CERTIFICATION OF ENROLLMENT

SECOND SUBSTITUTE HOUSE BILL 1906

Chapter 396, Laws of 2007

60th Legislature
2007 Regular Session

MATHEMATICS AND SCIENCE EDUCATION

EFFECTIVE DATE: 07/22/07 - Except section 14, which becomes effective 09/01/09; and sections 1 and 2, which become effective 05/09/07.

Passed by the House April 17, 2007
Yeas 96 Nays 2

FRANK CHOPP

Speaker of the House of Representatives

Passed by the Senate April 11, 2007
Yeas 37 Nays 12

BRAD OWEN

President of the Senate

Approved May 9, 2007, 9:52 a.m.

CHRISTINE GREGOIRE

Governor of the State of Washington

CERTIFICATE

I, Richard Nafziger, Chief Clerk of the House of Representatives of the State of Washington, do hereby certify that the attached is **SECOND SUBSTITUTE HOUSE BILL 1906** as passed by the House of Representatives and the Senate on the dates hereon set forth.

RICHARD NAFZIGER

Chief Clerk

FILED

May 11, 2007

Secretary of State
State of Washington

SECOND SUBSTITUTE HOUSE BILL 1906

AS AMENDED BY THE SENATE

Passed Legislature - 2007 Regular Session

State of Washington 60th Legislature 2007 Regular Session

By House Committee on Appropriations (originally sponsored by Representatives Hunter, Anderson, Wallace, Seaquist, Eddy, P. Sullivan, McDermott, Ormsby, McIntire, Pedersen, Rolfes, Barlow, Goodman, Rodne, O'Brien, Kenney, McDonald, Morrell, Newhouse, Hurst, Skinner, Wood and Bailey)

READ FIRST TIME 03/28/07.

AN ACT Relating to improving mathematics and science education; amending RCW 28A.660.005, 28A.660.050, 28B.102.080, 28A.230.130, and 28A.230.130; adding new sections to chapter 28A.305 RCW; adding new sections to chapter 28A.300 RCW; adding a new section to chapter 28A.415 RCW; adding new sections to chapter 28A.660 RCW; adding a new section to chapter 28B.10 RCW; adding a new section to chapter 28A.320 RCW; adding a new section to chapter 28A.655 RCW; adding a new section to chapter 28B.76 RCW; creating new sections; providing an effective date; providing expiration dates; and declaring an emergency.

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

NEW SECTION. **Sec. 1.** A new section is added to chapter 28A.305 RCW to read as follows:

MATHEMATICS AND SCIENCE STANDARDS AND CURRICULUM. (1) The activities in this section revise and strengthen the state learning standards that implement the goals of RCW 28A.150.210, known as the essential academic learning requirements, and improve alignment of school district curriculum to the standards.

(2) The state board of education shall be assisted in its work under subsections (3) and (5) of this section by: (a) An expert

national consultant in each of mathematics and science retained by the state board; and (b) the mathematics and science advisory panels created under section 2 of this act, as appropriate, which shall provide review and formal comment on proposed recommendations to the superintendent of public instruction and the state board of education on new revised standards and curricula.

(3) By September 30, 2007, the state board of education shall recommend to the superintendent of public instruction revised essential academic learning requirements and grade level expectations in mathematics. The recommendations shall be based on:

(a) Considerations of clarity, rigor, content, depth, coherence from grade to grade, specificity, accessibility, and measurability;

(b) Study of:

(i) Standards used in countries whose students demonstrate high performance on the trends in international mathematics and science study and the programme for international student assessment;

(ii) College readiness standards;

(iii) The national council of teachers of mathematics focal points and the national assessment of educational progress content frameworks; and

(iv) Standards used by three to five other states, including California, and the nation of Singapore; and

(c) Consideration of information presented during public comment periods.

(4) By January 31, 2008, the superintendent of public instruction shall revise the essential academic learning requirements and the grade level expectations for mathematics and present the revised standards to the state board of education and the education committees of the senate and the house of representatives as required by RCW 28A.655.070(4). The superintendent shall adopt the revised essential academic learning requirements and grade level expectations unless otherwise directed by the legislature during the 2008 legislative session.

