Nevada Ready!
State Computer Science Education Overview

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Standards and Instructional Support

January 30, 2020

Nevada Department of Education

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Computer Science Education Week

December 9-15, 2019

Learn computer science.
Change the world.

HOUR OF CODE

Hour of Code 2019
#HourOfCode #CSforGood

Governor's Proclamation
Computer Science Education Week 2019

Summary

LEGISLATIVE BILLS
SENATE BILL 200 (2017)

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Senate Bill 200 (2017) – Overview

POINTS OF THE BILL	IMPLEMENTATION TIMELINE	SECTION OF BILL
CS Subcommittee formation	July 1, 2017	Section 8
CS can count as 4th math or 3rd science	July 1, 2017	Section 4
NVACS for CS developed	July 1, 2018	Section 5
Computer Education and Technology in elementary	July 1, 2018	Section 3
HS Computer Education and Technology grad req must include CS	July 1, 2018	Section 3
CS can count as entry for NSHE institutions	July 1, 2020	Section 6
All HS's must offer CS	July 1, 2022	Section 2

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Summary

LEGISLATIVE BILLS
SENATE BILL 313 (2019)

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Senate Bill 313 (2019) – Section 1

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.

> " Department shall:
> (1.a) develop and make available…an Internet repository of resources…
> (1.b) assist school districts, charter schools…to establish programs of instruction in computer science…
> (2)[provides definitions of 'computational thinking' and 'computer coding'] "

Effective date July 1, 2019

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Senate Bill 313 (2019) – Section 2

Sec. 2. *A person who receives an endorsement to teach in a field of specialization relating to computer literacy and computer*

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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.

"

[Reimbursement for individuals who take coursework to become endorsed to teach computer literacy or computer science]

"

Effective date July 1, 2019

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Senate Bill 313 (2019) – Section 3

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.

State Board shall adopt regulations

Effective date July 1, 2019

"

The Account for Computer Education and Technology is hereby created..to be administered by the Superintendent.

- It may receive gifts and grants
- Money must be expended according to terms of the gift/grant
- Interest, income, and appropriations stay in Account
- Money does not revert back to general fund; carried forward to next fiscal year
- Money may be used only for providing or reimbursing
    - Coursework towards endorsement
    - Pre-service teacher programs
    - Or according to terms of gift

"

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Senate Bill 313 (2019) – Section 3.5

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 1 must submit to the Department an

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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.

State Board shall adopt regulations

Effective date July 1, 2019

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"

...the State Board shall establish by regulation...

[(1) Application process for rurals/charters to provide incentives for a teacher to earn a degree or other credential in computer science.
(2) A rural district or charter school may apply in a consolidation
(3) They must provide an application to the Department with a description of the incentives they intend to establish]

"

Senate Bill 313 (2019) – Section 4

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:

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> "...each Regional Training program shall provide:
>
> ...Training for teachers on methods to teach computer literacy or computer science to pupils."

Effective date July 1, 2019

Senate Bill 313 (2019) – Section 5

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(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.

"

The governing body of each Regional Training Program shall provide [an annual report...that includes:

[The number of teachers trained in computer literacy and computer science]

"

Effective date July 1, 2019

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Senate Bill 313 (2019) – Section 6

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.

> The Board of Regents may apply for a grant from the Account for Computer Education and Technology... [to develop curriculum and standards to train all individuals studying to become a teacher]

Effective date July 1, 2019

Sec. 6.5. Section 1 of this act is hereby amended to read 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 , *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,

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"
The Department shall: [provide the Internet repository of resources referenced in section 1, but updated to include the courses all high schools must offer by 2022 and in ways to increase their enrollment of females, students with disabilities, and underrepresented student populations in the computer science field]
"

Effective date July 1, 2022

Senate Bill 313 (2019) – Section 7

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.

