FIRST REGULAR SESSION

HOUSE BILL NO. 456

100TH GENERAL ASSEMBLY

INTRODUCED BY REPRESENTATIVE NEELY.

1145H.01I DANA RADEMAN MILLER, Chief Clerk

AN ACT

To amend chapter 170, RSMo, by adding thereto one new section relating to a high school diploma endorsement in STEM.

Be it enacted by the General Assembly of the state of Missouri, as follows:

Section A. Chapter 170, RSMo, is amended by adding thereto one new section, to be known as section 170.032, to read as follows:

170.032. 1. As used in this section, unless the context otherwise requires, the following terms mean:

(1) "Granting local education provider", a school district or charter school that chooses to grant a STEM diploma endorsement to a student who demonstrates mastery in the STEM disciplines as described in this section;

(2) "STEM", the combination of the disciplines of science, technology, engineering, and mathematics.

2. A school district or charter school may grant a diploma endorsement in STEM to a graduating high school student who demonstrates mastery in the STEM disciplines. To obtain a diploma endorsement in STEM, a graduating student shall:

(1) Meet the minimum high school graduation requirements at a high level of proficiency as specified by the granting local education provider;

(2) Successfully complete, with a grade point average of at least three and one-half on a four-point scale or equivalent, a coherent sequence of at least four courses in the areas of science, technology, engineering, and mathematics as determined by the granting local education provider, which courses are in addition to the minimum graduation requirements in these areas;

EXPLANATION — Matter enclosed in bold-faced brackets **[**thus**]** in the above bill is not enacted and is intended to be omitted from the law. Matter in **bold-face** type in the above bill is proposed language.

(3) Demonstrate proficiency in mathematics by:

(a) Achieving a score of twenty-eight or higher on the mathematics portion of the ACT college readiness assessment;

(b) Achieving a score of six hundred or higher on the mathematics portion of the college readiness assessment provided by the College Board, commonly known as the SAT;

(c) Achieving a score of five or higher on the mathematics portion of the international baccalaureate test;

(d) Achieving a score of four or higher on the advanced placement mathematics assessment;

(e) Achieving a score of one hundred or higher on the suite of tests that assesses reading, writing, mathematics, and computer skills provided by the College Board for college placement purposes, commonly known as the Accuplacer; or

(f) Achieving a score of eighty-five or higher on the Armed Services Vocational Aptitude Battery; and

(4) Successfully complete a final capstone project, which is a culminating exhibition of the student's project or experience that demonstrates academic and intellectual learning. To successfully complete a final capstone project, the student shall achieve a high proficiency level of mastery, as set by the granting local education provider, for each of the following competencies:

(a) Inquiry-based learning, which is demonstrated through the capstone project by asking questions and defining problems;

(b) Creative problem-solving, which is demonstrated through the capstone project by developing and applying scientific and mathematical models to explain complex ideas and solutions;

(c) Experimentation, which is demonstrated through the capstone project by planning and carrying out investigations;

(d) Critical thinking, which is demonstrated through the capstone project by analyzing and interpreting data and communicating conclusions;

(e) Deductive and inductive reasoning, which is demonstrated through the capstone project by using mathematics and computational thinking;

(f) Understanding of engineering principles, which is demonstrated through the capstone project by constructing explanations and designing solutions; and

(g) Effective communication skills, which are demonstrated through the capstone project by engaging in argument from evidence.

3. Each granting local education provider shall work with STEM-related business and industrial leaders identified by the granting local education provider within the

surrounding communities and with appropriate institutions of higher education to establish the high proficiency levels of mastery that a student shall demonstrate in each of the competencies described in subdivision (4) of subsection 2 of this section.

4. Each granting local education provider shall annually provide to each student enrolled in grades six through twelve, and each student's parents or guardians, information concerning the requirements for obtaining the STEM diploma endorsement.

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