

Appendix: Technical Information for the State Board of Education’s Strategic Plan Science, Technology, Engineering, and Mathematics (STEM) Focus Metrics

Goal 1: Highest Student Achievement

Metric	Brief Description	Technical Information
1. Student Achievement on Florida STEM Assessments a) Mathematics b) Science	Percent of students achieving grade-level or above performance on Mathematics and Science assessments	This metric includes students who score at achievement level 3 or higher on the statewide assessment for these STEM subject areas: a) FSA Math grades 3-8; Algebra 1, Algebra 2, Geometry End-of-Course (EOC) ¹ b) Statewide Science Assessment grades 5, 8; Biology EOC
2. Continued Achievement Growth on Florida STEM Assessments a) Mathematics	Percent of students who improved in Mathematics, including those performing below grade level and those performing at grade level and above	This metric is based on the percentage of students who made learning gains in Mathematics (FSA Math; Algebra 1, Algebra 2, Geometry EOC). ¹ The school grades learning gains criteria were established by the State Board of Education.
3. Closing the Achievement Gap on Mathematics and Science Assessments a) Between White and Hispanic students b) Between White and African American students c) Between non-economically disadvantaged students and economically disadvantaged students d) Between students without disabilities and students with disabilities	Percent of the gap in K-12 student achievement on Mathematics and Science assessments	This metric compares the subgroup’s performance in the STEM subject areas/statewide assessments (Mathematics and Science) listed above to determine the gap, which is the number of percentage points by which they are different. <ul style="list-style-type: none"> • Economically disadvantaged students include students determined to be eligible for free and reduced price meals under the National School Lunch Program. • Students with disabilities include students who are documented as having an

¹ The Algebra 2 EOC was last given in 2016-17 and is included in the Math results for 2015 through 2017.

<p>e) Between non-English Language Learners and English Language Learners</p>		<p>intellectual disability; a hearing impairment, including deafness; a speech or language impairment; a visual impairment, including blindness; an emotional or behavioral disability; an orthopedic or other health impairment; an autism spectrum disorder; a traumatic brain injury; or a specific learning disability, including, but not limited to, dyslexia, dyscalculia, or developmental aphasia.</p> <ul style="list-style-type: none"> English Language Learners (ELL) include students enrolled in a program or receiving services that are specifically designed to meet the instructional needs of ELL students and students who have exited the English for Speakers of Other Languages (ESOL) program and are in a two-year follow-up period.
<p>5. High School STEM Graduation Rate Plus</p>	<p>Percent of high school graduates who have completed one or more accelerated STEM courses or STEM industry certifications</p>	<p>This metric represents the percentage of high school graduates who were eligible for college credit or an industry certification in a STEM area while in high school. College credit eligibility is determined by either passing scores on an Advanced Placement (AP), International Baccalaureate (IB), or Advanced International Certificate of Education (AICE) exam in a STEM area or a grade of "C" or higher in a STEM dual enrollment course. STEM industry certifications are awarded by passing a STEM industry certification exam. Only STEM industry certifications on the funding list adopted by the State Board are included. This metric captures the percent of graduates who earned at least</p>

		one of these accelerated outcomes in a STEM area while enrolled in high school.
7. Postsecondary STEM Completion Rate a) Florida College System STEM completion at 150% of program time b) District Postsecondary STEM completion at 150% of program time (primarily technical centers)	Percent of students completing a postsecondary degree or certificate in STEM fields	<p>These metrics measure the percentage of first-time, full-time students who complete an educational certificate or Associate degree within 150% of the time it takes a full-time student to complete the program (e.g., three years for a two-year degree program).</p> <p>The Florida College System STEM completion rate is the percent of these students (who complete within 150% of program time) who completed in a STEM field.</p> <p>The District Postsecondary STEM completion rate is the percent of these students (who complete within 150% of program time) who completed in a STEM field.</p>

Goal 2: Seamless Articulation and Maximum Access

Metric	Brief Description	Technical Information
1. Postsecondary STEM Continuation Rate	Percent of high school graduates who enroll in postsecondary education in a STEM program	This metric includes the percentage of students that enroll in-state within 12 months of earning a high school diploma in a STEM Program in a Florida College System institution, State University System institution, or District Postsecondary Career and Adult Education institution.
2. Associate Degree STEM Articulation Rate	Percent of students earning an Associate of Arts (AA) degree who articulate into a STEM Bachelor degree program	This metric provides the percentage of students earning an AA degree who transfer into a STEM program at the next postsecondary level in a Florida College System institution or a State University System institution.

Goal 3: Skilled Workforce and Economic Development

Metric	Brief Description	Technical Information
1. Postsecondary STEM Employment Rate	Percent of STEM program completers from these sectors who are in employment: Florida College System and District Postsecondary	This metric uses Florida Education and Training Placement Information Program (FETPIP) data to identify whether STEM program completers were employed in the fall (October, November, and December) of the year following their completion. It includes individuals employed full- or part-time and who were not found continuing their education.
2. STEM Initial Wages	Average initial wages earned by STEM program completers from these sectors combined: Florida College System and District Postsecondary	This metric uses FETPIP data to identify the wages of STEM program completers employed in the fall (October, November, and December) of the year following their completion. It includes individuals employed full- or part-time and who were not found continuing their education.