPI, Bon Secours Sports Medicine, Sheltering Arms Hospital, St. Francis Hospital, St. Mary's Hospital, Memorial Regional and Richmond Community Hospital, Central Virginia Health Planning Agency, Brandermill Woods

Retirement Facility, West End Orthopedic, Medical College of Virginia and Wauford Group.

Beginning in 2013-14, the Academy will offer the pathway plans of study for Diagnostic Services and Therapeutic Services. In 2014-15, the Health Informatics, Support Services, and Biotechnology Research and Development pathways will be fully implemented.

The health sciences pathways plans of study (Appendix C) will provide rigorous academic, technical, and employability skills, and credentials necessary for students' successful transition to postsecondary education and careers. Based on students' career interest, the articulated plans of study will provide the foundational skills and work-based experiences that lead to careers in dentistry, nursing, physical and occupational therapy, sports medicine, biotechnologies in medicine and forensics, and medical systems administration.

The 2010-2011 edition of the Bureau of Labor Statistics Career Guide to Industries reports the health care field will generate 3.2 million new wage and salary jobs between 2008 and 2018. The rate of employment in health care is expected to be approximately 22 percent versus 11 percent for all other industries combined.

The proposed Chesterfield County Public Schools Governor's Health Sciences Academy is poised to address this need in central Virginia and will be a valuable resource to prepare students to pursue health care careers to meet the Commonwealth's demand.

3) Proposal to Establish the Cumberland County Public Schools Superintendents' Region 8 Governor's Health Sciences Academy

The proposal for Superintendents' Region 8 Governor's Health Sciences Academy consists of partnerships among the counties of: Cumberland, Amelia, Brunswick, Buckingham, Charlotte, Greenville, Halifax, Lunenburg, Mecklenburg, Nottoway, and Prince Edward; and Southside Virginia Community College, Piedmont Health District, and South Central Workforce Investment Board Region. The Academy's secondary academic and career and technical courses will be offered in each of the participating school divisions and the postsecondary courses, including dual enrollment courses, will be offered at Southside Virginia Community College. The Academy will have the capacity to enroll 200 students, grades 9-12. Beginning in 2013-14, the Academy will implement the Therapeutic Services and Health Informatics Services pathways. In 2014-15, the Biotechnology Research and Development, Diagnostic Services, and Support Services Pathways will be implemented.

The health sciences pathways plans of study (Appendix C) will provide the core academic, technical, and employability skills, and credentials necessary for successful transition to postsecondary education and careers in respiratory therapy, nursing, medical laboratory technology, radiology technology, therapeutic massage therapy; health care data analysis, and dietary and food service in health care institutions.

According to the Virginia Community College System Community Profile from the Virginia Employment Commission, updated on February 21, 2013, of the 50 largest employers in Southside Virginia, nine are either hospitals or nursing homes. The same profile shows the healthcare occupations are the fourth largest among new hires by the industry and the eighth highest, 9.8 percent, in turnover. In Region 8, currently there are 93,531 workers in health care who are 55 and older and will be retiring soon. The Virginia Employment Commission predicts that an additional

35.4 percent of health care and social assistance workers will be needed by 2020.

4) Proposal to Establish the Fairfax County Public Schools Governor's Health Sciences Academy at Falls Church High School

According to the U.S. Bureau of Labor Statistics, the health sector employment is projected to increase to nearly 18.3 million jobs in 2020. Greater than one million of these jobs will be in the Northern Virginia area. It is imperative that high school students be exposed to the health sciences as a means of increasing knowledge and experiences that may lead to postsecondary degrees in the health care fields, thus helping to meet the demands of Virginia's work force.

Falls Church High School offers one of six academy programs within Fairfax County Public Schools. Currently, the Falls Church High School Academy offers two health sciences career pathways, Therapeutic Services and Diagnostic Services. The proposed Fairfax County Public Schools Governor's Health Sciences Academy will combine these two pathway offerings with the three additional pathways to offer students a wider range of programs within the cluster.

Beginning in 2013-14, the Governor's Health Sciences Academy will offer Health Informatics along with Therapeutic Services and Diagnostic Services; Support Services in 2014-15; and Biotechnology Research and Development in 2015-16. The Governor's Health Sciences Academy will be available to students from 25 high schools and will have the capacity to enroll 300 students, grades 10-12. During the initial school year (2013-2014) applications will be accepted for 145 students.

