## (Reprinted with amendments adopted on June 2, 2017) SECOND REPRINT S.B. 200

SENATE BILL NO. 200–SENATORS WOODHOUSE, DENIS, FORD, SPEARMAN, CANCELA; ATKINSON, CANNIZZARO, GANSERT, MANENDO, PARKS, RATTI AND SEGERBLOM

FEBRUARY 22, 2017

JOINT SPONSORS: ASSEMBLYMEN CARLTON, FRIERSON; AND FUMO

Referred to Committee on Education

SUMMARY—Revises provisions relating to instruction in computer education and technology. (BDR 34-266)

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 formitted material is material to be omitted.

AN ACT relating to education; requiring certain pupils to receive instruction in computer education and technology; authorizing a pupil to apply credit received for certain courses in computer science to fulfill requirements for graduation from high school, admission to college and eligibility for the Millennium Scholarship under certain circumstances; requiring a school district or charter school to provide professional development concerning computer science and computer education technology; requiring the Advisory Council on Science, Technology, Engineering and Mathematics to appoint a computer science subcommittee on recommendations concerning instruction in computer education and technology; making an appropriation; and providing other matters properly relating thereto.

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

Existing law requires computer education and technology to be taught in all public schools, the Caliente Youth Center, the Nevada Youth Training Center and any other state facility for the detention of children. (NRS 389.018) The Council to Establish Academic Standards for Public Schools is required to establish standards of content and performance for computer education and technology. (NRS 389.520)





Section 2 of this bill requires that a course in computer science approved by the State Board of Education be made available to pupils at each public high school, each charter school that operates as a high school and each university school for profoundly gifted pupils. Section 3 of this bill requires each pupil who is enrolled in a public school or any state facility for the detention of children to receive instruction in computer education and technology that is approved by the State Board before beginning sixth grade. Section 3 also provides that if the State Board prescribes a course in computer education and technology for pupils in high school, the State Board is required to prescribe the amount of the instructional time for the course that must be dedicated to computer science and computational thinking. Sections 4.5 and 8.3 of this bill require the Department of Education to review all courses in computer science and instruction in computer education and technology and make recommendations to the State Board concerning whether to approve the course or instruction. Section 5 of this bill requires that the standards of content and performance established by the Council for computer education and technology include standards for computer science and computational thinking.

Existing law requires a pupil in a public high school to enroll in at least four units of credit in mathematics and three units of credit in science. (NRS 389.018) Section 4 of this bill allows a pupil who completes certain courses in computer science to receive a fourth unit of mathematics credit or a third unit of science credit toward the total number of credits required in mathematics or science, as applicable, for graduation from high school. Sections 6 and 7 of this bill provide that if the Board of Regents of the Nevada System of Higher Education requires a student to successfully complete a course in mathematics or science to be admitted to any institution in the System or to be eligible for the Millennium Scholarship, the student may apply not more than one unit of credit received for completing certain courses in computer science toward those requirements if the student has also completed a certain number of units of credit in mathematics or science, as applicable.

Existing law requires the board of trustees of each school district and the governing body of each charter school to ensure that the teachers and administrators of the school district or charter school have access to professional development training concerning the curriculum and instruction required for courses of study in science, technology, engineering and mathematics. (NRS 391A.370) **Section 5.5** of this bill requires that professional development training to include, to the extent applicable, training in computer science and computer education and technology.

Existing law establishes the Advisory Council on Science, Technology, Engineering and Mathematics. (NRS 223.640) **Section 8** of this bill requires the Advisory Council to appoint a subcommittee on computer science to make recommendations concerning instruction in computer education and technology.

**Section 8.5** of this bill makes appropriations to the Department of Education: (1) for transfer to the Clark and Washoe County School Districts for the purpose of carrying out the requirements of this bill; and (2) to award noncompetitive grants to other school districts and charter schools for the purpose of carrying out the requirements 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 the provisions set forth as sections 2 to 4.5, inclusive, of this act.

