1.3.d: Increase the number of graduates in STEM (academic transfer and professional-technical programs) in public community and technical colleges from 14,526 in 2012-13 to 14,817 in 2016-17

Data source: The State Board for Community and Technical Colleges’ (SBCTC) data warehouse

Community and Technical Colleges Race and Ethnicity by Results Washington Measure
Why is this a priority?

According to Georgetown University, Washington will demand as many as 282,130 new jobs by 2018, an increase of 55,090 new STEM jobs since 2008. We will be second in the nation in the percent of STEM jobs in 2018, behind Virginia, according to a Georgetown University report. Employers need many levels of STEM education, including certificates, associate degrees, and bachelor's degrees.

How are we doing?

According to our 2013 report on our part in the role of transfer students earning a baccalaureate degree in a public institution, 92 percent completed a bachelor's degree in a STEM or health related major of our graduates who completed Associate in Science (AS-T) Tracks 1 (chemistry and related programs) and 2 (engineering & physics and related fields), which are aligned with specific majors. Students who graduated in these tracks were also more likely to enroll in a research university (81 percent of AS-T Track 1 and 72 percent of AS-T Track 2) than those who completed other degrees.

What are we working on?
• We now have 31 applied baccalaureate degrees in STEM fields and more are varying stages of development.
• We have implemented an agreement to use of the Smarter Balanced high school career and college readiness assessment for placement in our community and technical colleges and in 2017-18 will be reviewing the terms and assessing the impact.
• We are addressing our pathways to college-level math courses in order to improve student success in those courses, and will be hosting a meeting in fall 2017 focused specifically on the calculus/STEM pathway; implementing innovative placement approaches using high school transcripts; and accelerating movement through pre-college (i.e. developmental) math through reducing the number of course levels by redesigning the curriculum and instruction delivery.
• The Student Achievement Initiative, our performance-based funding system, tracks students’ progress from pre-college math into their first college-level math class. This allows us to analyze the success of our efforts.

How can you help?

Research reports on transfer education are available at: http://www.sbctc.edu/colleges-staff/research/reports/transfer-research.aspx

Information on college programs is available at: http://www.sbctc.edu/our-colleges/search-college-programs/default.aspx