(5) By June 30, 2008, the state board of education shall recommend to the superintendent of public instruction revised essential academic learning requirements and grade level expectations in science. The recommendations shall be based on:

(a) Considerations of clarity, rigor, content, depth, coherence from grade to grade, specificity, accessibility, and measurability;

(b) Study of standards used by three to five other states and in countries whose students demonstrate high performance on the trends in international mathematics and science study and the programme for international student assessment; and

(c) Consideration of information presented during public comment periods.

(6) By December 1, 2008, the superintendent of public instruction shall revise the essential academic learning requirements and the grade level expectations for science and present the revised standards to the state board of education and the education committees of the senate and the house of representatives as required by RCW 28A.655.070(4). The superintendent shall adopt the revised essential academic learning requirements and grade level expectations unless otherwise directed by the legislature during the 2009 legislative session.

(7)(a) By May 15, 2008, the superintendent of public instruction shall present to the state board of education recommendations for no more than three basic mathematics curricula each for elementary, middle, and high school grade spans.

(b) By June 30, 2008, the state board of education shall provide official comment and recommendations to the superintendent of public instruction regarding the recommended mathematics curricula. The superintendent of public instruction shall make any changes based on the comment and recommendations from the state board of education and adopt the recommended curricula.

(c) By May 15, 2009, the superintendent of public instruction shall present to the state board of education recommendations for no more than three basic science curricula each for elementary, middle, and high school grade spans.

(d) By June 30, 2009, the state board of education shall provide official comment and recommendations to the superintendent of public instruction regarding the recommended science curricula. The superintendent of public instruction shall make any changes based on the comment and recommendations from the state board of education and adopt the recommended curricula.

(e) In selecting the recommended curricula under this subsection (7), the superintendent of public instruction shall provide information to the mathematics and science advisory panels created under section 2

of this act, as appropriate, and seek the advice of the appropriate panel regarding the curricula that shall be included in the recommendations.

(f) The recommended curricula under this subsection (7) shall align with the revised essential academic learning requirements and grade level expectations. In addition to the recommended basic curricula, appropriate diagnostic and supplemental materials shall be identified as necessary to support each curricula.

(g) Subject to funds appropriated for this purpose and availability of the curricula, at least one of the curricula in each grade span and in each of mathematics and science shall be available to schools and parents online at no cost to the school or parent.

(8) By December 1, 2007, the state board of education shall revise the high school graduation requirements under RCW 28A.230.090 to include a minimum of three credits of mathematics, one of which may be a career and technical course equivalent in mathematics, and prescribe the mathematics content in the three required credits.

(9) Nothing in this section requires a school district to use one of the recommended curricula under subsection (7) of this section. However, the statewide accountability plan adopted by the state board of education under RCW 28A.305.130 shall recommend conditions under which school districts should be required to use one of the recommended curricula. The plan shall also describe the conditions for exception to the curriculum requirement, such as the use of integrated academic and career and technical education curriculum. Required use of the recommended curricula as an intervention strategy must be authorized by the legislature as required by RCW 28A.305.130(4)(e) before implementation.

NEW SECTION. **Sec. 2.** A new section is added to chapter 28A.305 RCW to read as follows:

ADVISORY PANELS. (1) The state board of education shall appoint a mathematics advisory panel and a science advisory panel to advise the board regarding essential academic learning requirements, grade level expectations, and recommended curricula in mathematics and science and to monitor implementation of these activities. In conducting their work, the panels shall provide objective reviews of materials and information provided by any expert national consultants retained by the

board and shall provide a public and transparent forum for consideration of mathematics and science learning standards and curricula.

(2) Each panel shall include no more than sixteen members with representation from individuals from academia in mathematics and science-related fields, individuals from business and industry in mathematics and science-related fields, mathematics and science educators, parents, and other individuals who could contribute to the work of the panel based on their experiences.

