CERTIFICATION OF ENROLLMENT

ENGROSSED SECOND SUBSTITUTE HOUSE BILL 1872

Chapter 25, Laws of 2013

63rd Legislature
2013 2nd Special Session

K-12 EDUCATION--SCIENCE, TECHNOLOGY, ENGINEERING, MATHEMATICS

EFFECTIVE DATE: 09/28/13

Passed by the House June 25, 2013
Yea 58  Nay 32

FRANK CHOPP
Speaker of the House of Representatives

Passed by the Senate June 28, 2013
Yea 47  Nay 0

BRAD OWEN
President of the Senate

Approved July 3, 2013, 2:17 p.m.

I, Barbara Baker, Chief Clerk of the House of Representatives of the State of Washington, do hereby certify that the attached is ENGROSSED SECOND SUBSTITUTE HOUSE BILL 1872 as passed by the House of Representatives and the Senate on the dates hereon set forth.

BARBARA BAKER
Chief Clerk

JAY INSLEE
Governor of the State of Washington

FILED
July 3, 2013

Secretary of State
State of Washington
AN ACT Relating to establishing a comprehensive initiative to increase learning opportunities and improve educational outcomes in science, technology, engineering, and mathematics through multiple strategies and statewide partnerships; amending RCW 28B.77.020 and 28A.290.010; adding a new chapter to Title 28A RCW; and recodifying RCW 28A.300.515, 28A.630.065, 28A.630.066, 28A.700.120, 28A.625.200, 28A.625.210, 28A.625.220, 28A.625.230, and 28A.625.240.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

NEW SECTION. Sec. 1. STEM LITERACY. (1) As used throughout this chapter, "STEM" means science, technology, engineering, and mathematics.

(2) To provide focus and clarity to efforts to increase learning opportunities and improve educational outcomes in STEM, the following definition of STEM literacy is adopted: STEM literacy means the ability to identify, apply, and integrate concepts from science, technology, engineering, and mathematics to understand complex problems and to innovate to solve them. STEM literacy is achieved when a student is able to apply his or her understanding of how the world
works within and across the four interrelated STEM disciplines to improve the social, economic, and environmental conditions of the local and global community.

(3) The component parts of STEM literacy are:

(a) Scientific literacy, which is the ability to use scientific knowledge and processes in physics, chemistry, biology, and earth and space science to understand the natural world and to participate in decisions that affect it;

(b) Technological literacy, which is the ability to use new technologies, understand how technologies are developed, and have skills to analyze how new technologies affect individuals, the nation, and the world. Technology is the innovation, change, or modification of the natural environment to satisfy perceived human needs and wants;

(c) Engineering literacy, which is the understanding of how technologies are developed through the engineering design process. Engineering design is the systematic and creative application of scientific and mathematical principles to practical ends, such as the design, manufacture, and operation of efficient and economic structures, machines, processes, and systems; and

(d) Mathematical literacy, which is the ability to analyze, reason, and communicate ideas effectively through posing, formulating, solving, and interpreting solutions to mathematical problems in a variety of situations.

NEW SECTION. Sec. 2. STEM EDUCATION INNOVATION ALLIANCE. (1) The STEM education innovation alliance is established to advise the governor and to provide vision, guidance, assistance, and advice to support the initiatives under this chapter, as well as other current or proposed programs and initiatives across the spectrum of early learning through postsecondary education, that are intended to increase learning opportunities and improve educational outcomes in STEM.

(2) The governor's office, in consultation with the superintendent of public instruction, shall invite representatives of STEM businesses, business and labor organizations with expertise in STEM fields, one or more nonprofit organizations with a mission to enhance STEM education from early learning through postsecondary education, school districts and institutions of higher education that have demonstrated leadership and innovation in STEM education, and STEM educators to participate in
the alliance. Representatives from the governor's office, the office of the superintendent of public instruction, and other state education agencies shall also participate as members of the alliance.

