



OUR MISSION: TO PROMOTE AND EXPAND THE TEACHING AND LEARNING OF SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS EDUCATION IN K-12 SCHOOLS ACROSS TENNESSEE.

Our Goal: Increase STEM Interest for ALL Tennessee Students

To assist in increasing student interest and achievement in STEM, the Tennessee STEM Innovation Network is making available Learning Blade®, a supplemental STEM career awareness curriculum at *no cost* to all middle schools in the state of Tennessee! Learning Blade® introduces STEM opportunities to students in a novel format that demonstrates the benefits and roles of the careers in society. It also demonstrates the relevance of academic skills to STEM careers and provides real-world examples of the use of math and ELA skills in practical situations.



STEM Career Awareness Program Now Available FREE to all TN Middle Schools

Learning Blade® introduces students to Science, Technology, Engineering, and Math (STEM) career opportunities and technologies through an entertaining game-based format. In this student-ready web-based system, the student pursues engaging missions that solve a problem such as helping an injured dolphin, building an orphanage after a major earthquake, or solving energy and transportation needs in a new city.

To complete the missions, students must earn tools and teammates that correspond to STEM activities and careers by completing short academic exercises that expose the student to interesting aspects of STEM.

The activities contain exercises linked to academic standards. This provides the teacher with valuable feedback on student skills, while demonstrating the relevance of academic skills in real-life contexts.

Learning Blade® has been validated as a supplemental tool for increasing STEM career awareness and interest by BattelleEd.

Implementing the Learning Blade® Curriculum

The curriculum is supplemental and can be implemented in any classroom, after-school or community program. Because the lessons are self-guided, students can work on the activities in spare classroom time, as part of a flipped classroom, etc. Training and professional development is available, including examples of how other schools nationwide have successfully used this system.



A typical deployment plan includes:

- Introductory presentation or webinar (arranged through TSIN)
- Signup for account at the www.LearningBlade.com/TN
- Upload or provide teacher and student lists
- Teacher training via webcast
- Deployment in schools



Expected Outcomes

The Learning Blade® system has been demonstrated to:

- Increase student awareness of STEM careers and technologies
- Increase student interest in following STEM career paths
- Increase relevance of academic skills
- Provide practice and analysis of academic skill math and ELA objectives

Several schools have also shown increases in reading and science scores after implementation of Learning Blade®.



STEMconnector®