(3) Each member of each panel shall be compensated in accordance with RCW 43.03.220 and reimbursed for travel expenses in accordance with RCW 43.03.050 and 43.03.060. School districts shall be reimbursed for the cost of substitutes for the mathematics and science educators on the panels as required under RCW 28A.300.035. Members of the panels who are employed by a public institution of higher education shall be provided sufficient time away from their regular duties, without loss of benefits or privileges, to fulfill the responsibilities of being a panel member.

(4) Panel members shall not have conflicts of interest with regard to association with any publisher, distributor, or provider of curriculum, assessment, or test materials and services purchased by or contracted through the office of the superintendent of public instruction, educational service districts, or school districts.

(5) This section expires June 30, 2012.

NEW SECTION. **Sec. 3.** A new section is added to chapter 28A.300 RCW to read as follows:

AFTER-SCHOOL MATHEMATICS SUPPORT PROGRAM. (1) The after-school mathematics support program is created to study the effects of intentional, skilled mathematics support included as part of an existing after-school activity program.

(2) The office of the superintendent of public instruction shall provide grants to selected community-based, nonprofit organizations that provide after-school programs and include support for students to learn mathematics.

(3) Grant applicants must demonstrate the capacity to provide assistance in mathematics learning in the following ways:

(a) Identifying the mathematics content and instructional skill of the staff or volunteers assisting students;

(b) Identifying proposed learning strategies to be used, which could include computer-based instructional and skill practice programs and tutoring by adults or other students;

(c) Articulating the plan for connection with school mathematics teachers to coordinate student assistance; and

(d) Articulating the plan for assessing student and program success.

(4) Priority will be given to applicants that propose programs to serve middle school and junior high school students.

(5) The office of the superintendent of public instruction shall evaluate program outcomes and report to the governor and the education committees of the legislature on the outcomes of the grants and make recommendations related to program continuation, program modification, and issues related to program sustainability and possible program expansion. An interim report is due November 1, 2008. The final report is due December 1, 2009.

NEW SECTION. **Sec. 4.** A new section is added to chapter 28A.415 RCW to read as follows:

MATHEMATICS AND SCIENCE INSTRUCTIONAL COACH PROGRAM. (1) A mathematics and science instructional coach program is authorized, which shall consist of a coach development institute, coaching seminars, coaching activities in schools, and program evaluation.

(2) The office of the superintendent of public instruction shall develop a mathematics and science instructional coach program that includes an initial coach development experience for new coaches provided through an institute setting, coaching support seminars, and additional coach development services. The office shall draw upon the experiences of coaches in federally supported elementary literacy programs and other successful programs, research and policy briefs on adult professional development, and research that specifically addresses the instructional environments of middle, junior high, and high schools as well as the unique aspects of the fields of mathematics and science.

(3) The office of the superintendent of public instruction shall design the application process and select the program participants.

(4) Schools and school districts participating in the program shall carefully select the individuals to perform the role of mathematics or science instructional coach. Characteristics to be considered for a successful coach include:

(a) Expertise in content area;

(b) Expertise in various instructional methodologies and personalizing learning;

(c) Personal skills that include skilled listening, questioning, trust-building, and problem-solving;

(d) Understanding and appreciation for the differences in adult learners and student learners; and

(e) Capacity for strategic planning and quality program implementation.

(5) The role of the mathematics or science instructional coach is focused on supporting teachers as they apply knowledge, develop skills, polish techniques, and deepen their understanding of content and instructional practices. This work takes a number of forms including: Individualized professional development, department-wide and school-wide professional development, guidance in student data interpretation, and using assessment to guide instruction. Each coach shall be assigned to two schools as part of the program.

(6) Program participants have the following responsibilities:

(a) Mathematics and science coaches shall participate in the coach development institute as well as in coaching support seminars that take place throughout the school year, practice coaching activities as guided by those articulated in the role of the coach in subsection (5) of this section, collect data, and participate in program evaluation activities as requested by the institute pursuant to subsection (7) of this section.

(b) School and district administrators in districts in which the mathematics and science coaches are practicing shall participate in program evaluation activities.

