Women in Defense (WID) seeks to encourage secondary students to pursue Science, Technology, Engineering and Math (STEM) education and careers. The Tennessee Valley Chapter of WID has sponsored 8 MAE student design teams to create STEM-related hardware for use in middle- and high-school classrooms. Design teams also participated in outreach efforts by involving students in the design process in an effort to further encourage student interest in STEM subjects.

MAE design teams participated in a product demonstration at Williams Middle School (WMS) and administered surveys to students to determine whether the implementation of the hardware affected students’ knowledge and opinions of STEM subjects. The teams found that the hardware promoted the students’ interest in STEM as well as provided team members critical engineering design experience.

Survey results indicated that implementation of STEM-related hardware in secondary education classrooms tremendously increased the students understand of STEM concepts via hands-on use of these tools.

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