> " [appropriations outlined]
> Clark: FY20 & FY21 $400K /yr
> Washoe: FY20 & FY21 $100K /yr
> Rural/charters: FY20 & FY21 $200K /yr
> RPDPs: $120K / yr to provide required training
> NDE: $12,588 across biennium to provide monitoring and support
> Account for Computer Education and Technology: $100K starting balance
> Total CS education funding over the 20/21 biennium: $1,632,588 "

Effective date July 1, 2019

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State Updates for CS Education

- Content standards

- Computer education and technology credit for graduation

- Equity and Access to computer science coursework in Nevada

- Funding and advances of resources

- Professional development

- Teacher endorsements

- Works in Progress

- Supporting information

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Nevada Academic Content Standards for

COMPUTER SCIENCE AND INTEGRATED TECHNOLOGY

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K-12 Computer Science and Integrated Technology Standards

"Computer Education and Technology"

- 2018 – K-12 Computer Science Standards adopted

- 2019 – K-12 Integrated Technology Standards adopted (formerly Ed Tech Standards)

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Instructional Support

Computer Science and Integrated Technology Instructional Support Guide

- Currently being developed by a team of professionals
- Interactive videos, best practices, in-depth definitions of key topics
- Anticipated release in Spring 2020
- Byte-Size Seminar Series – stemhub.nv.gov/csfornv

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Required for Graduation

COMPUTER EDUCATION AND TECHNOLOGY - 0.5 CREDIT

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Computer Science and Applications

- Course must follow a prescribed set of standards
- At LEAST 50% of course must cover Computer Science
- New course is being taught as of Fall 2019

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Elementary Computer Education and Technology

- Must be in place for 2020-2021 school year
- Includes K-5 standards from Computer Science and from the Integrated Technology standards
- Includes at age-appropriate levels:
  - keyboarding
  - use of productivity tools
  - foundational computer science instruction

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Computer Science Education

EQUITY AND ACCESS

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H. S. Equity and Access

The chart below outlines the trend for high school computer science course offerings in districts from 2015-2019

School Year	# of High Schools with CS	% of NV High Schools with CS*	% change
2015-2016	19	12%	Baseline
2016-2017	27	17%	+.05
2017-2018	40	25%	+.08
2018-2019	60	37%	+.12

*percent based on approximately 161 high schools

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AP Computer Science Principles

Number of Students who took AP CSP exam	2017	2018	2019
	329	746	TBD
Enrollment by Gender	**2017**	**2018**	**2019**
Female	99	272	1388
Male	230	474	1899
Enrollment by Demographic	**2017**	**2018**	**2019**
American Indian / Alaska Native	2	1	14
Asian	61	115	533
Black or African American	12	38	239
Hispanic / Latino	89	248	1,358
Native Hawaiian or other Pacific Islander	0	3	52
White	4	23	863
Two or more races, non-Hispanic	19	74	228
No Response	142	244	n/a

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Comparison By Demographics 2019-2020

Total Number of HS Students in Nevada	**144,831**	
Total Number of Ninth Grade Level Students	37,904	
Total AP Computer Science Students Enrolled	**3,287**	
Enrollment by race/ethnicity	**% 9th grade enrollment**	**% of HS CSP students**
American Indian / Alaska Native	0.9	0.0
Asian	6.1	1.4
Black or African American	11	0.6
Hispanic / Latino	43.1	3.6
Native Hawaiian or other Pacific Islander	1.6	0.1
White	31.2	2.3
Two or more races, non-Hispanic	6.1	0.6

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Comparison By Demographics % of HS CSP students

Total Number of HS Students in Nevada	144,831	
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American Indian / Alaska Native	0.9	0.0
Asian	6.1	1.4
Black or African American	11	0.6
Hispanic / Latino	43.1	3.6
Native Hawaiian or other Pacific Islander	1.6	0.1
White	31.2	2.3
Two or more races, non-Hispanic	6.1	0.6

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Computer Science Education State Grants

FUNDING AND IMPLEMENTATION

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FY 18 Allocations

District/Charter	Allocation
Clark	$700,000.00
Washoe	$100,000.00
Nye Consortium (Nye, Storey, White Pine, Lincoln, Churchill, Pershing)	$100,701.61
Carson City Consortium (Carson City, Douglas, Lyon)	$18,886.93
Esmeralda	$16,783.60
Mater Academy	$16,783.60
Doral Academy	$16,783.60
Elko Institute for Academic Achievement	$10,195.00
Discovery Charter	$5,000.00
Beacon Academy	$2,000.00
Legacy Traditional	$12,865.66
Total FY18 Allocation	$1,000,000.00