(7)(a) The Washington State University social and economic sciences research center shall conduct an evaluation of the mathematics and science instructional coach program in this section. Data shall be collected through various instruments including surveys, program and activity reports, student performance measures, observations, interviews, and other processes. Findings shall include an evaluation

of the coach development institute, coaching support seminars, and other coach support activities; recommendations with regard to the characteristics required of the coaches; identification of changes in teacher instruction related to coaching activities; and identification of the satisfaction level with coaching activities as experienced by classroom teachers and administrators.

(b) The Washington State University social and economic sciences research center shall report its findings to the governor, the office of the superintendent of public instruction, and the education and fiscal committees of the legislature. An interim report is due November 1, 2008. The final report is due December 1, 2009.

Sec. 5. RCW 28A.660.005 and 2001 c 158 s 1 are each amended to read as follows:

(1) The legislature finds and declares:

((~~(1)~~)) (a) Teacher qualifications and effectiveness are the most important influences on student learning in schools((~~.~~));

((~~(2)~~)) (b) Preparation of individuals to become well-qualified, effective teachers must be high quality((~~.~~));

((~~(3)~~)) (c) Teachers who complete high-quality alternative route programs with intensive field-based experience, adequate coursework, and strong mentorship do as well or better than teachers who complete traditional preparation programs((~~.~~));

((~~(4)~~)) (d) High-quality alternative route programs can provide more flexibility and expedience for individuals to transition from their current career to teaching((~~.~~));

((~~(5)~~)) (e) High-quality alternative route programs can help school districts fill subject matter shortage areas and areas with shortages due to geographic location((~~.~~));

((~~(6)~~)) (f) Regardless of route, all candidates for residency teacher certification must meet the high standards required by the state; and

(g) Teachers need an adequate background in subject matter content if they are to teach it well, and should hold full, appropriate credentials in those subject areas.

(2) The legislature recognizes widespread concerns about the potential for teacher shortages and finds that classified instructional

staff in public schools, current certificated staff, and unemployed certificate holders represent a great untapped resource for recruiting ((~~the~~)) more teachers ((~~of the future~~)) in critical shortage areas.

NEW SECTION. **Sec. 6.** A new section is added to chapter 28A.660 RCW to read as follows:

(1) The pipeline for paraeducators conditional scholarship program is created. Participation is limited to paraeducators without a college degree who have at least three years of classroom experience. It is anticipated that candidates enrolled in this program will complete their associate of arts degree at a community and technical college in two years or less and become eligible for a mathematics, special education, or English as a second language endorsement via route one in the alternative routes to teacher certification program provided in this chapter.

(2) Entry requirements for candidates include district or building validation of qualifications, including three years of successful student interaction and leadership as a classified instructional employee.

NEW SECTION. **Sec. 7.** A new section is added to chapter 28A.660 RCW to read as follows:

(1) The retooling to teach mathematics and science conditional scholarship program is created. Participation is limited to current K-12 teachers and individuals having an elementary education certificate but who are not employed in positions requiring an elementary education certificate. It is anticipated that candidates enrolled in this program will complete the requirements for a mathematics or science endorsement, or both, in two years or less.

(2) Entry requirements for candidates include:

(a) Current K-12 teachers shall pursue a middle level mathematics or science, or secondary mathematics or science endorsement.

(b) Individuals having an elementary education certificate but who are not employed in positions requiring an elementary education certificate shall pursue an endorsement in middle level mathematics or science only.

Sec. 8. RCW 28A.660.050 and 2004 c 23 s 5 are each amended to read as follows:

The ((~~alternative route~~)) conditional scholarship program<u>s</u> ((~~is~~)) <u>in this chapter are</u> created under the following guidelines:

(1) The program<u>s</u> shall be administered by the higher education coordinating board. In administering the program<u>s</u>, the higher education coordinating board has the following powers and duties:

(a) To adopt necessary rules and develop guidelines to administer the program<u>s</u>;

(b) To collect and manage repayments from participants who do not meet their service obligations; and

(c) To accept grants and donations from public and private sources for the program<u>s</u>.

