

The MHS SEALs view educational outreach as an important part of our mission. While competitions help us develop technical skills, we believe our responsibility goes beyond competing. Our goal is to share our knowledge, increase access to STEM education, and show students that engineering is something they can enjoy and succeed in.

One of our most meaningful outreach activities is mentoring a FIRST Lego League team of elementary students. These children start with no experience in robotics or programming. Through consistent mentoring, team members teach basic concepts while encouraging teamwork, problem-solving, and perseverance. Instead of giving students the answers, mentors guide them through challenges and help them learn from mistakes. Over time, students become more confident and begin solving problems on their own. Watching younger students get excited when their robot finally completes a task shows how impactful early exposure to STEM can be.

This same approach carries into our school through STEMWORKS, a student-led program focused on accessibility and collaboration. Our team plays a major role in STEMWORKS by bringing together engineering and STEM-based clubs in a shared learning space. Created by the team's founding captain and led by current team leadership, STEMWORKS provides an open after-school lab where students can explore hands-on projects, observe others working, and ask questions. This environment allows students of all experience levels to learn about STEM in a relaxed setting and encourages curiosity and exploration.

The MHS SEALs also host workshops through STEMWORKS that introduce skills commonly used in RoboBoat and other engineering projects. These workshops cover topics such as tool safety, CAD software, and basic programming concepts. By providing structured instruction early on, the team helps students build confidence and reduces the intimidation factor for those who are new to engineering.

The team focuses on reaching students through open houses, middle school visits, student panels, and community events which allow MHS SEALs to connect with prospective students and their families. By sharing personal experiences and demonstrating our boat, team members aim to make engineering feel approachable rather than overwhelming. These interactions highlight the fact that enthusiasm, curiosity, and effort are more important than prior experience.

Through mentorship, hands-on learning, and community involvement, the MHS SEALs use outreach to strengthen our community and inspire long-term interest in STEM. By supporting students at different stages of their education, the team extends the impact of RoboBoat beyond competition and helps create an inclusive and supportive learning environment.

