2020 -- H 7045

========
LC003181
========

S T A T E O F R H O D E I S L A N D

IN GENERAL ASSEMBLY

JANUARY SESSION, A.D. 2020

A N A C T

RELATING TO EDUCATION -- CURRICULUM

Introduced By: Representatives Lombardi, Hull, Walsh, Lyle, and Fogarty

Date Introduced: January 09, 2020

Referred To: House Health, Education & Welfare

It is enacted by the General Assembly as follows:

SECTION 1. Chapter 16-22 of the General Laws entitled "Curriculum [See Title 16 Chapter 97 - The Rhode Island Board of Education Act]" is hereby amended by adding thereto the following sections:

16-22-34. Recommendations on the development of computer science curriculum.

(a) The council on elementary and secondary education ("council") shall develop recommendations on a computer science curriculum to prepare students for successful postsecondary education and careers in computer science, information technology, and related fields. In developing these recommendations, the council shall consider policies and practices that are designed to increase access to high-quality educational experiences that help more students obtain careers in these fields.

(b) The council's recommendations shall identify:

(1) High school courses in computer science, including computer coding and computer programming, of sufficient rigor that may be used to satisfy admissions requirements at state colleges and universities, including requirements for foreign languages, mathematics, and science;

(2) Common academic and technical skills needed for students to meet projected labor market demands in computer science, information technology, and related fields in and outside of the state;

(3) How middle and high school students, including underrepresented and nontraditional

students, can be encouraged to pursue further studies and careers in computer science, information technology, and related fields;

(4) Secondary course sequences which prepare students to succeed in postsecondary educational programs in computer science, information technology, and related fields;

(5) Gaps in current policy, curricula, programs, and practices at the state, school district, and postsecondary level which inhibit students from pursuing advanced studies and careers in computer science, information technology, and related fields;

(6) Appropriate educator qualifications and computer science pedagogy to maintain technologically current instructional knowledge and practices in teacher preparation programs; and

(7) Common definitions for terms related to computer science, including terms such as "computer coding" and "computer programming," for consistent use across both the Rhode Island kindergarten through grade twelve (K-12) education system and the state's postsecondary education system.

(c) By December 31, 2021, the council shall report its recommendations to the board of education, the governor, and the general assembly.

16-22-35. Computer science and technology instruction.

(a) By June 30, 2022, the commissioner of elementary and secondary education ("commissioner") shall develop academic standards for a computer science high school curriculum, including standards and benchmarks for computer coding and computer programming, and identify high school-level courses which incorporate the standards and prepare students for postsecondary success in computer science, information technology, and related fields. In developing these standards, the commissioner shall consider and incorporate the recommendations made by the council on elementary and secondary education pursuant to §16-22-30, to the fullest extent the commissioner deems practicable.

(b) The courses in the computer science curriculum should, to the extent academically feasible, enable a student to utilize computer science courses to meet foreign language, mathematics, and science admission requirements at the state colleges and universities, including the Community College of Rhode Island, Rhode Island College, and the University of Rhode Island.

(c) If a school district does not offer a course identified by the commissioner pursuant to subsections (a) and (b) of this section, that district shall provide students access to the course through a virtual school or education program, an online program, or through other means.

(d) If a student is enrolled in an identified course that satisfies a foreign language,

mathematics, or science admissions requirement for a state postsecondary school, including the Community College of Rhode Island, Rhode Island College, and the University of Rhode Island, the school district shall notify the student that they should contact any private in-state or out-of-state public or private postsecondary institution to which the student is applying and inquire whether the course credit satisfies any of the institution's admissions requirements.

(e) The commissioner shall annually report to the council on elementary and secondary education, the governor, and the general assembly on:

(1) The courses identified by the commissioner that meet the academic standards for computer science;

(2) The number of students, by district, including all public schools and charter public schools, who are enrolled in a course identified by the commissioner that meets the academic standards for computer science; and

(3) The number of teachers, educators and other individuals who hold a valid educator certificate in computer science or a related field.

(f) The council on elementary and secondary education shall consult with the board of education and school districts to develop strategies for recruiting qualified teachers to provide computer science instruction, updating computer science educator certification requirements, providing appropriate professional development to maintain technologically current instructional knowledge and practices in the school districts, and identifying and streamlining traditional and alternative pathways toward computer science educator certification.

SECTION 2. This act shall take effect upon passage.

========
LC003181
========

EXPLANATION

BY THE LEGISLATIVE COUNCIL

OF

A N A C T

RELATING TO EDUCATION -- CURRICULUM

***

This act would direct the council on elementary and secondary education to develop recommendations for a high school curriculum to prepare students for successful postsecondary education and careers in computer science. The act would also direct the commissioner of elementary and secondary education to consider the council's recommendations and develop academic standards for a computer science high school curriculum. The courses in the computer science curriculum should, to the extent academically feasible, enable a student to utilize computer science courses to meet foreign language, mathematics, and science admission requirements at the state's colleges and universities.

This act would take effect upon passage.

========
LC003181
========