The board of trustees of each school district, the governing body of each charter school that operates as a high school and the governing body of each university school for

profoundly gifted pupils shall:

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1. Ensure that a course in computer science that has been approved by the State Board is made available to pupils enrolled in each public high school within the school district or in the charter school or university school for profoundly gifted pupils, as applicable. The course may be a course of distance education that is approved by the State Board and included on the list prepared by the Department pursuant to NRS 388.834.

2. Make efforts to increase the enrollment in the course of female pupils, pupils with disabilities and pupils who belong to ethnic and racial groups that are underrepresented in the field of computer science, as identified by regulation of the State Board.

- Sec. 3. 1. Before beginning sixth grade, each pupil who is enrolled in a public school, the Caliente Youth Center, the Nevada Youth Training Center or any other state facility for the detention of children that is operated pursuant to title 5 of NRS, including, without limitation, each pupil with a disability who is so enrolled, must receive instruction in computer education and technology approved by the State Board, including, without limitation, instruction on the skills necessary to complete the criterionreferenced examinations administered pursuant to NRS 390.105.
- If the State Board prescribes a course in computer education and technology pursuant to NRS 385.114 for pupils enrolled in high school, the State Board shall adopt regulations prescribing the percentage of the instructional time for the course that must be dedicated to computer science and computational thinking, which may include, without limitation, instruction in logic, coding, robotics and cyber security.
- Sec. 4. 1. Except as otherwise provided in this section, each public high school, including without limitation, a charter school, must allow a pupil enrolled in the school to receive a fourth unit of credit towards 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:
  - (a) An advanced placement computer science course;





- (b) A computer science course that is offered through a program of career and technical education; or
- (c) A computer science course that is offered by a community college or university which has been approved pursuant to NRS 389.160.
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- (a) May not apply more than one unit of credit received for the completion of one or more courses described in subsection 1 toward the mathematics or science credits required for graduation from high school.
- (b) Must successfully complete each mathematics or science course for which an end-of-course examination is prescribed by the State Board pursuant to NRS 390.600.
- Sec. 4.5. The department, in consultation with the Advisory Council on Science, Technology, Engineering and Mathematics created by NRS 223.640, shall:
- 1. Review all instruction in computer education and technology submitted to the State Board for approval pursuant to section 3 of this act; and
- 2. Make recommendations to the State Board concerning whether the instruction should be approved.
  - **Sec. 5.** NRS 389.520 is hereby amended to read as follows: 389.520 1. The Council shall:
- (a) Establish standards of content and performance, including, without limitation, a prescription of the resulting level of achievement, for the grade levels set forth in subsection 4, based upon the content of each course, that is expected of pupils for the following courses of study:
  - (1) English language arts;
  - (2) Mathematics:
  - (3) Science;
- (4) Social studies, which includes only the subjects of 32 33 history, geography, economics and government; 34
  - (5) The arts:
  - (6) Computer education and technology ; which includes computer science and computational thinking;
    - (7) Health;
    - (8) Physical education; and
    - (9) A foreign or world language.
  - (b) Establish a schedule for the periodic review and, if necessary, revision of the standards of content and performance. The review must include, without limitation, the review required pursuant to NRS 390.115 of the results of pupils on the examinations administered pursuant to NRS 390.105.





