MATE ROV COMPETITION

23 YEARS OF INSPIRING & EMPOWERING STUDENTS

MORE THAN 'JUST' A COMPETITION

This report is a testament to the enduring legacy of the MATE ROV Competition and its instrumental role in shaping the next generation of leaders, innovators, and members to the ocean technical workforce.

OUR REACH IN 2024

MATE ROV COMPETITION

30 REGIONAL QUALIFIERS

10 COUNTRIES

3065 STUDENTS & MENTORS

423 VOLUNTEERS

336 TEAMS

1 WORLD CHAMPIONSHIP

17 COUNTRIES

662 STUDENTS & MENTORS

156 VOLUNTEERS

78 TEAMS

We had **17 Alumni** participate as volunteers at the 2024 World Championship!

"This is the most wonderful program. My daughter's confidence has grown leaps and bounds from participating in MATE ROV. She can envision herself pursuing a career in this field."

- 2024 MATE ROV Competition Parent

NUMBERS TELL THE STORY

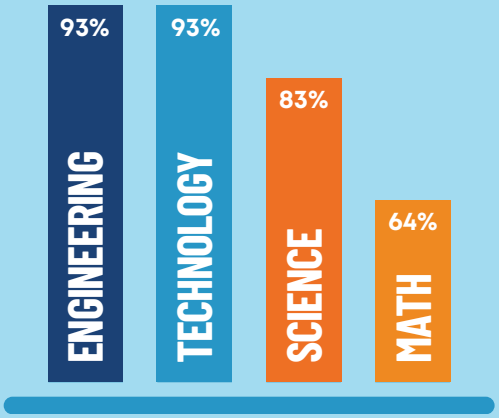
MATE ROV COMPETITION

STUDENTS ARE MORE INTERESTED IN STEM

91% wanted to learn more about STEM.

84% were more interested in a STEM career.

STUDENTS INCREASED SKILLS & KNOWLEDGE



PARENTS PROVIDED POSITIVE FEEDBACK

96% Said that their children were **more interested in STEM.**

95% Parents reported that their children were better **critical thinkers.**

98% Parents reported that their children were better **team members.**

97% Parents reported that their children were better **problem solvers.**

93% Parents reported that their children were better **leaders.**

TEACHERS SAW IMPROVEMENTS IN STUDENT LEARNING

Observed increases in their students' ability to apply STEM knowledge and skills to solving real-world problems.

Saw improvements in team building, critical thinking, and problem solving.

COMPETITION'S INFLUENCE ON STUDENTS' EDUCATION & CAREER PATHS

A 2024 survey of MATE ROV Competition alumni explored their education, employment, internships, scholarships, and opportunities gained through participation. Key results are highlighted below.

Alumni credit the program with strengthening their workplace skills, including **problem solving (98%), critical thinking (98%)**, **teamwork (97%), and leadership (97%)**.

The program played a role in attaining **college admittance (31%), employment (29%), internships (28%), scholarships (18%), and awards (15%)**.

Alumni credit the program with strengthening their STEM knowledge and skills in **engineering (98%), technology (98%), science (93%), and math (75%).**

93% Alumni credit the program with influencing their education and career a little to a great extent.

89% Of alumni college students were STEM majors.

88% Of alumni college degrees were STEM degrees.

81% Of employed alumni had a STEM-related job.

VOICES FROM THE DEPTHS

"My son has learned to bounce back after failures and disappointments. He doesn't give up!

- 2024 MATE ROV Competition Parent

"Very fulfilling volunteer experience. Gives me hope for our kids' future. Thanks, MATE team, for helping our region to deliver an excellent STEM program!"

- 2024 MATE ROV Competition Volunteer Judge

"This exciting, fun, challenging project provided the venue for them to learn hands on ways to grow and overcome areas in electronics, design, engineering, and team collaboration. I was proud to see how this program provided a lifelong memory of lessons they will use in all aspects of life."

- 2024 MATE ROV Competition Faculty Mentor

At my interview for my co-op this year, the interviewers were fully interested in my experience with MATE and underwater robotics, and how I was able to gain so much hands-on skills.

- 2024 MATE ROV Competition Participant

"I believe this may be one of the best STEM projects available to students and the resources provided by the MATE organization are outstanding. My students learned so much about circuits and ocean engineering. They were actually able to build the control box, the tether, and the ROV itself."

- 2024 MATE ROV Competition Faculty Mentor

THE NUMBERS DON'T LIE

STUDENT 21ST CENTURY SKILLS

1 APPLICATION PROBLEM SOLVER

89% of students stated that their ROV project increased their ability to **apply STEM** to solving real-world problems.

91% of students stated that their ROV project made them a better **problem solver**.

2 TEAM MEMBER COMMUNICATIONS

91% of students stated that their ROV project made them a better **team member**.

88% of students stated that their ROV project increased their ability to **communicate** the engineering design process.

3 CRITICAL THINKER SELF-CONFIDENCE

90% of students stated that their ROV project made them a better **critical thinker**.

79% of students stated that their ROV project made them more **self-confident**.

4 LEADER ORGANIZED

81% of students stated that their ROV project made them a better **leader**.

73% of students stated that their ROV project made them more **organized**.

MATE ROV COMPETITION

The MATE ROV Competition uses underwater robotics (remotely operated vehicles or ROVs) as a way to get students in grades 4-16 excited about learning science, technology, engineering, and math (STEM). The program also exposes students to STEM career opportunities and helps them to see pathways to those careers.

With the exception of the 2024 alumni survey, all data resulted from an independent evaluation of surveys completed by **nearly 800 students, close to 200 teachers, and more than 200 parents** who participated in the 2024 MATE ROV Competitions. For more information, contact MATE at **materovcompetition.org/contact**.

MATE ROV ACADEMY

2024 MATE ROV ACADEMY PARTICIPATION DATA

7 Professional Development **Workshops**

55 Teachers **Trained**

110 Classrooms Received **Material Support**

128 Average Number of **Students Per Classroom**

88% Report Serving **Underrepresented Communities**

14,080 Total **Students Impacted** Annually

TEACHERS REPORTED FAVORABLY THAT THE MATE ROV ACADEMY WORKSHOP

Clearly addressed the topics they came to learn about

Provided valuable ideas and activities that they can use in courses

Helped them understand current technologies used in the marine field

Provided them with instructional materials that will improve student preparedness for STEM occupations

Plan to use an ROV for team building or to implement curriculum in the classroom

Rated the MATE ROV Academy training was Excellent

"This fills a gap that is important. Students need exposure to many more hands-on activities that emulate the real world and its opportunities."

- 2024 MATE ROV Academy Attendee

"This is the best workshop I have been to in my 20 years of teaching."

- 2024 MATE ROV Academy Attendee