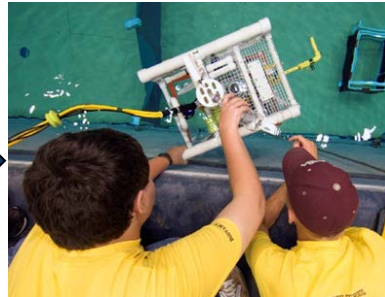


MATE ROV Competitions:

Providing Pathways to the Working World



Jill Zande
Associate Director & Competition Coordinator
ITEST Project PI
Marine Advanced Technology Education (MATE) Center





MATE

M A R I N E
A D V A N C E D
T E C H N O L O G Y
E D U C A T I O N
C E N T E R

What is the MATE Center?

National partnership of organizations working to improve marine technical education & help prepare students for ocean occupations.

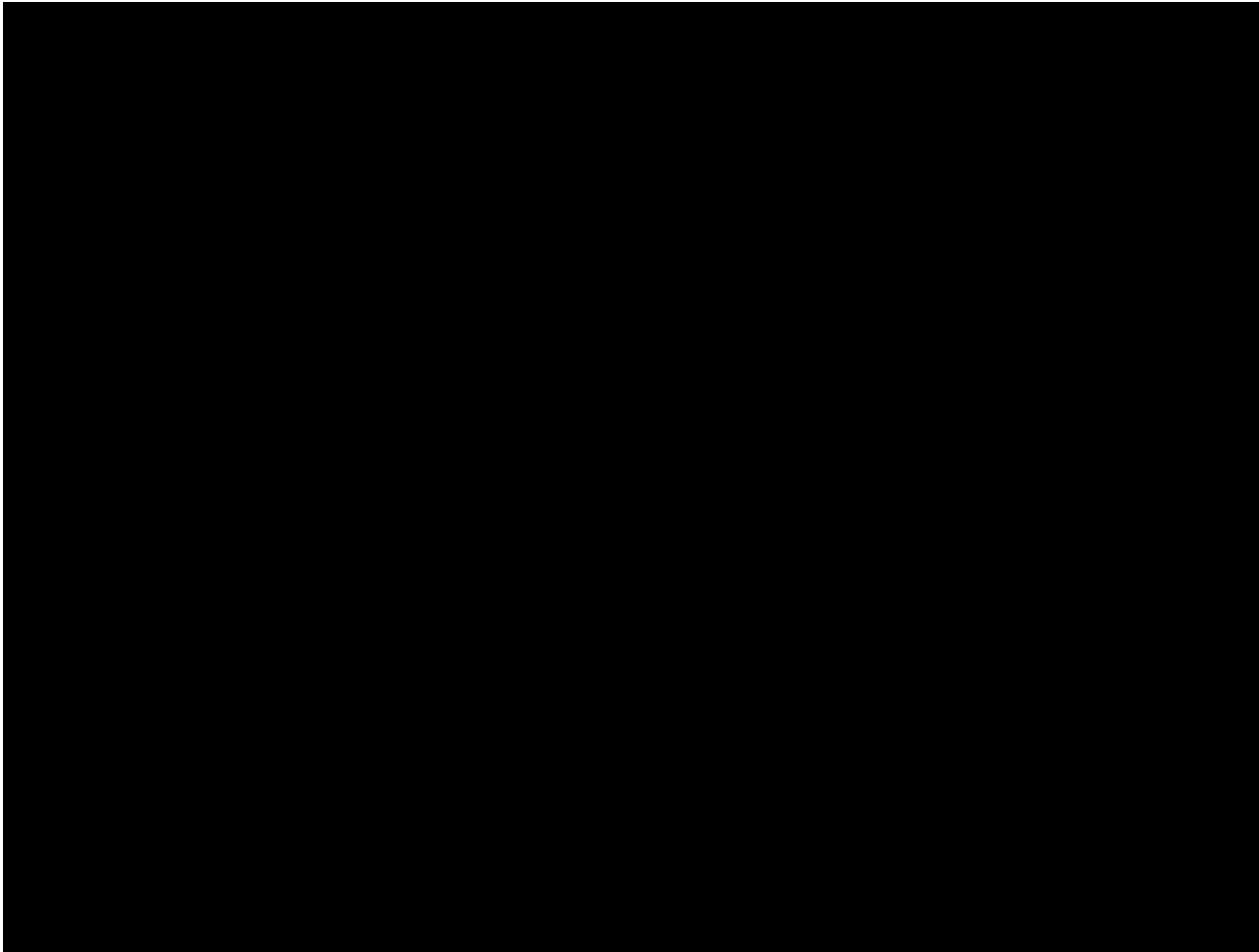


What does the MATE Center do?

- ▶ Workforce studies
- ▶ Curriculum development
- ▶ Summer Institutes for teachers
- ▶ Technical internships for students
- ▶ ROV competitions



2013 ROV Competition video!



Available at <http://vimeo.com/73115789>

MATE ROV Competition



- Partnership with the MTS ROV Committee
- To date, has involved more than 10,000 students in grades 4-16
- Includes one international competition and 23 regional contests held across the U.S. and in Canada, Hong Kong, Scotland, Japan, & Egypt
- Involves 100s of working professionals & organizations
- Includes underwater missions, technical reports, presentations, and poster displays
- Is encouraging students to pursue degrees in engineering, science, and technology and eventually to get jobs in the field
- Is a great way to teach science, technology, engineering, and math as well as teamwork, critical thinking, and problem-solving

The goal of the ROV program is to:

- Use ROVs as a way to get K-12 school students excited about learning science, technology, engineering, and math.
- Show these students the career opportunities that are available to them in ocean science, technology, engineering, and math.
- Help these students to see the pathways to those careers.