The Governor's Health Sciences Academy has established an extensive network of healthcare professionals, business and industry, and postsecondary education institutions partners that will provide extended learning opportunities for students through industry tours, job shadow experiences, internships with industry partners specializing in high-tech professions, access to highly ranked medical facilities as well as federal government facilities located close to Fairfax schools. The Academy partners include: Fairfax County Public Schools, Annandale Chamber of Commerce, Falls Church Chamber of Commerce, George Mason University – Department of Nursing, Northern Virginia Community College, Howard University College of Dentistry, University of Maryland School of Dentistry, Virginia Commonwealth University - School of Pharmacy, American Association of Colleges of Pharmacy, Association of American Medical Colleges—Aspiring Docs Program, Inova Health System, Capital Caring (hospice & palliative care), Wise Hospice Options, Walgreens Pharmacy, U.S. Department of Homeland Security--Secret Service, County of Fairfax, VA (Fairfax County Police Department, Fairfax County Fire and Rescue Department, Fairfax County Sheriff's Office), Arlington County Fire Department, Sterling Fire and Rescue, Occoquan-Woodbridge-Lorton Fire and Rescue, James Madison Fire and Rescue, Virginia Tech Fire and Rescue, Prince William County Fire and Rescue – Paramedics, International Association of Fire Fighters, Falls Church Early Childhood Class Based Special Education Center, Northern Virginia Dental Clinic, Mission of Mercy--Northern Virginia Dental Association, Donate Life Virginia, Patterson Dental, and Pace Dental.

The health sciences pathways plans of study (Appendix C) will provide rigorous academic, technical, and employability skills, and credentials necessary for students' successful transition to postsecondary education and careers. Considering students' career interest, the articulated plans of study will provide the foundational skills and work-based experiences that lead to careers in dentistry, nursing, pharmacy, emergency medical services, medical laboratory technology, health care administration, environmental services, and research in biotechnologies and nuclear medicine.

Highly specialized equipment for the health career specialty programs in dentistry, nursing, and pharmacy is available to enable students' clinical laboratory practice in a safe and supervised learning environment. Opportunities are available for virtual and simulated experiences to further enhance learning. Co-curricular participation in the Health Occupations Student Association (HOSA) provides leadership skills, service learning experiences, networking, and other professional learning opportunities for students.

5) Proposal to Establish the Fairfax County Public Schools Governor's Health Sciences Academy at West Potomac High School.

West Potomac High School offers one of six academy programs within Fairfax County Public Schools. Currently, the West Potomac High School Academy offers two health sciences career pathways, Therapeutic Services and Diagnostic Services. The proposed Fairfax County Public Schools Governor's Health Sciences Academy will combine these two pathway offerings with the three additional pathways to offer students a wider range of programs within the cluster.

Beginning in 2013-14, the Governor's Health Sciences Academy will offer Health Informatics along with Therapeutic Services and Diagnostic Services; Support Services in 2014-15; and Biotechnology Research and Development in 2015-16. The Governor's Health Sciences Academy will be available to students from 26 high schools and five centers and will have the capacity to enroll 375 students, grades 10-12. During the initial school year (2013-2014) applications will be accepted for 175 students.

The proposed Governor's Health Sciences Academy at West Potomac High School has established extensive partnerships among: Fairfax County Public Schools, Northern Virginia Community College Medical Education Campus, Howard University College of Dentistry, Virginia Commonwealth University School of Pharmacy, Columbia University College of Dental Medicine, University of Maryland School of Dentistry, Virginia Dental Association, Inova Health System, Capital Caring Hospice and Palliative Care, and Walgreens. The full-time career experience specialist coordinates with the Academy faculty, students, local business and industry, government, postsecondary education partners to provide students a range of work-based learning experiences from pediatrics to geriatrics, and varying degrees of health/wellness stages from home to other healthcare environments.

The health sciences pathways plans of study (Appendix C) will provide rigorous academic, technical, and employability skills, and credentials necessary for students' successful transition to postsecondary education and careers in dentistry, pharmacy, occupational therapy and/physical therapy, medical laboratory technology, and research in biotechnologies. Co-curricular participation in the Health Occupations Student Association (HOSA) provides leadership skills, service learning experiences, networking, and other professional learning opportunities for students.

The proposed Governor's Health Sciences Academy at West Potomac High School will provide programs that prepare students for postsecondary education and/or entry into high-demand careers in Northern Virginia.

Impact on Fiscal and Human Resources:

Funding for implementation must be provided at the local level.

Timetable for Further Review/Action:

The proposed beginning date is school year 2013-14 for the following:

- 1) Proposal to Establish the Albemarle County Public Schools Governor’s Health Sciences Academy
- 2) Proposal to Establish the Chesterfield County Public Schools Governor’s Health Sciences Academy
- 3) Proposal to Establish the Cumberland County Public Schools Superintendents’ Region 8 Governor’s Health Sciences Academy
- 4) Proposal to Establish the Fairfax County Public Schools Governor’s Health Sciences Academy at Falls Church High School
- 5) Proposal to Establish the Fairfax County Public Schools Governor’s Health Sciences Academy at West Potomac High School

Superintendent's Recommendation:

The Superintendent of Public Instruction recommends that the Board of Education approve the proposals to establish a Governor’s Health Sciences Academy for the following:

- 1) Albemarle County Public Schools Governor’s Health Sciences Academy
- 2) Chesterfield County Public Schools Governor’s Health Sciences Academy
- 3) Cumberland County Public Schools Superintendents’ Region 8 Governor’s Health Sciences Academy
- 4) Fairfax County Public Schools Governor’s Health Sciences Academy at Falls Church High School
- 5) Fairfax County Public Schools Governor’s Health Sciences Academy at West Potomac High School