



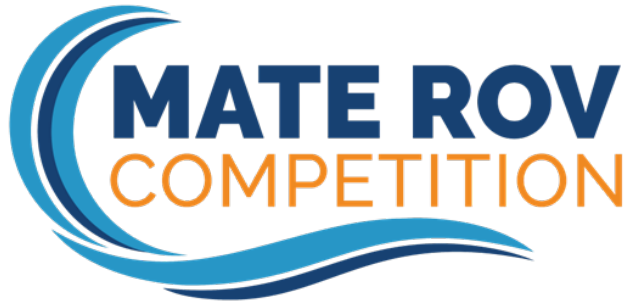


# THIS IS MATE

## Let the journey begin...

- The **Marine Advanced Technology Education (MATE) Center** was established in 1997 via an NSF Advanced Technological Education (ATE) grant to Monterey Peninsula College.
- 19 years later, **MATE Inspiration for Innovation (MATE II)** was founded as a 501(c)3 to support and sustain ongoing education activities initiated by the MATE Center.
- On July 1, 2023, MATE initiated the next phase of its journey with its integration into the **Marine Technology Society (MTS)**.





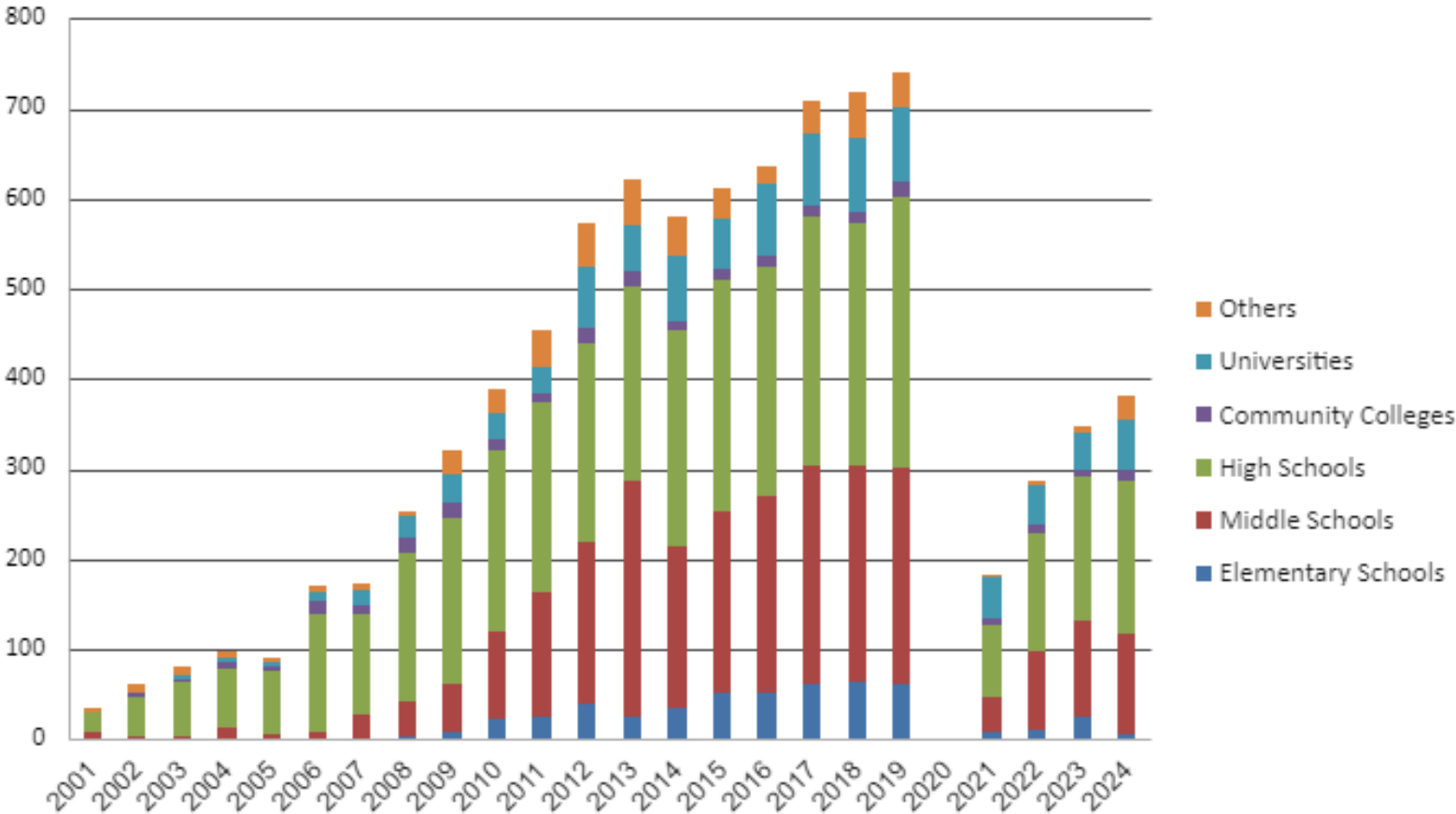
## The Global MATE ROV Competition:

- Created in 2001 as a workforce development pipeline to 1) raise awareness of ocean-related careers and 2) develop the skills necessary to support and sustain ocean activities.
- Includes a World Championship and Regional Network of 48 events around the world.
- Requires students to work in teams to engineer and operate ROVs (floats, too!) to tackle tasks based on real-world scenarios.
- Challenges students to think of themselves as entrepreneurs and emphasizes a business approach.
- Students also prepare technical reports, engineering presentations, and marketing displays that are delivered to working professionals who volunteer as judges
- Includes professional development workshops, instructional materials, SeaMATE starter ROV kits and building guides, and more to support student learning.



# COMMUNITY SERVED

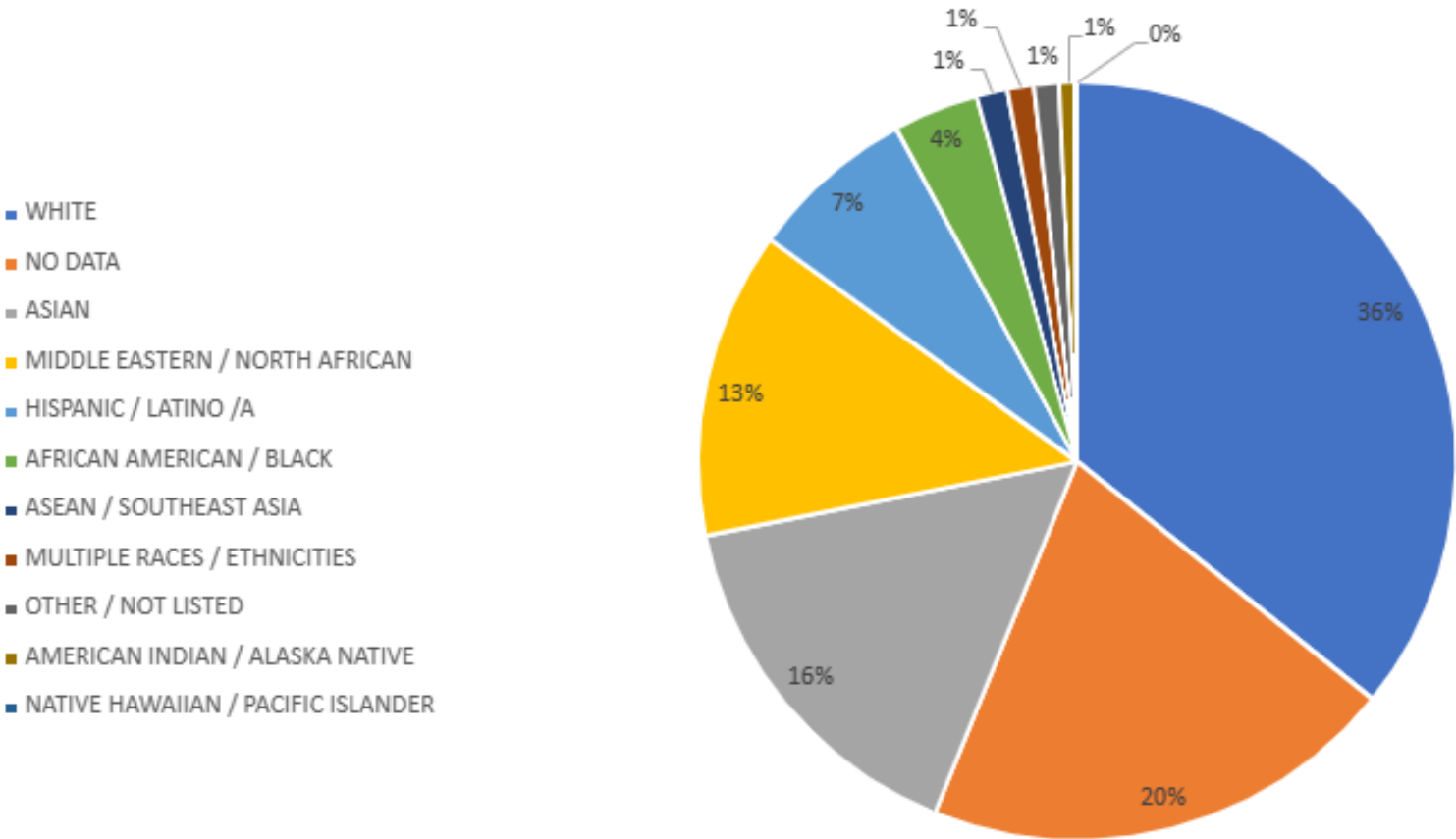
MATE ROV Competition Team Participation





# COMMUNITY SERVED

2024 MATE STUDENTS GLOBAL DEMOGRAPHICS



GENDER	%
MAN/BOY	69.62
WOMAN/GIRL	24.59
NO DATA	2.21
PREFER NOT TO SAY	1.93
NONBINARY	0.95
TRANSGENDER	0.28
GENDER-QUEER	0.21
NOT LISTED	0.11
PREFER TO SELF DESCRIBE AS	0.11



# IMPACT

## COMPETITION'S INFLUENCE ON STUDENTS' EDUCATIONAL AND CAREER PATHS

A 2020 survey of competition "alumni" included questions about their higher education, employment, internships, scholarships, and other opportunities that opened due to their involvement with the MATE ROV Competition. Highlights of the survey results are included below.

96%

Alumni credit the program with strengthening their 21st century workplace skills, including teamwork (96%), problem solving (92%), critical thinking (90%) and leadership (87%).

89%

89% credit the program with influencing their education/career a little to a great extent.

88%

88% of college degrees were STEM degrees.

83%

83% of college students were STEM majors.

77%

77% of employed alumni had a STEM-related job.

38%

The program played a role in attaining college admittance (38%), employment (37%), internships (36%), scholarships (22%), and awards (19%).

# BOOSTING IMPACT

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Grant/donor funding aimed at increasing DEIA in the ocean and greater STEM workforce:

- Schmidt Ocean Coalition
- Tennessee Valley Robotics
- Motorola Solutions Foundation
- Honda Foundation