(2) <u>Requirements for p</u>articipation in the ((~~alternative route~~)) conditional scholarship program<u>s are as provided in this subsection (2).</u>

<u>(a) The alternative route conditional scholarship program</u> is limited to interns of the partnership grant programs under RCW 28A.660.040. <u>In order to receive conditional scholarship awards, recipients shall:</u>

<u>(i) Be accepted and maintain enrollment in alternative certification routes through the partnership grant program;</u>

<u>(ii) Continue to make satisfactory progress toward completion of the alternative route certification program and receipt of a residency teaching certificate; and</u>

<u>(iii) Receive no more than the annual amount of the scholarship, not to exceed eight thousand dollars, for the cost of tuition, fees, and educational expenses, including books, supplies, and transportation for the alternative route certification program in which the recipient is enrolled. The board may adjust the annual award by the average rate of resident undergraduate tuition and fee increases at the state universities as defined in RCW 28B.10.016.</u>

<u>(b) The pipeline for paraeducators conditional scholarship program is limited to qualified paraeducators as provided by section 6 of this act. In order to receive conditional scholarship awards, recipients shall:</u>

<u>(i) Be accepted and maintain enrollment at a community and</u>

technical college for no more than two years and attain an associate of arts degree;

(ii) Continue to make satisfactory progress toward completion of an associate of arts degree. This progress requirement is a condition for eligibility into a route one program of the alternative routes to teacher certification program for a mathematics, special education, or English as a second language endorsement; and

(iii) Receive no more than the annual amount of the scholarship, not to exceed four thousand dollars, for the cost of tuition, fees, and educational expenses, including books, supplies, and transportation for the alternative route certification program in which the recipient is enrolled. The board may adjust the annual award by the average rate of tuition and fee increases at the state community and technical colleges.

(c) The retooling to teach mathematics and science conditional scholarship program is limited to current K-12 teachers and individuals having an elementary education certificate but who are not employed in positions requiring an elementary education certificate as provided by section 7 of this act. In order to receive conditional scholarship awards:

(i) Individuals currently employed as teachers shall pursue a middle level mathematics or science, or secondary mathematics or science endorsement; or

(ii) Individuals who are certificated with an elementary education endorsement, but not employed in positions requiring an elementary education certificate, shall pursue an endorsement in middle level mathematics or science, or both; and

(iii) Individuals shall use one of the pathways to endorsement processes to receive a mathematics or science endorsement, or both, which shall include passing a mathematics or science endorsement test, or both tests, plus observation and completing applicable coursework to attain the proper endorsement; and

(iv) Individuals shall receive no more than the annual amount of the scholarship, not to exceed three thousand dollars, for the cost of tuition, test fees, and educational expenses, including books, supplies, and transportation for the endorsement pathway being pursued.

(3) The Washington professional educator standards board shall select ((~~interns~~)) individuals to receive conditional scholarships.

((~~(3) In order to receive conditional scholarship awards, recipients shall be accepted and maintain enrollment in alternative certification routes through the partnership grant program, as provided in RCW 28A.660.040. Recipients must continue to make satisfactory progress towards completion of the alternative route certification program and receipt of a residency teaching certificate.~~))

(4) For the purpose of this chapter, a conditional scholarship is a loan that is forgiven in whole or in part in exchange for service as a certificated teacher employed in a Washington state K-12 public school. The state shall forgive one year of loan obligation for every two years a recipient teaches in a public school. Recipients ((~~that~~)) who fail to continue a course of study leading to residency teacher certification or cease to teach in a public school in the state of Washington in their endorsement area are required to repay the remaining loan principal with interest.

(5) Recipients who fail to fulfill the required teaching obligation are required to repay the remaining loan principal with interest and any other applicable fees. The higher education coordinating board shall adopt rules to define the terms for repayment, including applicable interest rates, fees, and deferments.

(6) ((~~To the extent funds are appropriated for this specific purpose, the annual amount of the scholarship is the annual cost of tuition; fees; and educational expenses, including books, supplies, and transportation for the alternative route certification program in which the recipient is enrolled, not to exceed eight thousand dollars. The board may adjust the annual award by the average rate of resident undergraduate tuition and fee increases at the state universities as defined in RCW 28B.10.016.~~

~~(7)~~)) The higher education coordinating board may deposit all appropriations, collections, and any other funds received for the program in this chapter in the ((~~student loan~~)) future teachers conditional scholarship account authorized in RCW ((~~28B.102.060~~)) 28B.102.080.

