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HOUSE BILL 2817

State of Washington 59th Legislature 2006 Regular Session

By Representatives Sells, McCoy, Strow, Dunshee, Lovick, Jarrett, Morris, Ormsby, Morrell, Haler, O'Brien, Fromhold, Ericks, Kilmer and B. Sullivan

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AN ACT Relating to establishing a state priority and state objectives for access, enrollment, delivery, and degree achievements in the fields of engineering, technology, biotechnology, science, computer science, and mathematics in higher education; and adding new sections to chapter 28B.10 RCW.

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

NEW SECTION. **Sec. 1.** A new section is added to chapter 28B.10 RCW to read as follows:

(1) The legislature recognizes the vital importance to the state's economic prosperity and the economic benefit of placing a priority on enrolling and conferring degrees upon students in the fields of engineering, technology, biotechnology, science, computer science, and mathematics.

(2) The legislature has significant concerns that other countries are outpacing the United States in graduating qualified engineers, and that major corporations within Washington state are searching out-of-state and even outside the United States to find the qualified and trained employees they need.

(3) Data compiled by the technology alliance shows that Washington state ranks thirty-fourth among the fifty states in the percentage of residents who have earned a science or engineering degree, per capita.

(4) Data collected by the office of financial management indicates that between the academic years of 1993-94 and 2003-04 at public four-year institutions of higher education in Washington state:

(a) There was a twelve percent decline in the number of full-time equivalents enrolled in the fields of engineering and related technologies; and

(b) There was nearly a nine percent decline in the number of bachelor's degrees conferred in the fields of engineering and related technologies.

(5) Data collected by the office of financial management also shows that for the 2003-04 academic year, only four percent of all full-time equivalents were enrolled in engineering and related technologies and just two percent of all full-time equivalents were enrolled in computer science studies at public four-year institutions of higher education in the state.

(6) Therefore, it is the intent of the legislature to promote increased access, delivery models, enrollment slots, and degree opportunities in the fields of engineering, technology, biotechnology, sciences, computer sciences, and mathematics. It is recognized that these areas of study and training are integrally linked to ensuring that Washington state's economy can compete nationally and globally in the twenty-first century marketplace. It is also recognized that community colleges play a unique role in supporting degree attainment in the fields of science, technology, engineering, and mathematics through the development of transferable curricula and the maintenance of viable articulation agreements with both public and private universities.

NEW SECTION. **Sec. 2.** A new section is added to chapter 28B.10 RCW to read as follows:

(1) A state priority is established for institutions of higher education, including community colleges, to ensure that growing numbers of enrollments and degrees are secured in the fields of engineering, technology, biotechnology, sciences, computer sciences, and mathematics.

(2) In meeting this state priority, the legislature understands and recognizes that the demands of the economic marketplace and the desires of students are not always on parallel tracks. Therefore, institutions of higher education shall be provided with a three-year period in which to establish student demand for programs in the fields of engineering, technology, biotechnology, sciences, computer sciences, and mathematics.

(3) While it is understood that these areas of emphasis should not be the sole focus of institutions of higher education, steady progress in these areas shall occur. The higher education coordinating board shall track and report progress in the fields of engineering, technology, biotechnology, sciences, computer sciences, and mathematics including, but not limited to, the following information:

(a) The number of students enrolled in these fields on an annual basis;

(b) The number of associate, bachelor's, and master's degrees conferred in these fields on an annual basis;

(c) The amount of expenditures in enrollment and degree programs in these fields; and

(d) The number and type of public-private partnerships established relating to these fields among institutions of higher education, including community colleges, and leading corporations in Washington state.

(4) Institutions of higher education, including community colleges, shall be provided discretion and flexibility in achieving the objectives under this section. Examples of the types of institutional programs that may help achieve these objectives include, but are not limited to, establishment of institutes of technology, new polytechnic-based institutions, new divisions of existing institutions, and a flexible array of delivery models, including face-to-face learning, interactive courses, internet-based offerings, and instruction on main campuses, branch campuses, and other educational centers.

(5) The legislature recognizes the global needs of the economic marketplace for technologically prepared graduates, and the relationship between technology industries and higher education. Institutions of higher education, including community colleges, are strongly urged to consider science, engineering, and technology program growth in areas of the state that exhibit a high concentration of

aerospace, biotechnology, and technology industrial presence. Expanded science and technology programs can gain from the proximity of experienced and knowledgeable industry leaders, while industry can benefit from access to new sources of highly trained and educated graduates.

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