



March 13, 2015

SUMMARY OF ORIGINAL BILL: Defines the acronym “STEM” as “science, technology, engineering, and mathematics”; “STEM innovation hub” as a regional partnership of local education agencies, STEM business, and community organizations that have made a formal commitment to amplifying and accelerating STEM programs in the region; and “Tennessee STEM innovation network (TSIN)” as the Tennessee STEM innovation network established in 2010 through an agreement with Battelle Memorial Institute (BMI).

Requires TSIN to establish a STEM innovation hub that is dedicated to serving the rural areas of Tennessee, and specifically to establish a STEM innovation hub in northwest Tennessee. Requires TSIN to implement STEM leadership training in all STEM innovation hubs. Requires TSIN to make a curriculum available to all middle schools that educates students on the variety and benefits of STEM careers. This curriculum shall be made available on the Internet.

FISCAL IMPACT OF ORIGINAL BILL:

Increase State Expenditures - \$1,500,000/FY15-16

Other Fiscal Impact - In FY16-17 and subsequent years, additional appropriations will be required. The extent of any additional appropriations required in future years is unknown and dependent upon multiple unknown factors.

SUMMARY OF AMENDMENT (003773): Adds a new section to the bill that requires TSIN to seek STEM partner organizations to find ways to collaborate on STEM education programs and opportunities.

FISCAL IMPACT OF BILL WITH PROPOSED AMENDMENT:

Unchanged from the original fiscal note.

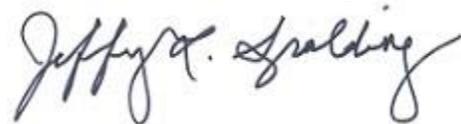
Assumptions for the bill as amended:

- TSIN will seek collaboration partners without an increase in state or local expenditures.
- The Race to the Top (RTT) funding that is currently allocated to TSIN and the STEM innovation hubs will cease on June 30, 2015.
- The fiscal estimate is based on information received from TSIN and BMI from current and previous projects.

- TSIN will retain a consulting firm through a request for proposal (RFP) process to explore virtual opportunities for a rural STEM innovation hub. Based on information provided by TSIN, it is estimated that the one-time increase in state expenditures in FY15-16 to contract with a consultant will be \$50,000.
- Under the RTT funding, the cost to establish an innovation hub has ranged from \$450,000 to \$800,000. Based on information provided by TSIN, the one-time increase in state expenditures for establishing a STEM hub in Northwest Tennessee will be \$250,000.
- Based on previous leadership development programs managed by TSIN for 25 leaders, STEM leadership training in all STEM innovation hubs is estimated to cost \$150,000. This cost is expected to be incurred in FY15-16; thus, a one-time increase in state expenditures of \$150,000.
- Based on BMI's previous development and implementation of STEM curriculum in Ohio and other states, and information provided by TSIN, the one-time increase in state expenditures in FY15-16 for middle school curriculum will be \$750,000, consisting of \$350,000 for online curriculum for middle schools; \$125,000 for curriculum hosting and implementation; \$100,000 for curriculum system training in schools; \$100,000 for data collection and analysis; and \$75,000 for effectiveness research support.
- TSIN will contract with BMI for management of the RFP and general project oversight; the one-time increase in state expenditures in FY15-16 is estimated to be \$300,000. This includes payment for salaries and benefits; facilities; supplies; travel; and indirect procurements.
- The total one-time increase in state expenditures occurring in FY15-16 is estimated to be \$1,500,000 (\$50,000 + \$250,000 + \$150,000 + \$750,000 + \$300,000).
- Based on information received from TSIN, the fiscal impact for this bill in FY16-17 and subsequent fiscal years is unknown; however, there will be additional state expenditures to continue the work of the Northwest innovation STEM hub; conduct additional leadership training; update the middle school curriculum; and to establish and continue the operations of a virtual STEM innovation hub that will serve rural communities statewide. These expenditures cannot be reasonably be quantified and are based on multiple unknown factors, including but not limited to, the outcome of the consultant study for the rural virtual innovation hub; the extent of additional training that is determined to be needed; the extent to which the middle school curriculum will require updating; and the extent to which the Northwest STEM innovation hub is able to raise funding to continue its operations.

CERTIFICATION:

The information contained herein is true and correct to the best of my knowledge.



Jeffrey L. Spalding, Executive Director

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