Sec. 9. RCW 28B.102.080 and 2004 c 58 s 9 are each amended to read as follows:

(1) The future teachers conditional scholarship account is created in the custody of the state treasurer. An appropriation is not

required for expenditures of funds from the account. The account is not subject to allotment procedures under chapter 43.88 RCW except for moneys used for program administration.

(2) The board shall deposit in the account all moneys received for the future teachers conditional scholarship and loan repayment program and for conditional loan programs under chapter 28A.660 RCW. The account shall be self-sustaining and consist of funds appropriated by the legislature for the future teachers conditional scholarship and loan repayment program, private contributions to the program, ((~~and~~)) receipts from participant repayments from the future teachers conditional scholarship and loan repayment program, and conditional loan programs established under chapter 28A.660 RCW. Beginning July 1, 2004, the board shall also deposit into the account: (a) All funds from the institution of higher education loan account that are traceable to any conditional scholarship program for teachers or prospective teachers established by the legislature before June 10, 2004; and (b) all amounts repaid by individuals under any such program.

(3) Expenditures from the account may be used solely for conditional loans and loan repayments to participants in the future teachers conditional scholarship and loan repayment program established by this chapter, conditional scholarships for participants in programs established in chapter 28A.660 RCW, and costs associated with program administration by the board.

(4) Disbursements from the account may be made only on the authorization of the board.

NEW SECTION. **Sec. 10.** A new section is added to chapter 28B.10 RCW to read as follows:

(1) By September 1, 2008, the state board for community and technical colleges, the council of presidents, the higher education coordinating board, and the office of the superintendent of public instruction, under the leadership of the transition math project and in collaboration with representatives of public two and four-year institutions of higher education, shall jointly revise the Washington mathematics placement test to serve as a common college readiness test for all two and four-year institutions of higher education.

(2) The revised mathematics college readiness test shall be implemented by all public two and four-year institutions of higher

education by September 1, 2009. All public two and four-year institutions of higher education must use a common performance standard on the mathematics placement test for purposes of determining college readiness in mathematics. The performance standard must be publicized to all high schools in the state.

NEW SECTION. **Sec. 11.** A new section is added to chapter 28A.320 RCW to read as follows:

(1) Subject to funding appropriated for this purpose and beginning in the fall of 2009, school districts shall provide all high school students enrolled in the district the option of taking the mathematics college readiness test developed under section 10 of this act once at no cost to the students. Districts shall encourage, but not require, students to take the test in their junior or senior year of high school.

(2) Subject to funding appropriated for this purpose, the office of the superintendent of public instruction shall reimburse each district for the costs incurred by the district in providing students the opportunity to take the mathematics placement test.

NEW SECTION. **Sec. 12.** The legislature finds that knowledge, skills, and opportunities in mathematics, science, and technology should be increased for all students in Washington. The legislature intends to foster capacity between and among the educational sectors to enable continuous and sustainable growth of the learning and teaching of mathematics, science, and technologies. The legislature intends to foster high quality mathematics, science, and technology programs to increase the number of students in the kindergarten through twelfth grade pipeline who are prepared and aspire to continue in the areas of mathematics, science, and technology, whether it be at a college, university, or in the workforce.

Sec. 13. RCW 28A.230.130 and 2003 c 49 s 2 are each amended to read as follows:

(1) All public high schools of the state shall provide a program, directly or in cooperation with a community college or another school district, for students whose educational plans include application for

entrance to a baccalaureate-granting institution after being granted a high school diploma. The program shall help these students to meet at least the minimum entrance requirements under RCW 28B.10.050.

