CREATING A STUDENT CENTERED ENVIRONMENT

Brandi Bolinger, Bobbi Mitchell & Diana Fultz
Robotics Coach, Mentor, Volunteer, and Event Partner
- Team Engagement Manager for MI, IL, WI, MN, ND, SD, IA, NE
- Over 16 Years of Experience Coaching Competitive Robotics
- Co-Head Mentor for Team 2337 - The EngiNERDs
- VRC, VIQ Camps, FLL, FTC, FRC, OCCRA
- Certified Referee, Event Partner, and Judge

Born and Raised in Mid-Michigan
- Went to Central Michigan University for Elementary Education
- Husband - Clinton, Children - Lucas & Clara
- I love tabletop games, cooking and traveling new places

Specializing in Anything “Team” Related
- Sustainability Best Practices
- Organization & Communications
- Educational Resources & Extension Activity Suggestions
- Fundraising & Grants
- Strategy & Game Analysis
Event Planning, Management, Training, Volunteer Recruitment
- Event Engagement Manager for TX, LA, AR, MS
- 7 years of event management experience, 3 with robotics competitions
- VIQC and WeDo Camps, Events for VRC, VIQC, RADC, FLL, FTC, WRO
- Worked every volunteer position at some point
- Certified Referee, Event Partner, and Judge

Born and Raised in West Virginia, Now a Texas Resident
- Worked for two years at the NASA ERC putting on events all over the state
- Became an EEM in September and moved to Texas in November of 2021
- Two wonderly hatful cats, Seymour and Willard

Specializing in Anything “Events” Related
- Sustainable programs
- Growing Event Regions
- Making sure your teams have events to attend
- Managing State and Regional Championships

BOBBI MITCHELL
EVENT ENGAGEMENT MANAGER
TX, LA, AR, MS
bobbi_mitchell@roboticseducation.org
Robotics Coach, Mentor, Volunteer, and Event Partner
- Certified Referee, Event Partner, and Judge
- Former Middle School Robotics Coach
- Taught 7th & 8th Grade Math, Pre-Algebra, Algebra I,
- Taught 6th, 7th, and 8th Science & Robotics

Born and Raised in Louisiana
- Married to Michael, Children: Cameron, Jackson and Madison
- Graduated from McNeese State University with a BA in Education
- Graduated from University of Texas Arlington with a Masters of Curriculum and Instruction in Mathematics.

Specializing in Anything "Team" Related
- Sustainability Best Practices
- Organization & Communications
- Educational Resources & Extension Activity Suggestions
- Fundraising & Grants
- Strategy & Game Analysis
This is for YOU - the Coaches. Please ask questions when you have them.

Mute Yourself
Utilize the Chat
Cameras Optional
Be Respectful
### WE ARE NOT HERE TO:

- **CALL OUT SPECIFIC PEOPLE**
  We’re all here to learn and grow together

- **DEBATE BEHAVIORS**
  The rules are there to help Teams learn what is and is not Student-Centered

- **BRING UP PAST EVENTS**
  “let go of the past, but keep the lessons it taught you”

### THE MAIN GOALS ARE TO:

- **ENCOURAGE POSITIVE ENVIRONMENTS**
  Use your role as a teacher or coach to guide students through the learning process

- **IDENTIFY PROCESSES**
  What works for one, may not work for another. Steal from the best, and design the rest

- **SUPPORT GOOD CHOICES**
  Let’s focus on the future and how we can improve our Teams!

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**LET GO OF THE PAST, BUT KEEP THE LESSONS IT Taught YOU**

ROBOTICS EDUCATION & COMPETITION FOUNDATION
Inspiring students, one robot at a time.
CORE PRINCIPLES: STUDENT-CENTERED

Student-Centered Learning
Students are actively involved in learning opportunities to increase their knowledge and skills in the engineering design process, mechanical design, programming and teamwork under the guidance of adult mentorship.

Student-Centered Application
Students have ownership on how their robot is designed, built, programmed, and utilized in match play with other teams and Robot Skills matches.

Student Centered Policy
WHAT DOES STUDENT-CENTERED LEARNING ACTUALLY MEAN?

