

Mentors Workshop

**WESTVIEW
ROBOTICS
TEAM**



1510



Workshop Agenda

- Goal of the Workshop
- Review of Team Organization
- Mentor Objectives vs. Team Objectives
- Questions & Answers
- Summary

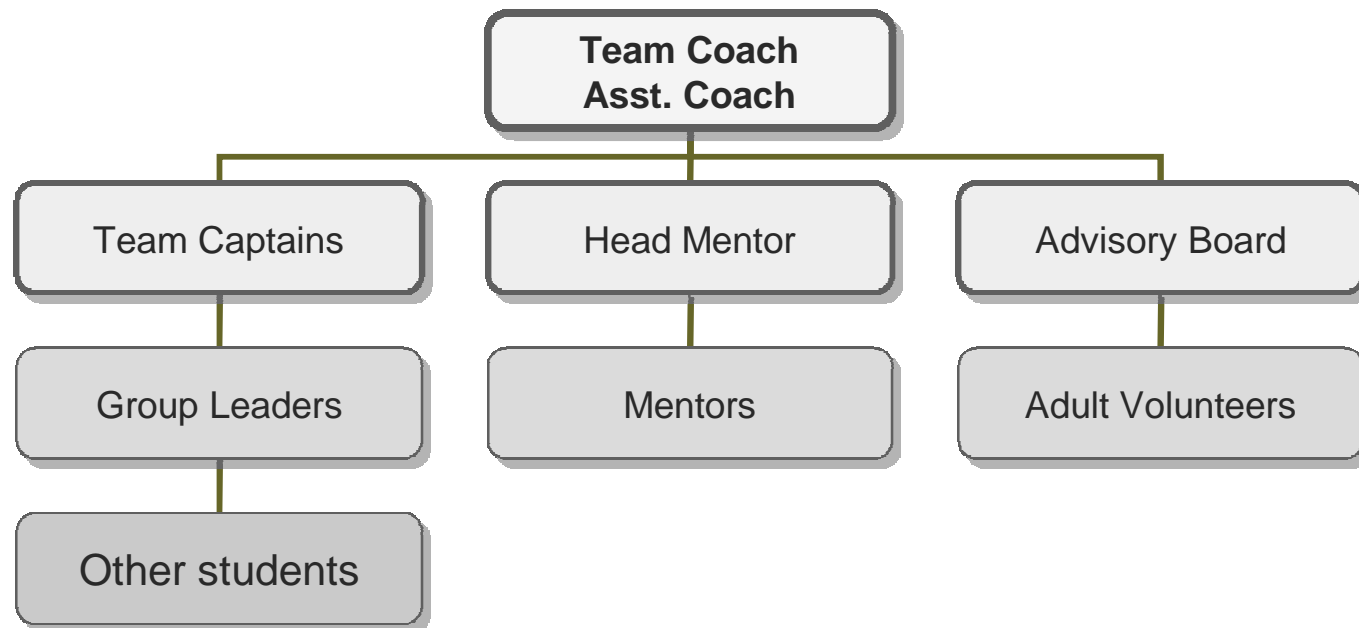


Goal of the Workshop

- Set up the Team's expectations regarding Mentors
- Review highlights of the Team Mentor's Handbook
 - Provide guidelines for some situations
 - Reduce stress during the build season
 - Improve efficiency



Team Organization





Team Motto



“Student designed, student built,
and mentors ~~approved~~
advised”



Definition of the word *Mentor*

noun - **One who advises** another, especially officially or professionally: adviser, **consultant, counselor.**

verb - To give **recommendations** to someone about a decision or course of action: advise, counsel, **recommend.**



Becoming a Team Mentor

Mentoring is the process by which an experienced person provides advice, support and encouragement to a less experienced person.

A mentor's **goal** should be to actively share his/her knowledge and experience with the students and provide an environment where the students can make choices, both good and bad.

The mentor's **main objective** is to foster growth in the student team members; building their technical expertise with practical experience and expanding their personal character with a professional attitude.

The mentors **reward** should be to see the students succeed with the students' design and creation.



IT IS NOT EASY!

BUT IT IS DOABLE!



Guidelines - Mentor's Roles

- Advise and guide the progress of the students in the team. Facilitate, make easier or less difficult, help move forward. (case 1)
- Honor the team's "hands-off" policy for mentors unless requested by a team member when executing a task.
- Inspire and motivate the students. Show your passion for your area of expertise. Share facts from your professional life.



Guidelines - Mentor's Roles

- Mentors should try to keep the work on track, however, watch for signs of stress and offer a break and a chance to relax.
- Encourage students to ask questions, think and talk things out.
- Final design decisions are made by the students with the advice of mentors. Be sensitive on how to communicate to the students any design issues you foresee.



Guidelines - Mentor's Roles

- Build trust and respect in the students
- Mentors must respect the ideas/suggestions of others. Avoid comments that are offensive.
- Promote independent thought. Approach all problems with an open mind, treat all ideas as equal, and resist any impulse to judge. Capture ideas as stated.



Guidelines - Mentor's Roles

- Ask open ended questions. Stay away from yes/no questions. Don't jump in with your idea or solution.
- Adapt the way you explain a topic to reach everyone in the group.
- Communication is vital to have everyone contributing towards the solution. Empower each student to have the courage to participate → project ownership.



Exercise

You come to one of the team meetings and join a group that was supposed to be building part of the robot. However, no work is being actually done. The students are talking a lot about unrelated things, nobody is taking the lead, and the part they were supposed to finish is critical to complete the project.

How should you (the mentor) behave in this situation?



Guidelines - Mentor's Roles

- Once ideas were discussed and a decision was made move on to the following project phases. Avoid having new or alternative ideas brought to discussion. (case 2)
- Inappropriate language should never be used. Students see the mentors as role models and view their actions and behavior as appropriate.
- Mentors should follow the concept of Gracious Professionalism



Guidelines - Mentor's Roles

- Encourage students to invent, but also be accountable. The KISS rule is very effective when inexperienced students are involved, use it.
- As students gain experience, the role of a mentor shifts from mentoring to sustaining.
- Things happen very quickly in the FRC project. When a mentor comes back after some days of absence he/she must let the work continue as it would be without him/her.



Guidelines - Mentor's Roles

- Mentors shall respect other mentors opinions, independently of their background or area of expertise.
- Mentors shall not have discussions without students' involvement. (case 3)
- Do not assign ownership to ideas.
- Treat all the students in the team the same way, independent of gender. (case 4)



It is not easy, but it pays off...

- It is a rewarding experience, you will be proud of the results.
- It is a unique opportunity to pass you knowledge and experience to the students. You can influence their lives.
- Mentors grow and learn new perspectives from participating in the students' brainstorming and working with them without being in a leadership role.



Conclusion

- Q & A
- Reference:
 - Chip R. Bell; "Managers as Mentors: Building Partnerships for Learning"; Berrett-Koehler Publishers
 - First Mentors Guidelines