(2) All public high schools of the state shall provide a program, directly or in cooperation with a community or technical college, a skills center, an apprenticeship committee, or another school district, for students who plan to pursue career or work opportunities other than entrance to a baccalaureate-granting institution after being granted a high school diploma. These programs may:

(a) Help students demonstrate the application of essential academic learning requirements to the world of work, occupation-specific skills, knowledge of more than one career in a chosen pathway, and employability and leadership skills; and

(b) Help students demonstrate the knowledge and skill needed to prepare for industry certification, and/or have the opportunity to articulate to postsecondary education and training programs.

(3) Within funds specifically appropriated therefor, a middle school that receives approval from the office of the superintendent of public instruction to provide a career and technical program directly to students shall receive funding at the same rate as a high school operating a similar program. Additionally, a middle school that provides a hands-on experience in math and science with an integrated curriculum of academic content and career and technical education, and includes a career and technical education exploratory component shall also qualify for the career and technical education funding.

(4) The state board of education, upon request from local school districts, may grant waivers from the requirements to provide the program described in subsections (1) and (2) of this section for reasons relating to school district size and the availability of staff authorized to teach subjects which must be provided. In considering waiver requests related to programs in subsection (2) of this section, the state board of education shall consider the extent to which the school district has offered such programs before the 2003-04 school year.

Sec. 14. RCW 28A.230.130 and 2006 c 263 s 407 are each amended to read as follows:

(1) All public high schools of the state shall provide a program,

directly or in cooperation with a community college or another school district, for students whose educational plans include application for entrance to a baccalaureate-granting institution after being granted a high school diploma. The program shall help these students to meet at least the minimum entrance requirements under RCW 28B.10.050.

(2) All public high schools of the state shall provide a program, directly or in cooperation with a community or technical college, a skills center, an apprenticeship committee, or another school district, for students who plan to pursue career or work opportunities other than entrance to a baccalaureate-granting institution after being granted a high school diploma. These programs may:

(a) Help students demonstrate the application of essential academic learning requirements to the world of work, occupation-specific skills, knowledge of more than one career in a chosen pathway, and employability and leadership skills; and

(b) Help students demonstrate the knowledge and skill needed to prepare for industry certification, and/or have the opportunity to articulate to postsecondary education and training programs.

(3) Within funds specifically appropriated therefor, a middle school that receives approval from the office of the superintendent of public instruction to provide a career and technical program directly to students shall receive funding at the same rate as a high school operating a similar program. Additionally, a middle school that provides a hands-on experience in math and science with an integrated curriculum of academic content and career and technical education, and includes a career and technical education exploratory component shall also qualify for the career and technical education funding.

NEW SECTION. **Sec. 15.** A new section is added to chapter 28A.300 RCW to read as follows:

The superintendent of public instruction shall provide support for statewide coordination for math, science, and technology, including employing a statewide director for math, science, and technology. The duties of the director shall include, but not be limited to:

(1) Within funds specifically appropriated therefor, obtain a statewide license, or otherwise obtain and disseminate, an interactive, project-based high school and middle school technology curriculum that includes a comprehensive professional development component for

teachers and, if possible, counselors, and also includes a systematic program evaluation. The curriculum must be distributed to all school districts, or as many as feasible, by the 2007-08 school year;

(2) Within funds specifically appropriated therefor, supporting a public-private partnership to assist school districts with implementing an ongoing, inquiry-based science program that is based on a research-based model of systemic reform and aligned with the Washington state science grade level expectations;

(3) Within funds specifically appropriated therefor, supporting a public-private partnership to provide enriching opportunities in mathematics, engineering, and science for underrepresented students in grades kindergarten through twelve using exemplary materials and instructional approaches;

(4) In an effort to increase precollege and prework interest in math, science, and technology fields, in collaboration with the community and technical colleges, the four-year institutions of higher education, and the workforce training and education coordinating board, conducting outreach efforts to attract middle and high school students to careers in math, science, and technology and to educate students about the coursework that is necessary to be adequately prepared to succeed in these fields;

(5) Coordinating youth opportunities in math, science, and technology, including facilitating student participation in school clubs, state-level fairs, national competitions, and encouraging partnerships between students and university faculty or industry to facilitate such student participation;

