

FLL New Coach Orientation: An Introduction to Coaching an FLL Team

Hosted by Senior Mentor, FLL Coach and FLL Partner
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Resources for coaching an FLL team:

FIRST LEGO League Coaches' Handbook*

FIRST LEGO League Challenge Project Training DVD*

2009 FIRST Compilation DVD*

FIRST: <http://www.usFIRST.org>

FIRST LEGO League: <http://www.FIRSTlegoleague.org>

General questions:

FLL Partner for your region of North America

FLL at *FIRST* Headquarters, flteams@usFIRST.org

*In registration packet

Please contact your local FLL Operational Partner for the specifics for the FLL program locally including training and tournaments. To find your FLL Partner go to the *FIRST* LEGO League website and click on 'Regional Contacts' in the left hand navigation.

1. What does a coach do?

- a. HAS FUN!
- b. Practices the Coaches' Promise, page iii Coaches' Handbook
- c. Helps the team set realistic, achievable goals – do this at the beginning! Review your goals during the season. If goals are reached determine next set of goals. Set goals for missions but also for project. Remember that this is a journey and you should assess it as you go. Celebrate your success as the season progresses.
- d. Facilitates the meetings – keep things on track especially with younger or less experienced teams.
- e. Encourages the process – the content will come from the team. Example: Brainstorming – you can teach them a successful process for brainstorming and they will provide the content.
- f. Asks questions to encourage the team's thinking and problem solving "What are you trying to do", "Is there another way you can do that", "Is there anything you can change", "Have you asked your team members", etc'
- g. Monitor the team's progress and remind them of the dates/time line. Let them decide where they stand/what needs to be done.
- h. Administrative responsibilities such as tournament registration and checking the Q & A frequently (more later).

2. FLL Core Values and Gracious Professionalism - in the FLL coach's handbook – p. i
Be sure the team understands the FLL Core Values as well as Gracious Professionalism and review them often during the season. Have them talk about what each value means to them as a team; encourage them to define their own additional Values. (They should also know the basics of *FIRST*, who founded it, what *FIRST* stands for, etc.)

- a. It is about the team – the kids do the work!
- b. Spirit of teamwork – learning to work as a team.
- c. Spirit of friendly competition – cheer the other teams on, learn from one another, and have fun together.
- d. Respect each other and respect each others’ ideas.
- e. Show Gracious Professionalism in everyday lives
- f. The journey is important - what you learn is more important than the awards at the end.
- g. Etc. – see the Coaches’ Handbook for more on FLL Values and Gracious Professionalism.

3. Overview of the FLL program – refer to the heart of the FLL program, page 5

- a. Robot – Chapter 4, p. 34.
- b. The Project – Chapter 5, p. 48. Just as important as the robot. *FIRST* is science and technology, not just technology. When it comes to the research project the team may need encouragement at *FIRST*. In the end, they may surprise you and embrace this part – give it a chance and give them a chance to discover something they may really enjoy!! There are three steps to the Project:
 1. Research the topic and identify a problem as defined by the assignment posted at kickoff;
 2. Create an innovative solution;
 3. Share your research, problem and solution with your community. The team defines their ‘community’ and who and how they share their research and solution. Be sure the team shares with the judges how they accomplished all three steps of the Project.
- c. FLL Events are a celebration of the teams’ accomplishments throughout the season. All aspects of the FLL program are equally important. So the breakdown for awards at tournaments: 25% each for robot performance, robot design, Project and presentation, and teamwork.
- d. Refer to the rubrics in Appendix A of the coach’s handbook. Know what the team will be judged on. Sharing the rubrics with the team is optional – there are mixed feelings among coaches on how best to share this information. However, team members do need to know how they are going to be judged. The rubrics guide the team in viewing various aspects of their work over the season.