(3) The STEM education innovation alliance shall initiate its work by aligning and combining previous STEM education strategic plans into a single, cohesive, and comprehensive STEM framework for action and accountability. The framework must concentrate on a limited number of selected and specific measures that are meaningful indicators of progress in increasing STEM learning opportunities and in achieving the intended longer-term outcomes of such efforts. The framework must use measures that are quantifiable and based on data that are regularly and reliably collected statewide.

(4) Staff support for the STEM education innovation alliance shall be provided by the governor's office and the office of financial management, with support from the office of the superintendent of public instruction and other state education agencies as necessary.

NEW SECTION. Sec. 3. STEM EDUCATION REPORT CARD. (1) The STEM education innovation alliance shall develop a STEM education report card, based on the STEM framework for action and accountability, to monitor progress in increasing learning opportunities and aligning strategic plans and activities in order to prepare students for STEM-related jobs and careers, with the longer-term goal of improving educational, workforce, and economic outcomes in STEM.

(2) The report card must:
   (a) Illustrate the most recent data for the indicators and measures of the STEM framework for action and accountability;
   (b) Provide information from state education agencies that indicates the extent that activities and resources are aligned with and support the STEM framework for action and accountability;
   (c) Provide data regarding current and projected STEM job openings in the state; and
   (d) Be prominently displayed on a web site designed for this purpose.

(3)(a) The education data center under RCW 43.41.400 must coordinate data collection and analysis to support the report card.
   (b) The state education agencies must annually report on how their policies, activities, and expenditures of public resources align with
and support the STEM framework for action and accountability. The
focus of the reporting under this subsection is on programs and
initiatives specifically identified in law or budget proviso as related
to STEM education. The agencies must use a common metric for the
reporting, designed by the education data center in consultation with
the STEM education innovation alliance. For the purposes of this
section, "state education agencies" includes the office of the
superintendent of public instruction, the student achievement council,
the state board for community and technical colleges, the workforce
training and education coordinating board, the professional educator
standards board, the state board of education, and the department of
early learning.

(c) The employment security department must create an annual report
on current and projected job openings in STEM fields and submit the
report to the education data center for inclusion in the STEM education
report card.

(4) The STEM education innovation alliance must publish the first
STEM education report card with baseline data on the identified
measures by January 10, 2014, and must update the report card by each
January 10th thereafter.

NEW SECTION. Sec. 4. STATEWIDE STEM ORGANIZATION. (1) To the
extent funds are appropriated specifically for this purpose, the office
of financial management shall contract with a statewide nonprofit
organization with expertise in promoting and supporting STEM education
from early learning through postsecondary education. The purpose of
the contract is to identify, test, and develop scalable, cost-
effective, and evidence-based approaches for increasing learning
opportunities and improving educational outcomes in STEM that are
aligned with the STEM framework for action and accountability. The
activities to be conducted under the contract shall be as provided in
this section, with specific performance expectations negotiated between
the office of the governor, the office of financial management, and the
selected organization.

(2) Under the terms of the contract, the organization selected
under this section shall:

(a) Conduct a statewide communications campaign to expand awareness
of the importance of STEM literacy and the opportunities presented by
STEM education and careers, particularly as a strategy to close the educational opportunity gap for disadvantaged students and promote economic development in disadvantaged communities;

(b) Expand regional networks of schools, institutions of higher education, educational service districts, STEM businesses, and community-based organizations to align STEM learning opportunities with best practices and local economic development;

(c) Establish an innovation fund and offer competitive grants to support innovative practices in STEM education, from early learning through postsecondary education, including developing models of interdisciplinary instruction and project-based learning;

(d) Expand STEM professional development opportunities for educators, faculty, and principals, including developing technology-enabled learning systems to support implementation of state learning standards; and

(e) Create opportunities to extend STEM learning into early learning programs.

NEW SECTION. Sec. 5. INTERDISCIPLINARY INSTRUCTION AND PROJECT-BASED LEARNING. (1) Subject to funds appropriated specifically for this purpose, the office of the superintendent of public instruction, in consultation with the STEM education innovation alliance, must identify and disseminate resources and materials to elementary, middle, and high schools that are intended to encourage and increase interdisciplinary instruction and project-based learning in STEM.

