

TSA Highlights

Tests of Engineering Aptitude, Mathematics, and Science (TEAMS) is a TSA STEM competition that provides students in middle school and high school with the opportunity to discover engineering through real-world challenges.

TSA's **Computer Science and Information Technology (CS/IT) competitions** – for both the middle school and high school level – are designed to be integrated into an existing CS/IT curriculum and, like all of TSA's competitions, include leadership and 21st century skills components.

The **TSA Achievement Program, Pathways to Excellence** encourages TSA members to engage in service leadership, STEM immersion, and personal/professional development activities. Members gain leadership skills and earn recognition for their efforts as they complete activities in these areas.

Junior Solar Sprint (JSS) – funded by the U.S. Army Educational Outreach Program (AEOP) – and **Senior Solar Sprint (SSS)** are national competitions that focus on STEM-based concepts and empower teachers, mentors, and community members to engage students in designing, building, and racing model solar cars. JSS targets fifth through eighth grade students, and SSS targets ninth through twelfth grade students.

Unite – also funded by AEOP – is a summer program held at colleges and universities across the country that encourages high school students to pursue STEM in higher education and careers.

The **National Technical Honor Society (NTHS)** serves Career and Technical Education (CTE) students through recognition and scholarship opportunities. TSA and NTHS formed a partnership in June 2023 to provide benefits to TSA members.

Here's what some chapter advisors say about their TSA experiences

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“TSA is an opportunity for students to participate in a chapter built around their interest in STEM and to compete in events that incorporate STEM principles and ideas. TSA provides a voice in a national organization that is helping shape the future of technology education.”

“Of all the things I've done over the years to promote technology education, becoming a TSA advisor by far has had the most impact on my students and my professional development. I highly recommend being an active part of a student organization that's dedicated to furthering the principles of leadership, teamwork, and responsibility.”

“By incorporating the components of TSA competitions into my lesson plans or using the events as culminating activities, I'm able to capture the imagination of my students and keep them engaged.”



Technology Student Association

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Supporting Teachers. Inspiring Students.



Technology Student Association
“Learning to Lead in a Technical World”

TSAweb.org

ABOUT TSA

The **Technology Student Association (TSA)** is a national career and technical student organization (CTSO) of students engaged in science, technology, engineering, and mathematics (STEM). TSA's intra-curricular program includes competitions and leadership activities. As a student organization of 300,000 middle and high school technology and engineering students, TSA provides its members the opportunity to explore a wide variety of STEM career interest areas. All TSA competitions—more than 75 middle and high school competitive events combined—are correlated with national STEM standards to enhance the academic curriculum. Since 1978, more than five million students have participated in TSA.

Mission

The **Technology Student Association** enhances personal development, leadership, and career opportunities in STEM, whereby members apply and integrate these concepts through intracurricular activities, competitions, and related programs.

Curriculum Integration

Education directives at the federal and state levels focus on providing avenues for initiatives such as STEM education. As a CTSO, TSA helps teachers meet the criteria for STEM education goals through innovative programs that include activities, competitions, leadership, and teamwork for students. Teacher advisors can use TSA's activities during the school day in their classroom and extend the learning beyond the classroom through a TSA chapter.



TSA Chapter Advisors

Teachers who serve as a TSA chapter advisor provide their students with the opportunity to be a part of a national CTSO that promotes and recognizes excellence in technology and engineering students through applied STEM competitions and leadership activities. TSA has chapters in more than 2,500 schools throughout 48 states. Chapter advisors work with student members to help them develop vital STEM skills.

There are many benefits for chapter advisors:

- Access to the TSA competitive events guide (middle school or high school level), which provides curriculum integration of TSA competitions designed to enhance career and technical education
- Classroom enrichment through hands-on experiences
- Opportunity to mentor student members
- Leadership materials and experiences for student members
- STEM-focused career and college preparation resources
- Collaboration with other educators, administrators, parents, and community leaders

TSA Competitions

Imagine an activity so captivating that your students spend hours working on it for weeks at a time. That is what can happen when TSA members engage in TSA competitions. Only TSA members have the opportunity to compete at exciting state conferences and then at the annual national TSA conference. Expert judging by technology and engineering educators and industry representatives inspires the best from participants. Members are rewarded not only with medals or trophies, but also with memories of the camaraderie and the challenge of participating in a national TSA conference.

TSA provides rules and guidelines for more than 75 middle school and high school competitions. Students are challenged to use and improve their STEM skills in team and individual events in career areas such as:

- Architecture and Construction Technology
- Communications Technology
- Computer Science and Information Technology
- Manufacturing and Transportation Technology
- Technology and Research