- (c) Assign priorities to the standards of content and performance relative to importance and degree of emphasis and revise the standards, if necessary, based upon the priorities.
- 2. The standards for computer education and technology must include a policy for the ethical, safe and secure use of computers and other electronic devices. The policy must include, without limitation:
- (a) The ethical use of computers and other electronic devices, including, without limitation:
- (1) Rules of conduct for the acceptable use of the Internet and other electronic devices; and
  - (2) Methods to ensure the prevention of:
    - (I) Cyber-bullying;

- (II) Plagiarism; and
- (III) The theft of information or data in an electronic form;
- (b) The safe use of computers and other electronic devices, including, without limitation, methods to:
- (1) Avoid cyber-bullying and other unwanted electronic communication, including, without limitation, communication with on-line predators;
- (2) Recognize when an on-line electronic communication is dangerous or potentially dangerous; and
- (3) Report a dangerous or potentially dangerous on-line electronic communication to the appropriate school personnel;
- (c) The secure use of computers and other electronic devices, including, without limitation:
- (1) Methods to maintain the security of personal identifying information and financial information, including, without limitation, identifying unsolicited electronic communication which is sent for the purpose of obtaining such personal and financial information for an unlawful purpose;
- (2) The necessity for secure passwords or other unique identifiers;
  - (3) The effects of a computer contaminant;
  - (4) Methods to identify unsolicited commercial material; and
- (5) The dangers associated with social networking Internet sites; and
- (d) A designation of the level of detail of instruction as appropriate for the grade level of pupils who receive the instruction.
- 3. The standards for social studies must include multicultural education, including, without limitation, information relating to contributions made by men and women from various racial and ethnic backgrounds. The Council shall consult with members of the





community who represent the racial and ethnic diversity of this State in developing such standards.

- 4. The Council shall establish standards of content and performance for each grade level in kindergarten and grades 1 to 8, inclusive, for English language arts and mathematics. The Council shall establish standards of content and performance for the grade levels selected by the Council for the other courses of study prescribed in subsection 1.
- 5. The Council shall forward to the State Board the standards of content and performance established by the Council for each course of study. The State Board shall:
- (a) Adopt the standards for each course of study, as submitted by the Council; or
- (b) If the State Board objects to the standards for a course of study or a particular grade level for a course of study, return those standards to the Council with a written explanation setting forth the reason for the objection.
- 6. If the State Board returns to the Council the standards of content and performance for a course of study or a grade level, the Council shall:
- (a) Consider the objection provided by the State Board and determine whether to revise the standards based upon the objection; and
- (b) Return the standards or the revised standards, as applicable, to the State Board.
- → The State Board shall adopt the standards of content and performance or the revised standards, as applicable.
- 7. The Council shall work in cooperation with the State Board to prescribe the examinations required by NRS 390.105.
  - 8. As used in this section:
- 31 (a) "Computer contaminant" has the meaning ascribed to it in NRS 205.4737.
- 33 (b) "Cyber-bullying" has the meaning ascribed to it in 34 NRS 388.123.
- 35 (c) "Electronic communication" has the meaning ascribed to it 36 in NRS 388.124.
  - **Sec. 5.5.** NRS 391A.370 is hereby amended to read as follows:
  - 391A.370 *I.* The board of trustees of each school district and the governing body of each charter school shall ensure that the teachers and administrators employed by the school district or charter school have access to high-quality, ongoing professional development training. The professional development training must include, without limitation, training concerning:





[1.] (a) The academic standards adopted by the State Board, including, without limitation, the academic standards for science.

[2.] (b) The academic standards and curriculum in English language development and literacy.

[3.] (c) The curriculum and instruction required for courses of study in:

(1) Science, technology, engineering and mathematics [- (b)], including, without limitation and to the extent applicable, computer science and computer education and technology.

(2) English language development and literacy.