“Students are actively involved in learning opportunities to increase their knowledge and skills in the engineering design process, mechanical design, programming, and teamwork under the guidance of adult mentorship”

— Student Centered Policy, page 1
ALWAYS ASK YOURSELF, “AM I...?"

- Encouraging Students, or just expressing my opinions?
- Teaching or Telling?
- Fostering independent behavior and critical thinking?
- Performing a task that Students could do by themselves?
WHAT DOES STUDENT-CENTERED APPLICATION LOOK LIKE?

“Students have ownership on how their robot is designed, built, programmed, and utilized in match play with other teams and Robot Skills matches”

— Student Centered Policy, page 1
USING THE **STUDENT-CENTERED GUIDE**

**GREEN**

**STUDENT-CENTERED LEARNING & APPLICATION**

Students and adults should strive for these behaviors, although it is expected that students with novice skills may need adult guidance to achieve these behaviors.

**YELLOW**

**APPROPRIATE ADULT GUIDANCE**

Adults should be cautious that they reserve these supports for students that need them and strive to remove supports when appropriate.

**RED**

**NOT ALIGNED WITH STUDENT-CENTERED**

Represents examples of adult guidance that is not aligned with the REC Foundation student-centered policy and may be considered a violation of the Code of Conduct.
<table>
<thead>
<tr>
<th>At Events</th>
<th>Student-Centered</th>
<th>Non-Student-Centered</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Game Strategy</strong></td>
<td>Students collaborating to discuss game strategy with alliance partners at the</td>
<td>Adults giving students on their team or alliance partners step-by-step match play</td>
</tr>
<tr>
<td></td>
<td>practice field, team pits, and queuing areas. Adults offering cheerful and</td>
<td>instructions prior to or during a match. Adults specifying teams to select for</td>
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<tr>
<td></td>
<td>positive encouragement as a spectator during matches and helping students to</td>
<td>alliance selection (VRC) without student collaboration.</td>
</tr>
<tr>
<td></td>
<td>reflect after a match is complete.</td>
<td></td>
</tr>
<tr>
<td><strong>Mechanical Design</strong></td>
<td>Students actively working on their robot and investigating failures. Adults</td>
<td>Adults demonstrating how to assemble a component or make minor repairs with the</td>
</tr>
<tr>
<td></td>
<td>sharing troubleshooting strategies when students have questions.</td>
<td>assistance of students. Students make improvements after the demonstration is</td>
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<tr>
<td></td>
<td></td>
<td>completed.</td>
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<td></td>
<td></td>
<td>Adults building or fixing the robot with no student assistance or students only</td>
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<tr>
<td></td>
<td></td>
<td>watching.</td>
</tr>
<tr>
<td>Game Strategy</td>
<td>Mechanical Design</td>
<td></td>
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<tr>
<td>------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Students watching the game video and reading the game manual to review robot</td>
<td>Students brainstorming and researching mechanical design ideas, building and</td>
<td></td>
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<tr>
<td>criteria and scoring strategies. Adults reviewing scoring techniques and</td>
<td>testing prototypes, and assembling their robot. Adults teaching students basic</td>
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<tr>
<td>reflection strategies with the students. Students agree on game strategies to</td>
<td>building techniques or mechanical design concepts that students can modify and</td>
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<tr>
<td>influence robot design and match play.</td>
<td>apply to their robot. Design ideas leveraged from other teams, videos or other</td>
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<tr>
<td></td>
<td>sources should be credited in their engineering notebook and during Pit</td>
<td></td>
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<td></td>
<td>Interviews.</td>
<td></td>
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<tr>
<td>Adults modeling for students how to organize game information needed to help</td>
<td>Teams utilizing a robot built from instructions provided by VEX Robotics as</td>
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<tr>
<td>influence robot design. Adults organizing mock game scenarios to develop</td>
<td>a starting point. Students make improvements to these designs as the season</td>
<td></td>
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<tr>
<td>students’ teamwork and communication skills.</td>
<td>progresses. Adults providing primitive pre-made mechanical design learning tools</td>
<td></td>
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<tr>
<td></td>
<td>(ex: 4-bar linkage) for students to reference, and students build and modify</td>
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<td></td>
<td>mechanisms for their own robots.</td>
<td></td>
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<tr>
<td>Adults telling students which scoring strategies to use to influence robot</td>
<td>Adults providing students with pre-made instructions or a model to copy for</td>
<td></td>
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<tr>
<td>design or providing step-by-step instructions on how to play in a match (driver</td>
<td>competitive robot designs. Adults building the robot with no student assistance.</td>
<td></td>
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<tr>
<td>or autonomous).</td>
<td>Adults building or designing all or portions of the robot that is used “as-is” at</td>
<td></td>
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<tr>
<td></td>
<td>an event. A robot built by students from instructions provided by VEX Robotics</td>
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<tr>
<td></td>
<td>are an exception and are allowed.</td>
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</tbody>
</table>
CREATING STUDENT-CENTERED ENVIRONMENTS

