

SENATE BILL NO. 476—COMMITTEE ON EDUCATION

MARCH 25, 2019

Referred to Committee on Education

SUMMARY—Establishes programs to promote education in computer science. (BDR 34-819)

FISCAL NOTE: Effect on Local Government: No.
Effect on the State: Yes.

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EXPLANATION – Matter in *bolded italics* is new; matter between brackets ~~omitted material~~ is material to be omitted.

AN ACT relating to education; requiring the development of an Internet repository of resources for providing instruction in computer science; requiring the Department of Education to assist school districts, charter schools and university schools for profoundly gifted pupils to establish programs of instruction in computer science; establishing a program to award grants to school districts and charter schools to provide incentives for a teacher to earn a degree or other credential in computer science; and providing other matters properly relating thereto.

Legislative Counsel's Digest:

Existing law requires each public high school in this State to allow a pupil enrolled in the school to receive a fourth unit of credit toward the mathematics credits required for graduation from high school or a third unit of credit towards the science credits required for graduation from high school for successful completion of certain courses in computer science. (NRS 389.0186) Beginning July 1, 2022, existing law requires each school district, charter school that operates as a high school and university school for profoundly gifted pupils to make available to pupils a course in computer science. (NRS 389.037) **Section 1** of this bill requires the Department of Education to develop and make available to school districts, charter schools and university schools for profoundly gifted pupils an Internet repository of resources for providing instruction in computer science to pupils in all grades. **Section 1** also requires the Department to assist school districts, charter schools and university schools for profoundly gifted pupils as necessary to establish programs of instruction in computer science that meet the needs of their pupils. **Section 2** of this bill provides that such programs of instruction may include the courses in computer science that each school district, charter school and university school for profoundly gifted pupils is required to make available to pupils enrolled in high school beginning on July 1, 2022.



Existing law requires the board of trustees of each school district and the governing body of each charter school to ensure that teachers and administrators have access to professional development training concerning the curriculum and instruction required for courses of study in computer science. (NRS 391A.370) **Section 3** of this bill requires, to the extent that money is available, the State Board of Education to establish a program to award grants on a competitive basis to school districts and charter schools to provide incentives for a teacher to earn a degree or other credential in computer science.

THE PEOPLE OF THE STATE OF NEVADA, REPRESENTED IN
SENATE AND ASSEMBLY, DO ENACT AS FOLLOWS:

Section 1. Chapter 389 of NRS is hereby amended by adding thereto a new section to read as follows:

1. The Department shall:

(a) Develop and make available to school districts, charter schools and university schools for profoundly gifted pupils an Internet repository of resources for providing instruction in computer science to pupils in all grades. The repository must contain, without limitation, resources for providing instruction concerning computational thinking and computer coding.

(b) Assist school districts, charter schools and university schools for profoundly gifted pupils as necessary to establish programs of instruction in computer science that meet the needs of pupils enrolled in the school district, charter school or university school for profoundly gifted pupils, as applicable.

2. As used in this section:

(a) "Computational thinking" means problem-solving skills and techniques commonly used by software engineers when writing programs for computer applications. Such skills and techniques include, without limitation, decomposition, pattern recognition, pattern generalization and designing algorithms.

(b) "Computer coding" means the process of writing script for a computer program or mobile electronic device.

Sec. 2. Section 1 of this act is hereby amended to read as follows:

1. The Department shall:

(a) Develop and make available to school districts, charter schools and university schools for profoundly gifted pupils an Internet repository of resources for providing instruction in computer science to pupils in all grades. The repository must contain, without limitation, resources for providing instruction concerning computational thinking and computer coding.

(b) Assist school districts, charter schools and university schools for profoundly gifted pupils as necessary to establish



1 programs of instruction in computer science , *including,*
2 *without limitation, the courses required by NRS 389.037,*
3 that meet the needs of pupils enrolled in the school district,
4 charter school or university school for profoundly gifted
5 pupils, as applicable.

6 2. As used in this section:

7 (a) "Computational thinking" means problem-solving
8 skills and techniques commonly used by software engineers
9 when writing programs for computer applications. Such skills
10 and techniques include, without limitation, decomposition,
11 pattern recognition, pattern generalization and designing
12 algorithms.

13 (b) "Computer coding" means the process of writing
14 script for a computer program or mobile electronic device.

15 **Sec. 3.** Chapter 391A of NRS is hereby amended by adding
16 thereto a new section to read as follows:

17 *1. To the extent that money is available, the State Board shall*
18 *establish by regulation a program to award grants on a*
19 *competitive basis to school districts and charter schools to provide*
20 *incentives for a teacher to earn a degree or other credential in*
21 *computer science.*

22 *2. A school district or charter school may apply jointly for a*
23 *grant pursuant to subsection 1 with another school district or*
24 *charter school, an employer, a college or university, a qualified*
25 *provider of an alternative route to licensure approved pursuant to*
26 *NRS 391.019 or a nonprofit organization.*

27 *3. A school district or charter school that wishes to obtain a*
28 *grant pursuant to subsection 1 must submit to the Department an*
29 *application in the form prescribed by the Department. The*
30 *application must include, without limitation, a description of the*
31 *incentives that the applicant intends to establish using the grant.*

32 **Sec. 4.** 1. This section and sections 1 and 3 of this act
33 become effective on July 1, 2019.

34 2. Section 2 of this act becomes effective on July 1, 2022.

