

Office of the Superintendent of Schools
MONTGOMERY COUNTY PUBLIC SCHOOLS
Rockville, Maryland

May 21, 2012

MEMORANDUM

To: Members of the Board of Education

From: Joshua P. Starr, Superintendent of Schools

Subject: Maryland State Department of Education Technology Credit

Members of the Montgomery County Board of Education (Board) have been contacted by Montgomery County Public Schools students who believe that the Maryland State Department of Education (MSDE) technology education credit graduation requirement is too narrow and may have a negative effect of limiting students' pursuit of computer science study. Board members requested the Strategic Planning Committee to consider this topic; the committee recommendation was for discussion and possible action by the Board.

Background

Effective September 2007, the Code of Maryland Regulations (COMAR) 13A.04.01.01 was revised to align technology education instruction with the International Technology and Engineering Education Association *Standards for Technology Literacy: Content for the Study of Technology* and with the Maryland State Standards. All courses satisfying the technology education credit must align with these standards.

To graduate from a Maryland high school, all students must earn one credit in technology education. Four courses currently offered in MCPS fulfill the technology education credit:

- Foundations of Technology (FOT)
- Introduction to Engineering Design (IED)
- Principles of Engineering (POE)
- Designing Technology Solutions (DTS)—a new course designed by MCPS

Between 2007 and 2009, MCPS requested waivers from the state requirements for technology education credit requirements to provide time to communicate changes to secondary principals, students, and parents and to develop curriculum, train staff members, and secure necessary equipment and instructional materials. Staff members in the Office of Curriculum and Instructional Programs (OCIP) collaborated with MSDE to audit existing MCPS courses that

satisfied the technology education credit to determine which courses aligned with the Maryland technology standards.

Based on the findings of the audit, courses that had previously fulfilled the technology education credit in MCPS were phased out and the new courses were phased in to allow the Class of 2012 to meet state requirements. OCIP staff members also developed curriculum for a new class, Designing Technology Solutions, to address the Maryland technology standards in a course designed to introduce students to computer programming.

Since 2010, staff members in OCIP have worked with members of the Montgomery County Collaboration Board, including career Cluster Advisory Board presidents and co-conveners from Montgomery College and MCPS to address concerns about the impact of the state requirements on enrollment in Information Technology (IT) courses and programs. Specifically, OCIP staff members and representatives of business and higher education reorganized the IT Cluster Advisory Board, with the help of leaders in the Academy of IT Cluster Advisory Board and the IT Foundations Advisory Board.

The newly formed IT Cluster Advisory Board includes members of both IT advisory groups to coordinate efforts to maintain quality career programs and support for students and to facilitate graduate employability in the surrounding community. The IT Cluster Advisory Board established a charge and deliverables related to curriculum, data analysis, articulation, and advocacy. The advocacy subgroup is pursuing options to persuade MSDE to modify or create alternatives to the technology education requirements with the desired outcome of allowing more courses to qualify.

At the table for tonight's discussion is Mr. Erick Lang, associate superintendent, Office of Curriculum and Instructional Programs.

JPS:EJL:kam