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FY 19 Allocations

District/Charter	Allocation	District/Charter	Allocation
Clark	$800,000.00	Elko Institute for Academic Achievement	$26,899.00
Washoe	$200,000.00	Discovery Charter	$15,000.00
Democracy Prep	$24,476.80	SLAM Academy	$18,338.00
Lyon Consortium (Carson City, Douglas, Churchill)	$104,648.41	Coral Academy	$30,800.00
Esmeralda	$29,664.43	Elko	$31,229.09
Mater Academy	$31,299.09	Humboldt	$31,229.09
Doral Academy	$25,257.00	Pinecrest Academy	$31,229.09
		Total FY19 Allocation	$1,400,000.00

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FY 20 Allocations

District/Charter	Allocation	District/Charter	Allocation
Clark	$400,000.00	Lander	$2,816.00
Washoe	$100,000.00	Learning Bridge Charter	$6,582.76
American Prep Academy	$7,926.54	Legacy Traditional	$7,926.54
Carson City	$7,926.54	Lincoln	$7,926.54
Churchill	$7,926.54	Lyon	$7,926.54
Coral Academy of LV	$7,926.54	Mater Academy LV	$7,926.54
Discovery Charter	$7,926.54	Mater – No NV	$7,926.54
Doral Academy	$7,926.54	Mineral	$7,926.54
Douglas	$7,926.54	Nye	$7,926.54
Elko County	$7,926.54	Pershing	$4,312.00
Elko Institute	$4,650.00	Pinecrest Academy	$7,926.54
Esmeralda	$7,926.54	SLAM Academy	$7,926.54
Humboldt	$7,926.54	Somerset Academy LV	$7,926.54
Imagine Schools	$7,926.54		
		Total FY20 Allocation	**$700,000.00**

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Computer Science and Integrated Technology

PROFESSIONAL DEVELOPMENT

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PD Training Data

Regional Professional Development Programs

- 2,344 teachers trained from 2017 to summer of 2019 – to include ES, MS, and HS teachers

- 2019-2020 goals – over 2,000 elementary teachers throughout the state

Districts / Charters

- Clark – MS/HS teachers and administrators – 150
- Washoe – 130
- Elko – 33
- Carson – 32
- Douglas – 19
- Lyon – 37
- Storey – 1
- Churchill – 28
- Humboldt – 18
- Pinecrest Academy – 4
- Doral Academy – 194 (100%)

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Computer Science Education

TEACHER ENDORSEMENTS

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Secondary CS Endorsements

NAC	TITLE	DESCRIPTION
NAC 391.202	Endorsement to teach computer technology-based applications and computational thinking	(3)-credit course on Methods for Teaching CS, (3) on CS Concepts, and (3) on Methods to Teach Computer Applications = 9 total credits
NAC 391.196	Endorsement to teach advanced computer science	(3)-credit course on Methods for Teaching CS, (3) on CS Concepts, and (6) credits on instruction in programming languages = 12 total credits **OR** *Take and pass the Praxis exam in Computer Science*

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Computer Science Education

WORK IN PROGRESS

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Coming Soon…

- Computer Science Summit 2020 – "Achieving 20/20 Vision for CS Education"
  - February 8-9 (Reno) | March 28-29 (Las Vegas)
- Nevada Computer Science Equity and Diversity Convening
- Administrator Training Guide
- NSHE pre-service teacher programs

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Computer Science Education

SUPPORTING INFORMATION

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Resources

- Nevada Computer Science Strategic Plan

- Computer Science Subcommittee

- NDE Computer Science Website

- STEMHub.nv.gov/csfornv Website

- NDE Biennium Report on CS Education

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Thank you for your time!

