2021 VIRTUAL **REC FOUNDATION** SUMMI

REC FOUNDATION

SUM

Roles on a Team (Including Adults)

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AGENDA

- Introductions
- Why the Need for Roles
- Strategies for Assigning Roles
- Student Roles
- Adult Roles
- Best Practices Resources and Discussion



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PRESENTERS



Ryan Osweiler EEM - KY, NC, SC, TN, VA



Diana Fultz TEM - AR, LA, MS, TX



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WHY HAVE ROLES?

- Keeps students on task
- Gives students ownership
 - over task/assignment
- Allows students to
 - gravitate towards interests
- Learning teamwork



STRATEGIES FOR ASSIGNING ROLES

All team members begin doing everything, then move towards interests. Team members starting with their specific roles/interests Permanent rotation through roles.

Considerations:

- Multiple students per role-recommended
- Age/experience are factors
- Naming of roles
- Captain/team leader strategy?



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STUDENT ROLES

- Designers / Design Team
- Builders / Engineers
- Programmers / Code Specialists / Computer Scientist
- Engineering Notebook Manager / Historian / Data
 Specialist
- Drivers / Drive Team
- Pit Team / Electrical Engineers / Quality Control Specialist
- Scout / Consultant / Lead Strategist
- Captain / Team Leader
- Community Outreach Team / Program Liaison / Online Challenge Team



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ADULT ROLES

Mentor/Coach/Facilitator:

- Adults are expected to mentor and teach design, building and programming skills to the Students on the Team, but may not design, build or program that Team's Robot.
- Adults may assist Students in urgent situations, but Adults may never work on or program a Robot without Students on that Team being present and actively participating.
- Advise team on best practices/game strategy but not make decisions for the team ("have you thought about x, y, z?" vs "do this").



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REC Foundation Student-Centered Policy

Student-Centered

The Robotics Education & Competition (REC) Foundation's mission is to increase student interest and involvement in science, technology, engineering, and mathematics (STEM) by engaging students in hands-on, affordable, and sustainable robotics engineering programs. We believe that the student-centered model of

STUDENT CENTERED POLICY

- This guide includes expectations for organizations and their team members concerning the REC Foundation's student-centered policy and contains examples of student-centered activities to provide transparency and to encourage student learning opportunities.
- The overarching mandate is that adults should not provide an unfair competitive advantage by having students use designs, programs and game strategies that are inconsistent with the students' ability and knowledge base.

https://www.roboticseducation.org/resources_library/student-centered-policy/



ADULT ROLES

- Be a Positive Role Model
 - Advocate for your program in the community/media/etc.
 - Adults associated with a team are considered to be "team members" at events
 - How to handle success and adversity
 - Teach how to and let students advocate for themselves
 - Let team members solve their own problems independent learners
 - Focus on the big picture (what will students remember 10, 20, etc. years from now?



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RESOURCES AND DISCUSSION

- <u>Team Guide</u>
- <u>Student Centered Policy</u>
- Robotics Community
 - Facebook Coaches Group
 - VEX Forum
 - Teachers/Coaches/Mentors in your area
- Team Engagement Manager
- Discussion

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