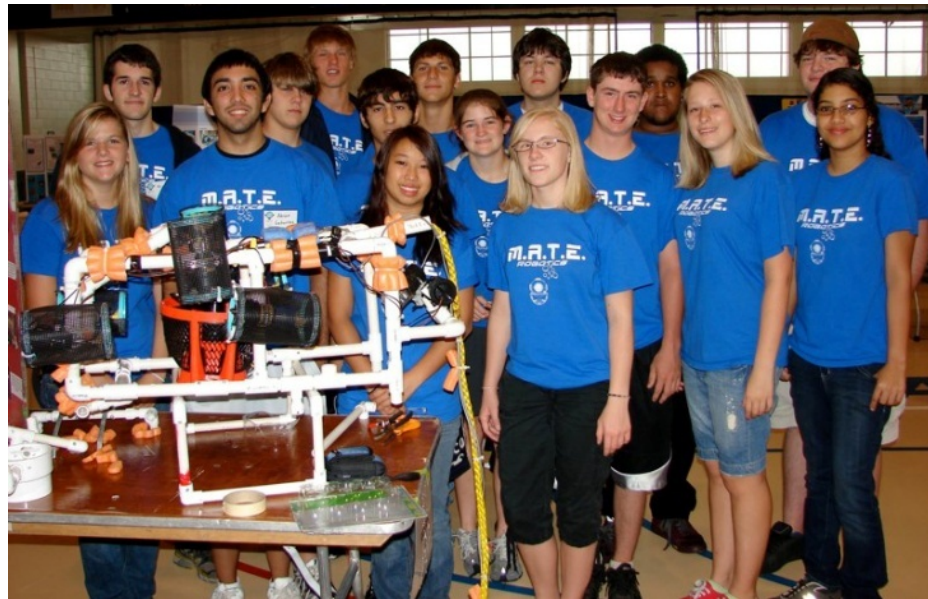


What MATE provides to area teachers and their students:

- Professional development for teachers
 - ROV design and building workshops
- Hands-on workshops for students
 - Learning electronics, soldering, wiring switches, waterproofing connections, pool practice days, and more
- Resources for their afterschool programs
 - Access to ROV kits
 - Curriculum materials, including building instructions and how-to videos
 - Information about education and career opportunities
 - ***Mentors to help with ROV building***
- ROV competition at Aptos High School
 - No registration fee
 - Community-building
 - Fun and prizes!



What does this mean for you?



Expectations & timeline

- Attend the mentor orientation on Friday, February 7th. (DONE!) Get matched with a teacher and school. (Hopefully done today!) After an e-mail introduction to the teacher you'll be working with, follow up to determine your "start date."
- Visit the classrooms of these teachers for 1-2 (or more) hours 1-2 days per week for ~10 weeks (**February through April 2013**).* During this time, you'll help the teacher to:
 - Introduce the project to 10-20 students
 - Help the students to design and build their own ROVs
 - If necessary, hold a in-school mini-contest to determine which team competes in the Monterey regional
- If possible, attend the Monterey Bay regional contest at Aptos High School on **Saturday, May 3, 2014** with the team to provide them with technical and moral support – OR volunteer to help with the contest (**safety checks**, technical support, time keeper, etc.).

*You may need to attend a Saturday pool practice and/or contest day to make sure that you get your 30 hours of service learning.

NOTES:

- Keeping in touch and following up with the teacher is important. Don't always expect them to initiate contact or remember to contact you about meeting dates/times/locations. Be proactive! Don't be afraid to pick up the phone or e-mail.
- Remember that you are the mentor, not the project "lead." The teacher plays this role. You aren't (and shouldn't be) expected to. That said, if you'd like to lead some lessons or demonstrations, talk that over with the teacher.
- Ask the teacher to sign off on your hours; Jill will sign the rest of your paperwork.
- Don't give out your personal contact information to the students – or ask for or take theirs!
- Refrain from taking photos of the students. If you'd like photos to remember the experience, check with the teacher.
- Never be alone with a student(s). Always make sure that the teacher or another adult from the school is present.
- We'll talk more about interacting with middle school students next.
- Contact me at any time if you have questions or concerns.

Volunteer requirements

All schools require a TB test. You can get this at the CSUMB Health Center. The test is paid for by Service Learning. You will need to make an appointment. See the Service Learning web site for more information.

District/School specific requirements:

- Pajaro Valley Unified School District (Hyde Elementary School, Radcliff Elementary School, Watsonville High School)
 - Complete and submit a volunteer form (I have these forms). The district will determine if you need to be fingerprinted. If you do, the cost is free. You will need to go to the district office to have this done and submit your TB test results.
- Salinas Unified School District (Washington Middle School)
 - Visit Velma Warden (796-7111) at Washington Middle School to complete paperwork. She will send your paperwork to Mona (796-7042) at the district office. Mona will contact you. You will need to visit the district office to turn in your TB test results and to be fingerprinted. The fee is \$61, but will be covered by MATE.
- Santa Rita School District (Bolsa Knolls Middle School)
 - Complete and submit a new employment form (I have these forms) to Evelyn (443-7200, ext. 282) at the district office. You will need to be fingerprinted. The fee is \$69, but reimbursable by the district.
- Monterey Peninsula Unified School District (Marina High School)
 - You are required to attend one of their training sessions, which are offered at CSUMB Service Learning Institute/Bldg 44. **BRING YOUR TB TEST RESULTS!** The district will provide you with information on the next steps during that training.
 - February 12 at 1pm
 - February 17 at 5pm

QUESTIONS?

You can also contact me at:

Jill Zande
MATE Center
980 Fremont Street
Monterey, CA 93940
jzande@marinetech.org
(831) 646-3082 (work)
(831) 262-1318 (cell)
www.marinetech.org