QUESTIONS AND COMMENTS

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Appendix

SENATE BILL 200 RESOURCE SLIDES

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Senate Bill 200 (2017) – Section 2

Sec. 2. 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:

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.

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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.

> "...(1) ensure that **a course in computer science**...is made available...[at] each public high school...or charter school...may be distant education...
> (2) Make efforts to **increase enrollment** in the course of female...pupils with disabilities and ... pupils from ethnic and racial groups... underrepresented in field of computer science"

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Effective date July 1, 2022

Senate Bill 200 (2017) – Section 3

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 criterion-referenced examinations administered pursuant to NRS 390.105.*

2. 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.

"
(1) **Before beginning sixth grade...each pupil...must receive instruction in computer education and technology...**

(2) [re: high school half-credit course] State Board shall adopt regulations prescribing the **percentage of instructional time...dedicated to computer science and computational thinking**...may include...logic, coding, robotics, and cyber security.
"

Effective date July 1, 2018

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Senate Bill 200 (2017) – Section 4

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.

2. A pupil:

(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.

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(1) ...each public high school..charter school...must allow pupil...to receive a **fourth unit of credit towards math credits required for graduation or a third unit of credit towards science**...for successful completion of: an AP CS course, CS course in CTE pathway, or CS course at approved community college or university...

(2)...may not apply more than one credit...must successfully complete each math or science course [having end of course exam]

Effective date July 1, 2017

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Senate Bill 200 (2017) – Sections 4.5 & 8.3

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. 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.

"
The department...with...STEM Advisory Council shall:

(1)...**review each course in computer science submitted to State Board for approval and all instruction in computer education and technology**

(2) make recommendations to the State Board concerning whether the course or instruction should be approved
"

Section 4.5: Effective date July 1, 2018
Section 8.3: Effective date July 1, 2022

Senate Bill 200 (2017) – Section 5

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 history, geography, economics and government;

    (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.

> "The Council shall establish **standards** of content and performance [for] computer education and technology, which includes computer science and computational thinking..."

Effective date July 1, 2018

Nevada Department of Education

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Senate Bill 200 (2017) – Section 5.5

Sec. 5.5. NRS 391A.370 is hereby amended to read as follows:

391A.370 *1.* 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:

[(a)] *(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.

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[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.

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> "(1)...each school district...each charter school shall ensure that teachers and administrators...have access to **high-quality, ongoing professional development training**....concerning....the curriculum and instruction for courses of study in ...computer science and computer education and technology
> (2) [outlines various ways PD can occur]"

Effective date July 1, 2018

Senate Bill 200 (2017) – Section 6

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.

"
(1)…if Board of Regents…require…math or science [**for admission**], a student who has successfully completed one or more courses in computer science described in section 4…**must be allowed to apply…one unit of credit…toward science** [after successful completion of two credits] **or math** [if successfully completing three units of math [including] Algebra II
(2) [outlines qualifying State Board approved courses]
"

Effective date July 1, 2020

Senate Bill 200 (2017) – Section 7

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

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unit of credit received for the completion of such courses toward that requirement.

" If the Board of Regents requires ...math 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...must be allowed to apply...one unit of credit received for the completion of such courses toward that requirement. "

Effective date July 1, 2017

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Senate Bill 200 (2017) – Section 8

(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.

Effective date July 1, 2017

> "
> ...the [STEM Advisory Council] shall:
>
> (i)Appoint a subcommittee on computer science ... to **provide advice and recommendations to**:
>
> (1)[State Board, Academic Standards Council, Boards of Trustees (districts), Governing Bodies (charters) concerning **curriculum and materials** for courses in computer science and computer education and technology and teacher PD]
>
> (2)The Commission on Professional Standards [on **teacher licensing** for CS and CET]
> "

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Senate Bill 200 (2017) – Section 8.5

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:

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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.

"

[appropriations outlined]
Clark: FY18 $700K | FY19 $800K
Washoe: FY18 $100K | FY19 $200K
Rural/charters: FY18 $200K | FY19 $400K
[Unused funds at the end of each fiscal year reverted back to State General Fund]

"

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