- MITRE

*On average, 88% of the 2024 MATE professional development workshop participants support students from underserved or underrepresented communities.*





**MATE FLOATS**  
MARINE TECHNOLOGY WORKSHOP

**An advanced, immersive, multi-day learning experience around float technology, sensors, and data science**

- Leverages several grants and partnerships:
  - GO-BGC Float Array (MBARI is the lead organization)
  - National Center for Autonomous Technologies (NCAT)
  - MATE's NSF ATE grant to increase community college participation in the MATE ROV Competition
  - University of Washington
- Workshop target audience is community and technical college students across the U.S.





**MATE FLOATS**  
MARINE TECHNOLOGY WORKSHOP



## Parting thoughts:

- Cornerstones of MATE programs: 1) accessible to a wide and diverse audience, 2) provide opportunities for networking, and 3) facilitate connections with employers (albeit it's difficult to make those connections when “no one from the industry shows up”).
- “Oceans aren’t confined to the coasts.” MATE programs reach inland via regional competitions, NCAT partnership, and involvement with GO-BGC.
- Something to consider: A strategy not to create new programs, but to support and strengthen programs that have the reach, culture of inclusivity, and demonstrate impact – and the potential to increase impact with additional support.
- And it’s not just about funding. In-kind support and creating and leveraging partnerships are a win-win for all.

# The last word...

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“STEM SEAS and MATE ROV are examples of efforts like this already. We don’t need to reinvent these examples. We just need to strengthen the programs that already exist and make the connections that are not currently being made – which is connecting BIPOC and other underrepresented workers/students to the people offering the jobs.”

– Rick Rupan, long-time MATE volunteer and ocean industry professional





**Jill Zande**

**MATE Executive Director  
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*Creating a global community of diverse learners who can think critically, solve problems, be creative and resourceful, and work as team to address societal challenges – and who can succeed in the ocean science and technology workplace.*