# SENATE BILL No. 313–SENATORS WOODHOUSE, DENIS, DONDERO LOOP, PARKS; BROOKS AND CANCELA

### MARCH 18, 2019

#### Referred to Committee on Education

SUMMARY—Revises provisions relating to computer literacy and computer science education. (BDR 34-731)

FISCAL NOTE: Effect on Local Government: May have Fiscal Impact. Effect on the State: Yes.

EXPLANATION - Matter in bolded italics is new; matter between brackets [omitted material] is material to be omitted.

AN ACT relating to education; requiring the Department of Education to establish an Internet repository of certain resources; authorizing a person who receives an endorsement to teach in a field of specialization relating to computer literacy and computer science to request a reimbursement; creating the Account for Computer Education and Technology; requiring a regional training program to provide training on methods to teach computer literacy or computer science; authorizing the Board of Regents of the University of Nevada to apply for a grant of money from the Account to establish curriculum and standards for the training of teachers in computer literacy and computer science; making an appropriation; and providing other matters properly relating thereto.

#### **Legislative Counsel's Digest:**

Existing law requires each public 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





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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 6.5** 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 provides various incentives for educational personnel. (NRS 391A.400-391A.590) **Section 3** of this bill creates the Account for Computer Education and Technology and establishes requirements for the use of money in the Account. Existing law authorizes the Board of Regents of the University of Nevada to prescribe courses of study for the Nevada System of Higher Education. (NRS 396.440) **Section 6** of this bill authorizes the Board of Regents to apply for a grant from the Account to develop the curriculum and standards required to educate and train students studying to become teachers in computer literacy and computer science. **Section 2** of this bill authorizes a person studying to become a teacher to request a reimbursement for the cost of the coursework required to obtain an endorsement to teach in a field of specialization relating to computer literacy and computer science.

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 3.5 of this bill requires, to the extent that money is available, the State Board of Education to establish a program to award grants to certain school districts and charter schools to provide incentives for a teacher to earn a degree or other credential in computer science. Existing law requires a regional training program to provide certain training for educational personnel. (NRS 391A.125) Section 4 of this bill requires a regional training program to provide training on methods to teach computer literacy and computer science.

Section 5 of this bill makes a conforming change. Section 7 of this bill makes appropriations for the purpose of carrying out the provisions of this bill.

## 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. 1.5.** Chapter 391 of NRS is hereby amended by adding thereto the provisions set forth as sections 2 and 3 of this act.
- Sec. 2. A person who receives an endorsement to teach in a field of specialization relating to computer literacy and computer science may request a reimbursement for the cost of the coursework required to receive such an endorsement from the board of trustees of a school district or governing body of a charter school that employs or will employ the person. The board of trustees or governing body, as applicable, may reimburse the person using money received from a grant provided to the board of trustees or governing body pursuant to NRS 391A.510 or section 3 of this act.
- Sec. 3. 1. The Account for Computer Education and Technology is hereby created in the State General Fund, to be administered by the Superintendent of Public Instruction. The Superintendent of Public Instruction may accept gifts and grants of money from any source for deposit in the Account. Any money from gifts and grants may be expended in accordance with the terms and conditions of the gift or grant and in accordance with regulations adopted pursuant to subsection 2. The interest and income earned on the sum of money in the Account and any unexpended appropriations made to the Account from the State General Fund must be credited to the Account. Any money remaining in the Account does not revert to the State General Fund, and the balance in the Account must be carried forward to the next fiscal year.
- 2. Except as otherwise provided in subsection 1, the money in the Account may be used only for providing or reimbursing the cost of training in computer literacy and computer science pursuant to sections 2 and 6 of this act. The State Board shall adopt regulations governing the distribution of money in the Account for this purpose.
- **Sec. 3.5.** Chapter 391A of NRS is hereby amended by adding thereto a new section to read as follows:
- 1. To the extent that money is available, the State Board shall establish by regulation a program to award grants to school districts located in a county whose population is less than 100,000





and charter schools to provide incentives for a teacher to earn a degree or other credential in computer science.

- 2. A school district or charter school may apply jointly for a grant pursuant to subsection 1 with another school district located in a county whose population is less than 100,000 or charter school, an employer, a college or university, a qualified provider of an alternative route to licensure approved pursuant to NRS 391.019 or a nonprofit organization.
- 3. A school district or charter school that wishes to obtain a grant pursuant to subsection I must submit to the Department an application in the form prescribed by the Department. The application must include, without limitation, a description of the incentives that the applicant intends to establish using the grant.
  - **Sec. 4.** NRS 391A.125 is hereby amended to read as follows:
- 391A.125 1. Based upon the priorities of programs prescribed by the State Board pursuant to subsection 4 of NRS 391A.505 and the assessment of needs for training within the region and priorities of training adopted by the governing body pursuant to NRS 391A.175, each regional training program shall provide:
- (a) Training for teachers and other licensed educational personnel in the:
- (1) Standards established by the Council to Establish Academic Standards for Public Schools pursuant to NRS 389.520;
- (2) Curriculum and instruction required for the standards adopted by the State Board;
- (3) Curriculum and instruction recommended by the Teachers and Leaders Council of Nevada; and
- (4) Culturally relevant pedagogy, taking into account cultural diversity and demographic differences throughout this State.
- (b) Through the Nevada Early Literacy Intervention Program established for the regional training program, training for teachers who teach kindergarten and grades 1, 2 or 3 on methods to teach fundamental reading skills, including, without limitation:
  - (1) Phonemic awareness;
  - (2) Phonics;
  - (3) Vocabulary;
  - (4) Fluency;
  - (5) Comprehension; and
  - (6) Motivation.
- (c) Training for administrators who conduct the evaluations required pursuant to NRS 391.685, 391.690, 391.705 and 391.710 relating to the manner in which such evaluations are conducted. Such training must be developed in consultation with the Teachers and Leaders Council of Nevada created by NRS 391.455.