(2) In collaboration with work groups of STEM educators and using the work of regional STEM networks and innovation grant recipients under section 4 of this act, the office of the superintendent of public instruction must:

(a) Identify interdisciplinary STEM instructional modules appropriate for different grade levels;

(b) Identify project-based learning models, projects, lessons, and guides appropriate for different grade levels; and

(c) Make the information collected in this section, including online resource guides, available for teachers to incorporate into their classroom instruction.

(3) The office of the superintendent of public instruction must
also disseminate information and research on best practices in interdisciplinary instruction and project-based learning in STEM.

Sec. 6. RCW 28B.77.020 and 2012 c 229 s 104 are each amended to read as follows:

(1) Aligned with the state's biennial budget and policy cycles, the council shall propose educational attainment goals and priorities to meet the state's evolving needs. The council shall identify strategies for meeting the goals and priorities by means of a short-term strategic action plan and a ten-year plan that serves as a roadmap.

(a) The goals must address the needs of Washington residents to reach higher levels of educational attainment and Washington's workforce needs for certificates and degrees in particular fields of study.

(b) The council shall identify the resources it deems appropriate to meet statewide goals and also recognize current state economic conditions and state resources.

(c) In proposing goals, the council shall collaborate with the superintendent of public instruction, the professional educator standards board, the state board of education, the state board for community and technical colleges, the four-year institutions of higher education, independent colleges and degree-granting institutions, certificate-granting institutions, and the workforce training and education coordinating board.

(2) The council shall update the strategic action plan every two years with the first strategic action plan to be submitted to the governor and the legislature by December 1, 2012. The ten-year roadmap must be updated every two years with the first roadmap to be submitted to the governor and the legislature by December 1, 2013. The council must provide regular updates to the joint higher education committee created in RCW 44.04.360 as needed.

(3) In order to develop the ten-year roadmap, the council shall conduct strategic planning in collaboration with agencies and stakeholders and include input from the legislature. The council must also consult with the STEM education innovation alliance established under section 2 of this act in order to align strategies under the roadmap with the STEM framework for education and accountability.
developed by the alliance. The roadmap must encompass all sectors of higher education, including secondary to postsecondary transitions. The roadmap must outline strategies that address:

(a) Strategic planning, which includes setting benchmarks and goals for long-term degree production generally and in particular fields of study;

(b) Expanding access, affordability, quality, efficiency, and accountability among the various institutions of higher education;

(c) Higher education finance planning and strategic investments including budget recommendations necessary to meet statewide goals;

(d) System design and coordination;

(e) Improving student transitions;

(f) Higher education data and analysis, in collaboration with the education data center, which includes outcomes for recruitment, retention, and success of students;

(g) College and career access preparedness, in collaboration with the office of the superintendent of public instruction and the state board of education;

(h) Expanding participation and success for racial and ethnic minorities in higher education;

(i) Development and expansion of innovations in higher education including innovations to increase attainment of postsecondary certificates, and associate, baccalaureate, graduate, and professional degrees; and innovations to improve precollege education in terms of cost-effectiveness and transitions to college-level education; ((and))

(j) Strengthening the education pipeline and degree production in science, technology, engineering, and mathematics fields, and aligning strategies under the roadmap with the STEM framework for action and accountability developed under section 2 of this act; and

(k) Relevant policy research.

(4) As needed, the council must conduct system reviews consistent with RCW 28B.77.080.

(5) The council shall facilitate the development and expansion of innovative practices within, between, and among the sectors to increase educational attainment and assess the effectiveness of the innovations.

(6) The council shall use the data and analysis produced by, and in consultation with, the education data center created in RCW 43.41.400
in developing policy recommendations and proposing goals. In conducting research and analysis the council at a minimum must:

(a) Identify barriers to increasing educational attainment, evaluate effectiveness of various educational models, identify best practices, and recommend methods to overcome barriers;

(b) Analyze data from multiple sources including data from academic research and from areas and agencies outside of education including but not limited to data from the department of health, the department of corrections, and the department of social and health services to determine best practices to remove barriers and to improve educational attainment;

(c) Assess educational achievement disaggregated by income level, age, gender, race and ethnicity, country of origin, and other relevant demographic groups working with data from the education data center;

(d) Track progress toward meeting the state's goals;

(e) Communicate results and provide access to data analysis to policymakers, the superintendent of public instruction, institutions of higher education, students, and the public; and

(f) Use data from the education data center wherever appropriate to conduct duties in (a) through (e) of this subsection.