4. FLL schedule Review in the Coaches’ Handbook Sample Schedules and Week-by-Week Milestones, pages 93-94

- a. May – September – registration open, registration materials and robots ship
- b. August – Field Setup kits begin shipping. Have the team put together the mission pieces and build/set up your table. The CD has instructions for putting together the mission pieces.
- c. August – read the FLL Coaches Handbook and review with your team the Project DVD and *FIRST* DVD. The team can begin to learn about the “SMART MOVE” challenge theme, teamwork, problem solving (brainstorming) and robot design, programming, etc.
- d. September 3rd – Challenge announced and kickoff material available. Be sure to read all material very carefully with you team before beginning!! Reference materials will be available on the website – this may include a video, links to helpful websites and other reference materials. Be sure to read the Project with your team as well as the robot missions – it is all important! Be sure all the pieces and the mat are placed properly on the board.

e. Tournament Dates – Refer to your region’s website and the FLL website for details on tournament registration. Be sure you watch for this, as registering with FLL initially is not the same as registering for a tournament. Tournament dates vary from state to state. **DO PARTICIPATE IN A TOURNAMENT!** Go even if you haven’t completed much.

5. Resources

- a. Coaches’ Handbook and both DVDs (that were sent with the Coaches’ Handbook).
- b. Appendix C, p. 110&111 in the handbook has helpful contact information such as phone numbers, emails, and websites.
- c. *FIRST* and FLL Partners and regional websites – vary by state.
- d. Local/regional new coaches training sessions – vary by state.
- e. Game Q & A on FLL website – this is the **official word**. This provides clarification on rules and should be checked often. Be sure coaches/mentors/team members understand every specific word of every mission. Be sure they understand the differences between words like in, into, to, out, onto, off, etc. Rules are very specific!
- f. flproject@usfirst.org for questions related to the Project
- g. Forum – also on the FLL website. This is an “unofficial” place where coaches and mentors give feedback and ideas on the robot, project, teamwork, tournaments, etc. This is very good for getting ideas, suggestions, and encouragement from others.
- h. Experienced coaches. *FIRST* is like a family, and they will be happy to share their experiences and answer questions.

6. How to get everything done? – You will always wish you had more time, but so does every other team!!

- a. Meeting frequency and times – this will vary from team to team. Many teams find meeting two times a week for 1 ½ - 2 hours works well. The *FIRST* meeting it is helpful to have team members and parents together to review FLL Core Values, create team Values, talk about goals, everyone’s responsibilities to the team, and what help is needed from everyone to ensure success.
- b. Breakdown of meetings – have a plan especially with larger teams, younger teams, and/or teams with only one robot. Be sure the entire team is making use of the meeting time. Examples of ways to break down weekly meetings:
 - i. One day for working on the Project and one day for working on the robot.
 - ii. Start and end the meetings with the entire team. For working sessions however, split the team in half. Half the team works on the robot and the other half the Project and then they switch.
- c. Parents help – don’t be afraid to ask for help. Parents can provide snacks, help with meetings, order shirts, make copies, communicate information to other team members, etc.
- d. Arrange for mentors/experts in the field to come to a meeting: engineers, scientists, experts studying a topic related to the theme such as University professors, teachers, etc. Field trips are also a good option.
- e. Remember KISS – This is a *FIRST* phrase “Keep it Simple Silly”. Don’t feel like the robot design, programming, research project, or teamwork activities have to be complex – simple can be great!!
- f. VOTE – Let the team make the decisions: team name, shirt design, robot design, Project topic, etc.
- g. HAVE FUN – team work activities are important. Team work activities don’t have to be fancy; they can be playing Frisbee or soccer for 20 minutes during each meeting. Team

spirit activities can really help build a team: coming up with a team name, shirt design, painting a banner, building a mascot, making hats, etc. Take time to do the fun things and the rest will follow.

7. Question/Comments

8. Review of basics

- a. HAVE FUN!
- b. Review goals during the season and celebrate as you go!
- c. Remember it is the journey!!
- d. Remember it is about the kids!!
- e. Remember all the life-long skills they are learning such as: self confidence, brainstorming, planning, listening, presentation skills, being part of a team, making a difference in their community, and doing the best possible job with limited time and resources.

To end: Have fun, remember it is the kids, remember it is a journey, and go to a competition even if you don't think you are ready – you'll be glad you did