(6) Developing and maintaining public-private partnerships to generate business and industry assistance to accomplish the following:

(a) Increasing student engagement and career awareness, including increasing student participation in the youth opportunities in subsection (5) of this section;

(b) Creation and promotion of student scholarships, internships, and apprenticeships;

(c) Provision of relevant teacher experience and training, including on-the-job professional development opportunities;

(d) Upgrading kindergarten through twelfth grade school equipment and facilities to support high quality math, science, and technology programs;

(7) Assembling a cadre of inspiring speakers employed or experienced in the relevant fields to speak to kindergarten through twelfth grade students to demonstrate the breadth of the opportunities in the relevant fields as well as share the types of coursework that is necessary for someone to be successful in the relevant field;

(8) Providing technical assistance to schools and school districts, including working with counselors in support of the math, science, and technology programs; and

(9) Reporting annually to the legislature about the actions taken to provide statewide coordination for math, science, and technology.

NEW SECTION. **Sec. 16.** A new section is added to chapter 28A.655 RCW to read as follows:

(1) Within funds specifically appropriated therefor, by December 1, 2008, the superintendent of public instruction shall develop essential academic learning requirements and grade level expectations for educational technology literacy and technology fluency that identify the knowledge and skills that all public school students need to know and be able to do in the areas of technology and technology literacy. The development process shall include a review of current standards that have been developed or are used by other states and national and international technology associations. To the maximum extent possible, the superintendent shall integrate goal four and the knowledge and skill areas in the other goals in the technology essential academic learning requirements.

(a) As used in this section, "technology literacy" means the ability to responsibly, creatively, and effectively use appropriate technology to communicate; access, collect, manage, integrate, and evaluate information; solve problems and create solutions; build and share knowledge; and improve and enhance learning in all subject areas and experiences.

(b) Technology fluency builds upon technology literacy and is demonstrated when students: Apply technology to real-world experiences; adapt to changing technologies; modify current and create new technologies; and personalize technology to meet personal needs, interests, and learning styles.

(2)(a) Within funds specifically appropriated therefor, the superintendent shall obtain or develop education technology assessments

that may be administered in the elementary, middle, and high school grades to assess the essential academic learning requirements for technology. The assessments shall be designed to be classroom or project-based so that they can be embedded in classroom instruction and be administered and scored by school staff throughout the regular school year using consistent scoring criteria and procedures. By the 2010-11 school year, these assessments shall be made available to school districts for the districts' voluntary use. If a school district uses the assessments created under this section, then the school district shall notify the superintendent of public instruction of the use. The superintendent shall report annually to the legislature on the number of school districts that use the assessments each school year.

(b) Beginning December 1, 2010, and annually thereafter, the superintendent of public instruction shall provide a report to the relevant legislative committees regarding the use of the assessments.

NEW SECTION. **Sec. 17.** A new section is added to chapter 28B.76 RCW to read as follows:

As part of the state needs assessment process conducted by the board in accordance with RCW 28B.76.230, the board shall assess the need for additional baccalaureate degree programs in Washington that specialize in teacher preparation in mathematics, science, and technology. If the board determines that there is a need for additional programs, then the board shall encourage the appropriate institutions of higher education or institutional sectors to create such a program.

NEW SECTION. **Sec. 18.** Beginning September 1, 2007, through December 1, 2008, the state board of education shall provide a status report at the beginning of each calendar quarter on the activities and progress in completing the requirements under section 1 of this act. The report shall be provided to the governor and the members of the education committees of the senate and the house of representatives.

NEW SECTION. **Sec. 19.** Captions used in this act are not any part of the law.

NEW SECTION. **Sec. 20.** Section 13 of this act expires September 1, 2009.

NEW SECTION. **Sec. 21.** Section 14 of this act takes effect September 1, 2009.

NEW SECTION. **Sec. 22.** Sections 1 and 2 of this act are necessary for the immediate preservation of the public peace, health, or safety, or support of the state government and its existing public institutions, and take effect immediately.

Passed by the House April 17, 2007.
Passed by the Senate April 11, 2007.
Approved by the Governor May 9, 2007.
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