

**HEALTH SCIENCES ACADEMY  
AT BAYSIDE HIGH SCHOOL  
YEAR-TWO EVALUATION**

**VIRGINIA BEACH CITY PUBLIC SCHOOLS  
Department of Accountability  
2512 George Mason Drive  
Virginia Beach, VA 23456**

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## **EXECUTIVE SUMMARY**

### **INTRODUCTION/BACKGROUND**

On February 19, 2002, the School Board approved the proposal for a Health Sciences Academy (HSA) to be implemented at Bayside High School (BHS) in September 2002. The implementation of the academy began in 2002-2003 with the first class of 91 students. The second year of the academy began in 2003-2004 with 194 academy students. Implementation of the academy would proceed through two additional phases until complete implementation was achieved in 2005-2006, when the Health Sciences Academy would accommodate 400 students in grades 9, 10, 11, and 12.

A year-one evaluation that focused on the implementation of the program and beginning progress toward meeting program goal and objectives of the Health Sciences Academy was presented to the Virginia Beach School Board in August 2003. This year-two evaluation examined actions taken as a result of the year-one recommendations, the second year of the continued implementation process, progress toward meeting the goal and objectives of the School Board approved program, and program costs.

### **FINDINGS**

- Overall, BHS and academy personnel responded positively to the year-one recommendations to make improvements and continue the implementation of the School Board approved program.
- The academy staff followed the approved student application and selection process. All comprehensive middle schools, some private schools, and four high schools had students selected for the academy. Students and parents expressed high levels of satisfaction with the marketing and application process.
- The first academy cohort group (86 students) included 77 tenth-grade students and 9 eleventh-grade students. The second academy cohort group included 108 ninth-grade students. The intent of a school-within-a-school model was reflected in the ethnicity of academy students that closely paralleled division demographics, with the percent of minority students (44.8%) exceeding the division (37.5%) by 7.3 percent. Females in the academy continued to outnumber males about 4:1.
- The staff selection, criteria, and training followed the approved plan. Staff members (83%+) felt training was effective and helped them integrate medical units/ideas into the curriculum, teach academy courses, and meet students' needs. Academy staff members continued to provide individual tutoring assistance for students not demonstrating success in their classes.
- Health Sciences Academy program growth indicators for 2003-2004 included:
  - A 39 percent increase in the number of applications.
  - A 37 percent increase in the number of students selected for the academy.
  - A 29 percent increase in the number of students enrolled for 2003-2004.

- A 91 percent return rate for 2003-2004 based on June 2003 student enrollment.
  - An increase of 6 percent in program capacity from 91 percent at the beginning of 2002-2003 to 97 percent program capacity at the beginning of 2003-2004.
  - A 93.5 percent program capacity maintained during 2003-2004.
  - Six new academy courses developed and approved by the School Board, including a dual enrollment Emergency Medical Technician course at Tidewater Community College.
- Through the academy program of study in 2003-2004:
    - Ninth- and tenth-grade students enrolled in academy core courses and academy classes.
    - Ninth-grade students obtained CPR certification through TCC.
    - Some students took Anatomy taught in Spanish and English.
    - Some students participated in Clinical Rotations.
    - Students (27) were inducted into a national premedical honor society.
  - Academy students (71%) participated in seminars, forums, or field trips. Students and parents expressed high levels of satisfaction with the knowledge and understanding gained from these academy activities, although some academy students (29%) reported they did not participate in these opportunities.
  - Academy students participated in eight academy clubs and other extracurricular activities. Parents (85%) and students (87%) felt the academy provided opportunities to participate in extracurricular activities, however, some academy students (21%) did not list any extracurricular activities on the year-end survey.
  - Bayside High School administrators and the academy coordinator monitored the continued program implementation and followed approved implementation guidelines. Changes reported in the applicants' grade levels, the number of ninth-grade students enrolled, and advanced opportunities afforded students, enhanced, rather than detracted from the program quality. Community partners felt the continued implementation had proceeded very well and the academy had established an "excellent reputation."
  - The approved transportation plan was followed. Students, parents, and staff felt bus transportation allowed full participation in the academy, although students agreement responses were lower (-18%) in 2003-2004. Suggestions for improvements included changes in bus pick-up locations and more consistency in bus service.
  - Stakeholders expressed high levels of satisfaction with the second year of the academy. Many current academy students (89%) planned to return for 2004-2005. Students (70%+), parents (75%+), and staff (92%+) felt the learning environment was flexible, many learning opportunities were provided in and out of class, courses were advanced, and the curriculum was challenging. Students, parents, and staff wrote positive comments about the knowledge and understanding gained from the academy. A few students and parents suggested more challenging curriculum and students (43) wrote comments suggesting more interaction with Bayside High School students.

- The BHS Health Sciences Academy made progress toward meeting the program goal and objectives for completing the sequential program of study and exceeding objectives on SOL tests.
  - Academy students (96%) planned to earn an advanced studies diploma.
  - Academy students (56%+) enrolled in advanced placement or honors classes.
  - Ninth-, tenth-, and eleventh-grade students earned final grade averages of 3.10, 2.97, and 2.91, respectively.
  - Academy students (100%) passed six of the nine Standards of Learning (SOL) tests and many students (94%) passed three of the nine SOL tests.
  
- The BHS Health Sciences Academy made progress toward the program objective to establish collaborative agreements with institutions of higher education.
  - A legal admissions agreement with Eastern Virginia Medical School (EVMS) guarantees admissions to HSA students if they maintain a specified grade point average (GPA) and attend partner colleges or universities. Informal admissions agreements established with five additional institutions of higher education included scholarships set aside for academy students.
  - The National Consortium for Specialized Secondary Schools of Mathematics, Science, and Technology (NCSSSMST) invited the academy to be one of 80 institutional members in the nation.
  - At least ten new partnerships were established in 2003-2004. Diverse and active community partners participated in developing curriculum, facilitating seminars, field trips, research projects, and clinical rotations, speaking to or team teaching classes, facilitating admissions agreements, providing support, and locating resources.
  
- The cumulative academy expenditures thus far including start-up costs, and FY 2002-2003 and FY 2003-2004 costs exclusive to academy students, were about \$482,618 less than the budget projections in the approved proposal. Higher than anticipated expenses for furniture and equipment and expenses for FTEs (salary and fringe benefits) were offset with lower than projected transportation expenditures.

## **RECOMMENDATIONS**

- Increase marketing designed to attract male students.
- Continue enrolling more than 100 students for each beginning cohort group to counteract the impact of attrition on academy enrollment.
- Examine parents' and students' perceptions and comments about challenging curriculum, transportation, extracurricular participation, field trips, and interaction with BHS students for ideas to enhance the program and operational components.
- Continue to track reenrollment rates and other student data of the first several cohort groups through the longitudinal study.