TEACH STUDENTS HOW TO ADVOCATE FOR THEMSELVES
Instill self-confidence, and educate your students on best practices for professional communication and inclusivity

REVIEW THE POLICY WITH YOUR TEAM, PARENTS, AND VOLUNTEERS
Send the link to the documents, create a team contract, review it at a parent meeting

DEVELOP YOUR OWN VALUES AND DEFINITION OF SUCCESS
Each Teams’ goals should look different, based on the resources and growth of the organization

MODEL POSITIVE BEHAVIOR
Be the change that you want to see in the world - be an example of honesty, integrity and reliability
WHAT IS THE CODE OF CONDUCT?

- Act with integrity, honesty, and reliability
- Behave in a respectful and professional manner with event staff, volunteers, and fellow competitors
- Exhibit maturity and class when dealing with difficult and stressful situations
- Respect individual differences
- Follow all rules as listed in the current game manual(s)
- Student-centered teams with limited adult assistance
- Safety as a top priority
- Good sportsmanship, which includes supporting your alliance partners
CODE OF CONDUCT

WHO DOES IT APPLY TO?

- All Team Members
- Coaches
- Volunteers
- Teachers
- Event Partners
- Adults
- Mentors
- Parents
CODE OF CONDUCT
WHERE DOES IT APPLY?

ALL REC FOUNDATION SANCTIONED EVENTS
- Qualifying Events
- Tournaments
- Workshops

TEAM-SANCTIONED OFFICIAL EVENTS
- Meetings
- Gatherings
- Demos

NON-SANCTIONED EVENTS
- Related Events
- Acting on behalf of the Team
- Related to participating individuals
The Code of Conduct document clearly outlines the process for determining what behavior IS and IS NOT in alignment with the REC Foundation’s Student-Centered Policy and the Behavior and Ethical Standards.

The flow chart on page two is used by REC Foundation Staff to guide the investigation process from beginning to end.
REPORTING A SUSPECTED VIOLATION AT AN EVENT

1. Inform the Event Partner that you think you may have witnessed a Code of Conduct Violation.

2. The Event Partner will work with you to complete a “Field Notes” sheet to document your interaction.

3. The Event Partner will file all necessary forms and contact the REC Foundation.

4. Your REC Foundation representative will begin an investigation using the information provided.

5. Your REC Foundation Team Engagement or Event Engagement Manager may contact you for a follow-up, if necessary.

6. An REC Foundation staff shares findings with appropriate people at the conclusion of the investigation.

7. Investigations take time - so please be patient.

8. Always contact your TEM or EEM directly with any questions - DO NOT contact the Team or individual.
If you think you witnessed a Code of Conduct that did NOT take place at an event, or you could not report it DURING the event:

1. Contact your REC Foundation Team Engagement AND Event Engagement Manager for your region
2. An REC Foundation Staff member will work with you to document your interaction
3. Staff shares findings with appropriate people at the conclusion of the investigation
4. Investigations take time - so please be patient.
5. Always contact your TEM or EEM directly with any questions - DO NOT contact the Team or individual.
THANK YOU
SCAFFOLDING STRATEGIES FOR EFFECTIVE COACHING

2:00 PM