- [4.] (d) The cultural competency required to meet the social, emotional and academic needs of certain categories of pupils enrolled in the school, including, without limitation, pupils who are at risk, pupils who are limited English proficient, pupils with disabilities and gifted and talented pupils.
- 2. Professional development training concerning the curriculum and instruction required for courses of study in computer science and computer education and technology may be provided by the school district or governing body or through an agreement with an institution of higher education, a regional training program for the professional development of teachers and administrators or the Department. If the professional development training is provided through an agreement with the Department, the professional development training may include content contributed by a third party if the content is approved by the Department for the purpose of professional development training.
- **Sec. 6.** Chapter 396 of NRS is hereby amended by adding thereto a new section to read as follows:
- 1. If the Board of Regents adopts rules that require a student to successfully complete courses in mathematics or science before being admitted to an institution within the System, a student who has successfully completed one or more courses in computer science described in section 4 of this act must be allowed to apply not more than one unit of credit received for the completion of such courses toward a requirement to successfully complete a course in:
- (a) Science, if the student successfully completed two units of credit in science; or
- (b) Mathematics, if the student successfully completed three units of credit in mathematics and successfully completed Algebra II.
- 2. The State Board shall approve a course in computer science for the purposes of paragraph (b) of subsection 1 if the State Board deems the mathematics component of the course to be sufficiently rigorous.





- **Sec. 7.** NRS 396.930 is hereby amended to read as follows:
- 396.930 1. Except as otherwise provided in subsections 2 and [3,] 4, a student may apply to the Board of Regents for a Millennium Scholarship if the student:
- (a) Except as otherwise provided in paragraph (e) of subsection 2, has been a resident of this State for at least 2 years before the student applies for the Millennium Scholarship;
- (b) Except as otherwise provided in paragraph (c), graduated from a public or private high school in this State:
  - (1) After May 1, 2000, but not later than May 1, 2003; or
- (2) After May 1, 2003, and, except as otherwise provided in paragraphs (c), (d) and (f) of subsection 2, not more than 6 years before the student applies for the Millennium Scholarship;
  - (c) Does not satisfy the requirements of paragraph (b) and:
- (1) Was enrolled as a pupil in a public or private high school in this State with a class of pupils who were regularly scheduled to graduate after May 1, 2000;
- (2) Received his or her high school diploma within 4 years after he or she was regularly scheduled to graduate; and
- (3) Applies for the Millennium Scholarship not more than 6 years after he or she was regularly scheduled to graduate from high school;
- (d) Except as otherwise provided in paragraph (e), maintained in high school in the courses designated by the Board of Regents pursuant to paragraph (b) of subsection 2, at least:
- (1) A 3.00 grade point average on a 4.0 grading scale, if the student was a member of the graduating class of 2003 or 2004;
- (2) A 3.10 grade point average on a 4.0 grading scale, if the student was a member of the graduating class of 2005 or 2006; or
- 30 (3) A 3.25 grade point average on a 4.0 grading scale, if the student was a member of the graduating class of 2007 or a later graduating class;
  - (e) Does not satisfy the requirements of paragraph (d) and received at least the minimum score established by the Board of Regents on a college entrance examination approved by the Board of Regents that was administered to the student while the student was enrolled as a pupil in a public or private high school in this State; and
    - (f) Is enrolled in at least:
- 40 (1) Nine semester credit hours in a community college within the System;
  - (2) Twelve semester credit hours in another eligible institution; or





- (3) A total of 12 or more semester credit hours in eligible institutions if the student is enrolled in more than one eligible institution.
  - 2. The Board of Regents:

- (a) Shall define the core curriculum that a student must complete in high school to be eligible for a Millennium Scholarship.
- (b) Shall designate the courses in which a student must earn the minimum grade point averages set forth in paragraph (d) of subsection 1.
- (c) May establish criteria with respect to students who have been on active duty serving in the Armed Forces of the United States to exempt such students from the 6-year limitation on applications that is set forth in subparagraph (2) of paragraph (b) of subsection 1.
- (d) Shall establish criteria with respect to students who have a documented physical or mental disability or who were previously subject to an individualized education program under the Individuals with Disabilities Education Act, 20 U.S.C. §§ 1400 et seq., or a plan under Title V of the Rehabilitation Act of 1973, 29 U.S.C. §§ 791 et seq. The criteria must provide an exemption for those students from:
- (1) The 6-year limitation on applications that is set forth in subparagraph (2) of paragraph (b) of subsection 1 and subparagraph (3) of paragraph (c) of subsection 1 and any limitation applicable to students who are eligible pursuant to subparagraph (1) of paragraph (b) of subsection 1.
- (2) The minimum number of credits prescribed in paragraph (e) (f) of subsection 1.
- (e) Shall establish criteria with respect to students who have a parent or legal guardian on active duty in the Armed Forces of the United States to exempt such students from the residency requirement set forth in paragraph (a) of subsection 1 or subsection 13.14.
- (f) Shall establish criteria with respect to students who have been actively serving or participating in a charitable, religious or public service assignment or mission to exempt such students from the 6-year limitation on applications that is set forth in subparagraph (2) of paragraph (b) of subsection 1. Such criteria must provide for the award of Millennium Scholarships to those students who qualify for the exemption and who otherwise meet the eligibility criteria to the extent that money is available to award Millennium Scholarships to the students after all other obligations for the award of Millennium Scholarships for the current school year have been satisfied.
- 3. If the Board of Regents requires a student to successfully complete courses in mathematics or science to be eligible for a





Millennium Scholarship, a student who has successfully completed one or more courses in computer science described in section 4 of this act must be allowed to apply not more than one unit of credit received for the completion of such courses toward that requirement.

- 4. Except as otherwise provided in paragraph (c) of subsection 1, for students who did not graduate from a public or private high school in this State and who, except as otherwise provided in paragraph (e) of subsection 2, have been residents of this State for at least 2 years, the Board of Regents shall establish:
- (a) The minimum score on a standardized test that such students must receive; or
  - (b) Other criteria that students must meet,
- → to be eligible for Millennium Scholarships.
- [4.] 5. In awarding Millennium Scholarships, the Board of Regents shall enhance its outreach to students who:
  - (a) Are pursuing a career in education or health care;
- (b) Come from families who lack sufficient financial resources to pay for the costs of sending their children to an eligible institution; or
- (c) Substantially participated in an antismoking, antidrug or antialcohol program during high school.
- (5.) 6. The Board of Regents shall establish a procedure by which an applicant for a Millennium Scholarship is required to execute an affidavit declaring the applicant's eligibility for a Millennium Scholarship pursuant to the requirements of this section. The affidavit must include a declaration that the applicant is a citizen of the United States or has lawful immigration status, or that the applicant has filed an application to legalize the applicant's immigration status or will file an application to legalize his or her immigration status as soon as he or she is eligible to do so.
  - **Sec. 8.** NRS 223.650 is hereby amended to read as follows:
- 223.650 1. The Advisory Council on Science, Technology, Engineering and Mathematics created by NRS 223.640 shall:
- (a) Develop a strategic plan for the development of educational resources in the fields of science, technology, engineering and mathematics to serve as a foundation for workforce development, college preparedness and economic development in this State;
- (b) Develop a plan for identifying and awarding recognition to pupils in this State who demonstrate exemplary achievement in the fields of science, technology, engineering and mathematics;
- (c) Develop a plan for identifying and awarding recognition to not more than 15 schools in this State that demonstrate exemplary performance in the fields of science, technology, engineering and mathematics:





- (d) Conduct a survey of education programs and proposed programs relating to the fields of science, technology, engineering and mathematics in this State and in other states to identify recommendations for the implementation of such programs by public schools and institutions of higher education in this State and report the information gathered by the survey to the State Board of Education and the Board of Regents of the University of Nevada;
- (e) Apply for grants on behalf of the State of Nevada relating to the development and expansion of education programs in the fields of science, technology, engineering and mathematics;
- (f) Identify a nonprofit corporation to assist in the implementation of the plans developed pursuant to paragraphs (a), (b) and (c);
- (g) Prepare a written report which includes, without limitation, recommendations based on the survey conducted pursuant to paragraph (d) and any other recommendations concerning the instruction and curriculum in courses of study in science, technology, engineering and mathematics in public schools in this State and, on or before January 31 of each odd-numbered year, submit a copy of the report to the State Board of Education, the Board of Regents of the University of Nevada, the Governor and the Director of the Legislative Counsel Bureau for transmittal to the Legislature; [and]
- (h) Conduct surveys for and make recommendations as deemed necessary to the Office of Economic Development and the Governor's Workforce Investment Board : and
- (i) Appoint a subcommittee on computer science consisting of at least three members to provide advice and recommendations to:
- (1) The State Board of Education, the Council to Establish Academic Standards for Public Schools, the boards of trustees of school districts and the governing bodies of charter schools and university schools for profoundly gifted pupils concerning the curriculum and materials for courses in computer science and computer education and technology and professional development for teachers who teach such courses; and
- (2) The Commission on Professional Standards in Education concerning the qualifications for licensing teachers and other educational personnel who teach courses in computer science or computer education and technology.
  - 2. Each year the Council:
- (a) Shall establish an event in southern Nevada and an event in northern Nevada to recognize pupils in this State who demonstrate exemplary achievement in the fields of science, technology, engineering and mathematics. The events must be held at an institution of higher education in this State.





- (b) Shall establish a statewide event which must be held in Carson City to recognize not more than 15 schools in this State that have demonstrated exemplary performance in the fields of science, technology, engineering and mathematics.
- (c) May accept any gifts, grants or donations from any source for use in carrying out the provisions of this subsection.
- 3. The Council or a subcommittee of the Council may seek the input, advice and assistance of persons and organizations that have knowledge, interest or expertise relevant to the duties of the Council.
- 4. The State Board of Education and the Board of Regents of the University of Nevada shall consider the plans developed by the Advisory Council on Science, Technology, Engineering and Mathematics pursuant to paragraphs (a), (b) and (c) of subsection 1 and the written report submitted pursuant to paragraph (g) of subsection 1. The State Board of Education shall adopt such regulations as the State Board deems necessary to carry out the recommendations in the written report.
- **Sec. 8.3.** Section 4.5 of this act is hereby amended to read as follows:
  - Sec. 4.5. The department, in consultation with the Advisory Council on Science, Technology, Engineering and Mathematics created by NRS 223.640, shall:
  - 1. Review each course in computer science submitted to the State Board for approval pursuant to section 2 of this act and all instruction in computer education and technology submitted to the State Board for approval pursuant to section 3 of this act; and
  - 2. Make recommendations to the State Board concerning whether the *course or* instruction should be approved.
- **Sec. 8.5.** 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 2017-2018 \$700,000 For the Fiscal Year 2018-2019 \$800,000

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 2017-2018 \$100,000 For the Fiscal Year 2018-2019 \$200,000

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 to carry out the provisions of this act, the following sums:

For the Fiscal Year 2017-2018 \$200,000 For the Fiscal Year 2018-2019 \$400,000

- 4. Grants awarded from the sum appropriated by subsection 3 must be awarded to school districts, other than the Clark County School District or Washoe County School District, and charter schools in this State through a noncompetitive application process.
- 5. Any balance of the sums appropriated by 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 21, 2018, and September 20, 2019, 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 21, 2018, and September 20, 2019, respectively.
- **Sec. 9.** The provisions of NRS 354.599 do not apply to any additional expenses of a local government that are related to the provisions of this act.
- **Sec. 10.** This act becomes effective upon passage and approval for the purpose of adopting any regulations and performing any other preparatory administrative tasks that are necessary to carry out the provisions of this act. For all other purposes:
- 1. This section and sections 1, 4, 7, 8, 8.5 and 9 of this act become effective on July 1, 2017.
- 2. Sections 3, 4.5, 5 and 5.5 of this act become effective on July 1, 2018.
  - 3. Section 6 of this act becomes effective on July 1, 2020.
- 4. Sections 2 and 8.3 of this act become effective on July 1, 2022.