- (d) Training for teachers, administrators and other licensed educational personnel relating to correcting deficiencies and addressing recommendations for improvement in performance that are identified in the evaluations conducted pursuant to NRS 391.685, 391.690, 391.705 or 391.710.
- (e) Training for teachers on methods to teach computer literacy or computer science to pupils.
  - (f) At least one of the following types of training:
- (1) Training for teachers and school administrators in the assessment and measurement of pupil achievement and the effective methods to analyze the test results and scores of pupils to improve the achievement and proficiency of pupils.
- (2) Training for teachers in specific content areas to enable the teachers to provide a higher level of instruction in their respective fields of teaching. Such training must include instruction in effective methods to teach in a content area provided by teachers who are considered masters in that content area.
- (3) In addition to the training provided pursuant to paragraph (b), training for teachers in the methods to teach basic skills to pupils, such as providing instruction in reading with the use of phonics and providing instruction in basic skills of mathematics computation.
- [(f)] (g) In accordance with the program established by the Statewide Council pursuant to paragraph (b) of subsection 2 of NRS 391A.135 training for:
- (1) Teachers on how to engage parents and families, including, without limitation, disengaged families, in the education of their children and to build the capacity of parents and families to support the learning and academic achievement of their children.
- (2) Training for teachers and paraprofessionals on working with parent liaisons in public schools to carry out strategies and practices for effective parental involvement and family engagement.
  - 2. The training required pursuant to subsection 1 must:
- (a) Include the activities set forth in 20 U.S.C. § 7801(42), as deemed appropriate by the governing body for the type of training offered.
- (b) Include appropriate procedures to ensure follow-up training for teachers and administrators who have received training through the program.
  - (c) Incorporate training that addresses the educational needs of:
- (1) Pupils with disabilities who participate in programs of special education; and
  - (2) Pupils who are English learners.
- 3. The governing body of each regional training program shall prepare and maintain a list that identifies programs for the





professional development of teachers and administrators that successfully incorporate:

- (a) The standards of content and performance established by the Council to Establish Academic Standards for Public Schools pursuant to NRS 389.520;
  - (b) Fundamental reading skills; and

- (c) Other training listed in subsection 1.
- The governing body shall provide a copy of the list on an annual basis to school districts for dissemination to teachers and administrators.
- 4. A regional training program may include model classrooms that demonstrate the use of educational technology for teaching and learning.
- 5. A regional training program may contract with the board of trustees of a school district that is served by the regional training program as set forth in NRS 391A.120 to provide professional development to the teachers and administrators employed by the school district that is in addition to the training required by this section. Any training provided pursuant to this subsection must include the activities set forth in 20 U.S.C. § 7801(42), as deemed appropriate by the governing body for the type of training offered.
- 6. To the extent money is available from legislative appropriation or otherwise, a regional training program may provide training to paraprofessionals.
- 7. As used in this section, "paraprofessional" has the meaning ascribed to it in NRS 391.008.
  - **Sec. 5.** NRS 391A.190 is hereby amended to read as follows:
- 391A.190 1. The governing body of each regional training program shall:
- (a) Establish a method for the evaluation of the success of the regional training program, including, without limitation, the Nevada Early Literacy Intervention Program. The method must be consistent with the uniform procedures and criteria adopted by the Statewide Council pursuant to NRS 391A.135 and the standards for professional development training adopted by the State Board pursuant to subsection 1 of NRS 391A.370.
- (b) On or before September 1 of each year and before submitting the annual report pursuant to paragraph (c), submit the annual report to the Statewide Council for its review and incorporate into the annual report any revisions recommended by the Statewide Council.
- (c) On or before December 1 of each year, submit an annual report to the State Board, the board of trustees of each school district served by the regional training program, the Commission on Professional Standards in Education, the Legislative Committee on





Education and the Legislative Bureau of Educational Accountability and Program Evaluation that includes, without limitation:

- (1) The priorities for training adopted by the governing body pursuant to NRS 391A.175.
- (2) The type of training offered through the regional training program in the immediately preceding year.
- (3) The number of teachers and administrators who received training through the regional training program in the immediately preceding year.
- (4) The number of administrators who received training pursuant to paragraph (c) of subsection 1 of NRS 391A.125 in the immediately preceding year.
- (5) The number of teachers, administrators and other licensed educational personnel who received training pursuant to paragraph (d) of subsection 1 of NRS 391A.125 in the immediately preceding year.
- (6) The number of teachers who received training pursuant to subparagraph (1) of paragraph [(f)] (g) of subsection 1 of NRS 391A.125 in the immediately preceding year.
- (7) The number of paraprofessionals, if any, who received training through the regional training program in the immediately preceding year.
- (8) An evaluation of the effectiveness of the regional training program, including, without limitation, the Nevada Early Literacy Intervention Program, in accordance with the method established pursuant to paragraph (a).
  - (9) An evaluation of whether the training included the:
- (I) Standards of content and performance established by the Council to Establish Academic Standards for Public Schools pursuant to NRS 389.520;
- (II) Curriculum and instruction required for the common core standards adopted by the State Board;
- (III) Curriculum and instruction recommended by the Teachers and Leaders Council of Nevada created by NRS 391.455; and
- (IV) Culturally relevant pedagogy, taking into account cultural diversity and demographic differences throughout this State.
- (10) An evaluation of the effectiveness of training on improving the quality of instruction and the achievement of pupils.
- (11) A description of the gifts and grants, if any, received by the governing body in the immediately preceding year and the gifts and grants, if any, received by the Statewide Council during the immediately preceding year on behalf of the regional training program. The description must include the manner in which the gifts and grants were expended.





- (12) The 5-year plan for the regional training program prepared pursuant to NRS 391A.175 and any revisions to the plan made by the governing body in the immediately preceding year.
- 2. The information included in the annual report pursuant to paragraph (c) of subsection 1 must be aggregated for each regional training program and disaggregated for each school district served by the regional training program.
- 3. As used in this section, "paraprofessional" has the meaning ascribed to it in NRS 391.008.
- **Sec. 6.** Chapter 396 of NRS is hereby amended by adding thereto a new section to read as follows:
- 1. The Board of Regents may apply for a grant from the Account for Computer Education and Technology created pursuant to section 3 of this act to develop the curriculum and standards required to educate and train a person who is studying to become a teacher in computer literacy and computer science.
- 2. All persons who are studying to become a teacher must receive appropriate education and training in computer literacy and computer science.
- **Sec. 6.5.** Section 1 of this act is hereby amended to read as follows:

### Section 1. 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, *including*, *without limitation*, *the courses required by NRS 389.037*, 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. 7.** 1. There is hereby appropriated from the State General Fund to the Department of Education for transfer to the Clark County School District for the purpose of carrying out the provisions of this act, the following sums:

For the Fiscal Year 2019-2020 \$400,000 For the Fiscal Year 2020-2021 \$400,000

2. There is hereby appropriated from the State General Fund to the Department of Education for transfer to the Washoe County School District for the purpose of carrying out the provisions of this act, the following sums:

For the Fiscal Year 2019-2020 \$100,000 For the Fiscal Year 2020-2021 \$100,000

3. There is hereby appropriated from the State General Fund to the Department of Education for the purpose of awarding grants of money to certain school districts and charter schools pursuant to subsection 7 to carry out the provisions of this act, the following sums:

For the Fiscal Year 2019-2020 \$200,000 For the Fiscal Year 2020-2021 \$200,000

4. There is hereby appropriated from the State General Fund to the Department of Education the sum of \$120,000 for the purpose of providing the training required pursuant to section 4 of this act.

5. There is hereby appropriated from the State General Fund to the Department of Education the sum of \$12,588 for the purpose of monitoring computer education on a statewide basis.

- 6. There is hereby appropriated from the State General Fund to the Account for Computer Education and Technology the sum of \$100,000.
- 7. Grants awarded from the sums appropriated by subsection 3 must be awarded to school districts, other than the Clark County School District or the Washoe County School District, and charter schools in this State through a noncompetitive application process.
  - 8. Any remaining balance of the sums appropriated by:
- (a) Subsections 1, 2 and 3 remaining at the end of the respective fiscal years must not be committed for expenditure after June 30 of the respective fiscal years by the entity to which the appropriation is made or any entity to which money from the appropriation is granted or otherwise transferred in any manner, and any portion of the appropriated money remaining must not be spent for any purpose after September 18, 2020, and September 17, 2021, respectively, by either the entity to which the money was appropriated or the entity to which the money was subsequently granted or transferred, and must be reverted to the State General Fund on or before September 18, 2020, and September 17, 2021, respectively.





- (b) Subsections 4, 5 and 6 must not be committed for expenditure after June 30, 2021, by the entity to which the appropriation is made or any entity to which money from the appropriation is granted or otherwise transferred in any manner, and any portion of the appropriated money remaining must not be spent for any purpose after September 17, 2021, by either the entity to which the money was appropriated or the entity to which the money was subsequently granted or transferred, and must be reverted to the State General Fund on or before September 17, 2021.
- **Sec. 8.** 1. This section, sections 1 to 6, inclusive, and section 7 of this act become effective on July 1, 2019.
  - 2. Section 6.5 of this act becomes effective on July 1, 2022.