(7) The council shall collaborate with the appropriate state agencies and stakeholders, including the state board of education, the office of the superintendent of public instruction, the state board for community and technical colleges, the workforce training and education coordinating board, and the four-year institutions of higher education to improve student transitions and success including but not limited to:

(a) Setting minimum college admission standards for four-year institutions of higher education, including a requirement that coursework in American sign language or an American Indian language satisfies any requirement for instruction in a language other than English that the council or the institutions may establish as a general undergraduate admissions requirement;

(b) Proposing comprehensive policies and programs to encourage students to prepare for, understand how to access, and pursue postsecondary college and career programs, including specific policies and programs for students with disabilities;
(c) Recommending policies that require coordination between or among sectors such as dual high school-college programs, awarding college credit for advanced high school work, and transfer between two and four-year institutions of higher education or between different four-year institutions of higher education; and

(d) Identifying transitions issues and solutions for students, from high school to postsecondary education including community and technical colleges, four-year institutions of higher education, apprenticeships, training, or workplace education; between two-year and four-year institutions of higher education; and from postsecondary education to career. In addressing these issues the council must recognize that these transitions may occur multiple times as students continue their education.

(8) The council directs the work of the office, which includes administration of student financial aid programs under RCW 28B.76.090, including the state need grant and other scholarships, the Washington advanced college tuition payment program, and work-study programs.

(9) The council may administer state and federal grants and programs including but not limited to those programs that provide incentives for improvements related to increased access and success in postsecondary education.

(10) The council shall protect higher education consumers including:

(a) Approving degree-granting postsecondary institutions consistent with existing statutory criteria;

(b) Establishing minimum criteria to assess whether students who attend proprietary institutions of higher education shall be eligible for the state need grant and other forms of state financial aid.

(i) The criteria shall include retention rates, completion rates, loan default rates, and annual tuition increases, among other criteria for students who receive state need grant as in chapter 28B.92 RCW and any other state financial aid.

(ii) The council may remove proprietary institutions of higher education from eligibility for the state need grant or other form of state financial aid if it finds that the institution or college does not meet minimum criteria.

(iii) The council shall report by December 1, 2014, to the joint higher education committee in RCW 44.04.360 on the outcomes of students...
receiving state need grants, impacts on meeting the state's higher education goals for educational attainment, and options for prioritization of the state need grant and possible consequences of implementing each option. When examining options for prioritizing the state need grant the council shall consider awarding grants based on need rather than date of application and making awards based on other criteria selected by the council.

(11) The council shall adopt residency requirements by rule.

(12) The council shall arbitrate disputes between and among four-year institutions of higher education and the state board for community and technical colleges at the request of one or more of the institutions involved, or at the request of the governor, or from a resolution adopted by the legislature. The decision of the council shall be binding on the participants in the dispute.

(13) The council may solicit, accept, receive, and administer federal funds or private funds, in trust, or otherwise, and contract with foundations or with for-profit or nonprofit organizations to support the purposes and functions of the council.

(14) The council shall represent the broad public interest above the interests of the individual institutions of higher education.

