

SENATE BILL 453

By Gardenhire

AN ACT to amend Tennessee Code Annotated, Title 49,
relative to STEM education.

WHEREAS, it is imperative to the future of Tennessee that we have a highly educated workforce; and

WHEREAS, Science, Technology, Engineering, and Math (STEM) fields are among the fastest-growing job sectors in the nation, and Tennessee's businesses are rapidly increasing their need for such technically trained workers; and

WHEREAS, Tennessee currently ranks below the national average in percentage of college degrees and certificates awarded in the STEM fields; and

WHEREAS, to address college and career readiness, Governor Bill Haslam established the Drive to 55 Alliance, with the goal of having fifty-five percent of Tennesseans possess a college degree or certificate by the year 2025; and

WHEREAS, to achieve the goals of Drive to 55, more students must follow an education path into STEM careers, but research has demonstrated that students make choices that affect this path beginning as early as middle school, when many students do not have an adequate knowledge of the variety and benefits of STEM careers; and

WHEREAS, the State established the Tennessee STEM Innovation Network (TSIN) in 2010 to build a pipeline of high-quality STEM programming within the K–12 system that would ensure Tennessee students are college and career ready upon graduation; and

WHEREAS, TSIN achieved its original objectives, including the establishment of six STEM innovation hubs and ten STEM-focused platform schools, which impacted dozens of schools and thousands of students and teachers; and

WHEREAS, the original funding for TSIN targeted those areas with the greatest assets necessary to build a STEM pipeline (i.e., universities and STEM businesses), but left large geographic gaps of school systems with no access to the resources needed to ensure that their students were appropriately prepared for success after graduation; and

WHEREAS, there is a need to make STEM resources available to students in rural areas of Tennessee, establish a stronger presence in Northwest Tennessee, and continue the vital infrastructure assistance for leadership development and teacher professional development to ensure STEM schools have all the tools necessary to support Tennessee's next generation of innovators; now, therefore,

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF TENNESSEE:

SECTION 1. Tennessee Code Annotated, Title 49, Chapter 6, is amended by adding Sections 2 through 5 as a new part.

SECTION 2. As used in this part:

(1) "STEM" means science, technology, engineering, and mathematics;

(2) "STEM innovation hub" means a regional partnership of LEAs, institutions of higher education, STEM businesses, and community organizations that have formally committed to amplifying and accelerating the impact of STEM programs in the region; and

(3) "TSIN" means the Tennessee STEM innovation network established in 2010 by executive order number 68 as a project within the department of education under an agreement with Battelle Memorial Institute, which is designated as the manager of TSIN and its activities.

SECTION 3.

(a) TSIN shall establish a STEM innovation hub specifically dedicated to serving the rural areas of the state.

(b) TSIN shall also establish a STEM innovation hub located in Northwest Tennessee.

SECTION 4. TSIN shall implement STEM leadership training in all STEM innovation hubs.

SECTION 5. TSIN shall make available to all middle schools in the state a curriculum to educate students on the variety and benefits of STEM careers. The curriculum shall:

- (1) Emphasize the benefits of STEM careers in helping people;
- (2) Not be limited to science classrooms, but be applicable in multiple classrooms;
- (3) Automatically produce reports detailing the academic skills of students without requiring teachers to separately analyze these skills; and
- (4) Be available through the Internet without requiring additional materials so that rural schools may easily access the curriculum.

SECTION 6. This act shall take effect upon becoming a law, the public welfare requiring it.