WEST VIRGINIA LEGISLATURE

2017 REGULAR SESSION

Introduced

House Bill 2337

BY DELEGATES HOWELL, FRICH AND ELDRIDGE

[Introduced February 10, 2017; Referred

to the Committee on Education then Finance.]

A BILL to amend and reenact §18-2-12 of the Code of West Virginia,1931, as amended, relating to required computer science classes for public schools.

Be it enacted by the Legislature of West Virginia:

That §18-2-12 of the Code of West Virginia,1931, as amended, be amended and reenacted to read as follows:

ARTICLE 2. STATE BOARD OF EDUCATION.

§18-2-12. ~~Computer science courses of instruction; learning standards; state board plan development.~~ Required Computer Science Course Offering.

~~(a) Legislative findings:~~

~~(1) Computer technology increasingly is pervasive in nearly every function of society from consumer products to transportation, communications, electrical infrastructure, logistics, agriculture, medical treatments, research, security and financial transactions;~~

~~(2) The U. S. Bureau of Labor Statistics predicts that by 2024, there will be more than 800,000 new jobs in the STEM fields and more than two-thirds of these directly will be in computing occupations;~~

~~(3) Studying computer science prepares students to enter many career areas, both within and outside of computing, teaching them logical reasoning, algorithmic thinking, design and structured problem solving skills applicable in many contexts from science and engineering to the humanities and business;~~

~~(4) Computer science is an established discipline at the collegiate and post-graduate levels but, unfortunately, computer science concepts and courses have not kept pace in the K-12 curriculum to the point that the nation faces a serious shortage of computer scientists at all levels that is likely to continue for the foreseeable future; and~~

~~(5) Organizations such as the Computer Science Teachers Association, the International Society for Technology in Education and technology industry leaders have developed recommendations for standards, curriculum and instructional resources for computer technology~~

~~learning in K-12 schools.~~

~~(b) Prior to the 2017 regular legislative session, the state board shall submit a plan to the Legislative Oversight Commission on Education Accountability for the implementation of computer science instruction and learning standards in the public schools. The Plan shall include at least the following:~~

~~(1) Recommendations for a core set of learning standards designed to provide the foundation for a complete computer science curriculum and its implementation at the K–12 level including, but not limited to:~~

~~(A) Introducing the fundamental concepts of computer science to all students, beginning at the elementary school level;~~

~~(B) Presenting computer science at the secondary school level in a way that is both accessible and worthy of an academic curriculum credit and may fulfill a computer science, math, or science graduation credit;~~

~~(C) Encouraging schools to offer additional secondary-level computer science courses that will allow interested students to study facets of computer science in more depth and prepare them for entry into the work force or college; and~~

~~(D) Increasing the availability of rigorous computer science for all students.~~

~~(2) Recommendations for teaching standards and secondary certificate endorsements if necessary for teachers to deliver curriculum appropriate to meet the standards;~~

~~(3) Recommendations for units of instruction or courses in academic and vocational technical settings that complement any existing K–12 computer science and IT curricula where they are already established, especially the Advanced Placement computer science curricula and professional IT certifications; and~~

~~(4) Proposals for implementation of the recommendations over a period not to exceed four years and estimates of any associated additional costs.~~

~~(c) Nothing in this section requires adoption or implementation of any specific~~

~~recommendation or any level of appropriation by the Legislature.~~

(a) Beginning in the 2017-2018 school year, a public high school shall offer at least one computer science course at the high school level.

(b) A computer science course offered by a public high school shall:

(1) Be of high quality;

(2) Meet or exceed the curriculum standards and requirements established by the State Board of Education; and

(3) Be made available in a traditional classroom setting, blended learning environment, online-based, or other technology-based format that is tailored to meet the needs of each participating student.

NOTE: The purpose of this bill is to require each public high school to offer a course in computer science.

Strike-throughs indicate language that would be stricken from a heading or the present law and underscoring indicates new language that would be added.