Sec. 7. RCW 28A.290.010 and 2011 1st sp.s. c 21 s 54 are each amended to read as follows:

(1) The quality education council is created to recommend and inform the ongoing implementation by the legislature of an evolving program of basic education and the financing necessary to support such program. The council shall develop strategic recommendations on the program of basic education for the common schools. The council shall take into consideration the capacity report produced under RCW 28A.300.172 and the availability of data and progress of implementing the data systems required under RCW 28A.655.210. Any recommendations for modifications to the program of basic education shall be based on evidence that the programs effectively support student learning. The council shall update the statewide strategic recommendations every four years. The recommendations of the council are intended to:

(a) Inform future educational policy and funding decisions of the legislature and governor;
(b) Identify measurable goals and priorities for the educational system in Washington state for a ten-year time period, including the goals of basic education \((\text{and})\), ongoing strategies for coordinating statewide efforts to eliminate the achievement gap and reduce student dropout rates, and strategies to increase learning opportunities in science, technology, engineering, and mathematics that are aligned with the STEM framework for action and accountability developed under section 2 of this act; and

(c) Enable the state of Washington to continue to implement an evolving program of basic education.

(2) The council may request updates and progress reports from the office of the superintendent of public instruction, the state board of education, the professional educator standards board, and the department of early learning on the work of the agencies as well as educational working groups established by the legislature.

(3) The chair of the council shall be selected from the councilmembers. The council shall be composed of the following members:

(a) Four members of the house of representatives, with two members representing each of the major caucuses and appointed by the speaker of the house of representatives;

(b) Four members of the senate, with two members representing each of the major caucuses and appointed by the president of the senate;

(c) One representative each from the office of the governor, office of the superintendent of public instruction, state board of education, professional educator standards board, and department of early learning; and

(d) One nonlegislative representative from the educational opportunity gap oversight and accountability committee established under RCW 28A.300.136, to be selected by the members of the committee.

(4) The council shall meet no more than four days a year.

(5)(a) The council shall submit an initial report to the governor and the legislature by January 1, 2010, detailing its recommendations, including recommendations for resolving issues or decisions requiring legislative action during the 2010 legislative session, and recommendations for any funding necessary to continue development and implementation of chapter 548, Laws of 2009.

(b) The initial report shall, at a minimum, include:
(i) Consideration of how to establish a statewide beginning teacher mentoring and support system;

(ii) Recommendations for a program of early learning for at-risk children;

(iii) A recommended schedule for the concurrent phase-in of the changes to the instructional program of basic education and the implementation of the funding formulas and allocations to support the new instructional program of basic education as established under chapter 548, Laws of 2009. The phase-in schedule shall have full implementation completed by September 1, 2018; and

(iv) A recommended schedule for phased-in implementation of the new distribution formula for allocating state funds to school districts for the transportation of students to and from school, with phase-in beginning no later than September 1, 2013.

(6) The council shall submit a report to the legislature by January 1, 2012, detailing its recommendations for a comprehensive plan for a voluntary program of early learning. Before submitting the report, the council shall seek input from the early learning advisory council created in RCW 43.215.090.

(7) The council shall submit a report to the governor and the legislature by December 1, 2010, that includes:

(a) Recommendations for specific strategies, programs, and funding, including funding allocations through the funding distribution formula in RCW 28A.150.260, that are designed to close the achievement gap and increase the high school graduation rate in Washington public schools. The council shall consult with the educational opportunity gap oversight and accountability committee and the building bridges work group in developing its recommendations; and

(b) Recommendations for assuring adequate levels of state-funded classified staff to support essential school and district services.

(8) The council shall be staffed by the office of the superintendent of public instruction and the office of financial management. Additional staff support shall be provided by the state entities with representatives on the council. Senate committee services and the house of representatives office of program research may provide additional staff support.

(9) Legislative members of the council shall serve without additional compensation but may be reimbursed for travel expenses in
accordance with RCW 44.04.120 while attending sessions of the council
or on official business authorized by the council. Nonlegislative
members of the council may be reimbursed for travel expenses in
accordance with RCW 43.03.050 and 43.03.060.

NEW SECTION. Sec. 8. RCW 28A.300.515, 28A.630.065, 28A.630.066,
28A.700.120, 28A.625.200, 28A.625.210, 28A.625.220, 28A.625.230, and
28A.625.240 are each recodified as sections in the new chapter created
in section 9 of this act.

NEW SECTION. Sec. 9. Sections 1 through 5 of this act constitute
a new chapter in Title 28A RCW.

Passed by the House June 25, 2013.
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