

# HOUSE BILL REPORT

## HB 2160

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### As Reported by House Committee On: Education

**Title:** An act relating to revised standards and assessments for teacher certification integrating STEM knowledge and skills.

**Brief Description:** Regarding revised standards and assessments for teacher certification integrating STEM knowledge and skills.

**Sponsors:** Representatives Maxwell, Dammeier, Springer, Pettigrew, Sullivan, Sells, Orwall, Hansen, Probst, Carlyle, Jinkins, Billig, Lytton and Dahlquist; by request of Governor Gregoire.

#### **Brief History:**

##### **Committee Activity:**

Education: 12/13/11 [DP].

#### **Brief Summary of Bill**

- Requires the Professional Educator Standards Board (PESB) to revise certification and certificate renewal standards for elementary teachers and secondary science and mathematics teachers to include integration of knowledge and skills in science, technology, engineering, and mathematics (STEM).
- Requires the PESB to revise the teacher certification assessments in both teaching effectiveness and subject matter knowledge to integrate the STEM knowledge and skills.

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### HOUSE COMMITTEE ON EDUCATION

**Majority Report:** Do pass. Signed by 15 members: Representatives Santos, Chair; Lytton, Vice Chair; Dammeier, Ranking Minority Member; Dahlquist, Assistant Ranking Minority Member; Billig, Fagan, Haigh, Hargrove, Hunt, Klippert, Ladenburg, Maxwell, McCoy, Probst and Wilcox.

**Minority Report:** Without recommendation. Signed by 2 members: Representatives Ahern and Angel.

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*This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not a part of the legislation nor does it constitute a statement of legislative intent.*

**Staff:** Barbara McLain (786-7383).

**Background:**

Teacher Standards. Standards for teacher certification and certificate renewal are established by the Professional Educator Standards Board (PESB). The standards outline both teaching competencies and subject matter knowledge in 33 endorsement areas. Prospective teachers must pass an assessment of subject matter knowledge for their endorsement area called the Washington Educator Skills Test (WEST-E). The WEST-E tests are aligned both with Washington's teacher standards and the Essential Academic Learning Requirements (EALRs) for students. The PESB is also part of a multi-state consortium developing a performance-based assessment of teaching effectiveness for certification purposes. Certificate renewal requires either continuing education or development of an individual professional growth plan.

Student Standards. Revisions to the EALRs for mathematics were adopted in 2008, and for science in 2009. Accordingly, statewide student assessments are being revised to align with the new EALRs. In addition, the Superintendent of Public Instruction adopted the Common Core standards in reading and mathematics in 2011, which will be phased in over the next several years. The Common Core standards were developed by a consortium of states. A similar multi-state effort is underway to develop Next Generation science standards.

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**Summary of Bill:**

The PESB must, as part of its regular review and revision of teacher certification standards, revise the standards for endorsement in elementary education and middle and secondary mathematics and science, as well as any other endorsements related to science, technology, engineering, and mathematics (STEM). Revisions for mathematics must be adopted by September 1, 2013. Revisions related to science must be adopted by September 1, 2014. The revision must include the integration of STEM knowledge and skills and be aligned with the Common Core standards, new state mathematics and science standards and assessments, and the Next Generation science standards. The revised endorsement standards must also include concepts and instructional practices for interdisciplinary connection with engineering and technology.

The PESB must revise the WEST-E assessments to measure the revised endorsement standards and require candidates taking the assessment of teaching effectiveness to demonstrate effective instruction that addresses the revised standards.

The PESB must require continuing education or professional growth plans for certificate renewal by elementary teachers and secondary teachers in STEM-related fields to include a specific focus on integrating STEM instruction.

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**Appropriation:** None.

**Fiscal Note:** Available.

**Effective Date:** The bill takes effect 90 days after adjournment of the session in which the bill is passed.

**Staff Summary of Public Testimony:**

(In support) We heard about the relationship between STEM and jobs for the future. Another issue that is heard consistently is the importance of STEM literacy. It is important to instill curiosity and interest in STEM in students from a very young age. Teachers need to be prepared to engage students, and they need to feel confident in their knowledge and skills in STEM. The purpose of this bill is to assure that, as the PESB goes through its regular updating of teacher requirements, they pay particular attention to STEM and to keeping the standards contemporary. Teaching standards are often thought about in subject-specific silos, but STEM is interdisciplinary. This will help teachers see connections across subjects, and enable them to work with students to see those connections.

The PESB has continuously examined the rigor and relevance of teaching standards, and this bill fits in for the most part with work that is already underway. There is, however, a growing recognition that we cannot continuously add requirements for beginning teachers without a research agenda to identify what matters and what has an impact on student learning. Most of the bill addresses preservice teachers, but it is good to include continuing education because preservice represents only a sliver of the existing teaching workforce.

The better qualified a teacher is in a STEM field, the more likely they will engage and equip students to enter STEM fields. The hope is that this will strengthen the teacher corps and put a focus on integrated, relevant, contextual teaching and learning for the children who will be our next workforce. It is worth remembering that neither the state nor districts have resources to provide professional development opportunities for current teachers.

(In support with concerns) Central Washington University (Central) is the nation's sixth largest teacher preparation program and offers all of the STEM-related endorsements. Central supports the intent to put more STEM-educated teachers into the classroom, but this bill seems redundant to things that are already being done. Over-legislating could be detrimental to achieving what the Governor ultimately hopes to accomplish.

(With concerns) There is support for a focus on educational opportunities that result in a vibrant middle-class workforce, but the teacher preparation institutions have concerns that this bill is premature. The Next Generation science standards have not even been written yet and there is no guarantee of what they will look like. This bill injects a level of specificity into the work of the PESB that is probably not necessary. It is uncertain whether there is high quality research on the effect of injecting STEM into the curriculum. The fiscal note appears to be glossed over. This needs to be re-thought.

**Persons Testifying:** (In support) Representative Maxwell, prime sponsor; Judy Hartmann, Governor's Executive Policy Office; Jennifer Wallace, Professional Educator Standards Board; Doug Levy, Cities of Renton and Everett; Bill McSherry, The Boeing Company; Jay Leviton, Renton School District; Lucinda Young, Washington Education Association; Brooke

Valentine, League of Education Voters; and Ramona Hattendorf, Washington State Parent Teacher Association.

(In support with concerns) Steve DuPont, Central Washington University.

(With concerns) Bob Cooper, Washington Association of Colleges of Teacher Education.

**Persons Signed In To Testify But Not Testifying:** None.