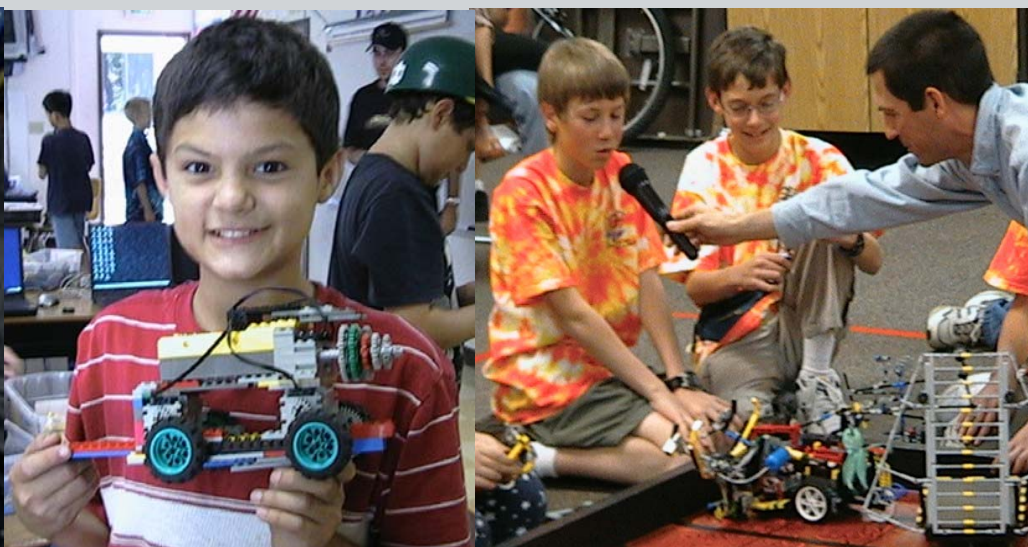




Los Altos Robotics
FIRST LEGO® League
2008 Season and Schedule



LEGO, the LEGO logo, MINDSTORMS and the brick configuration are trademarks of the LEGO Group, used here with special permission.



FIRST LEGO® LEAGUE

Presented by
Los Altos Robotics

- Introduction To FIRST and FLL
- Los Altos Robotics Organization
- How To Participate
- How You Can Help
- Question & Answer (10 minutes)
- End Meeting

Post-meeting: Q&A for potential coaches,
managers, and team organizers



FIRST Vision



"... to create a world where science and technology are celebrated..."

...where young people dream of becoming science and technology heroes..."

Dean Kamen, Founder and Visionary
FIRST Foundation

What is *FIRST* Foundation?

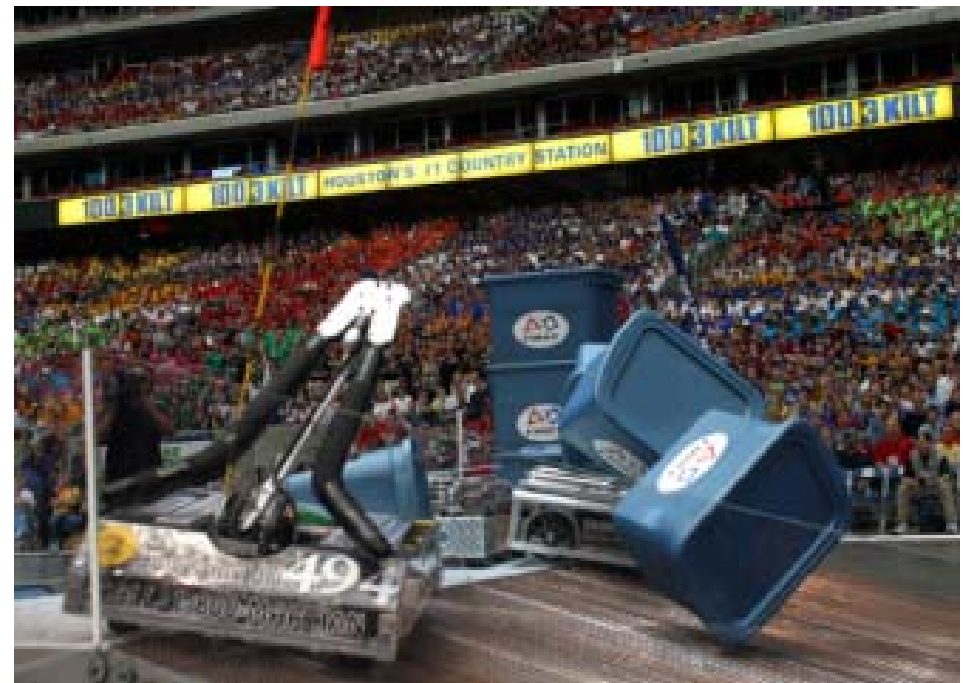
For **I**nspiration and **R**ecognition of **S**cience and **T**echnology



- Founded in 1989 by inventor Dean Kamen
- **FIRST Robotics Competition** for high-school-aged young people
- **FIRST LEGO League** for 9-14 year olds started in 1998
- **Other FIRST programs:** **FIRST Tech**, smaller scale robots for high school competitions, **FIRST Jr. FLL** for 6-8 year olds
- **Other programs:** **Botball** for jr/sr high school is run by KISS Institute for Practical Robotics

FIRST Robotics Competition for High School

- Combines the excitement of sport with science and technology
- Basketball-court sized field with autonomous and radio-controlled robots
- High-school-aged young people discover the value of education in science, technology and engineering



What is FIRST LEGO League

TEAMS OF 4-8 STUDENTS, AGES 9-14

- Build autonomous robots to solve challenges on a table-top sized field in a time trial competition
- Research and demonstrate their ideas to a panel of judges

WHAT TYPE OF CHALLENGE?

- An exciting and current technology or science
- A set of LEGO obstacles on an 4' x 8' field

HOW DOES IT WORK?

- 8 weeks to design, construct, program, and test solutions
- Use LEGO MINDSTORMS™ Robotics Invention or NXT Systems
- Compete with peers in high-energy tournaments



Challenge 2008



Embark on an exploration of the earth's climate in the *FIRSTLEGO* League's 2008 Climate Connections Challenge!

- Discover the links between science, people, resources and communities.
- Unearth how we learn about past climates and delve into questions surrounding our current and future climatic conditions.
- **KICK-OFF IS SEPTEMBER 5th** with a world-wide unveiling over the internet



Benefits of FIRST LEGO League

- Creates an environment where it is “cool” to get excited about science and technology
- Children have fun watching their own ideas in action, while building self-confidence, knowledge and life skills
- Creates a microcosm of working in a real-world design or engineering team

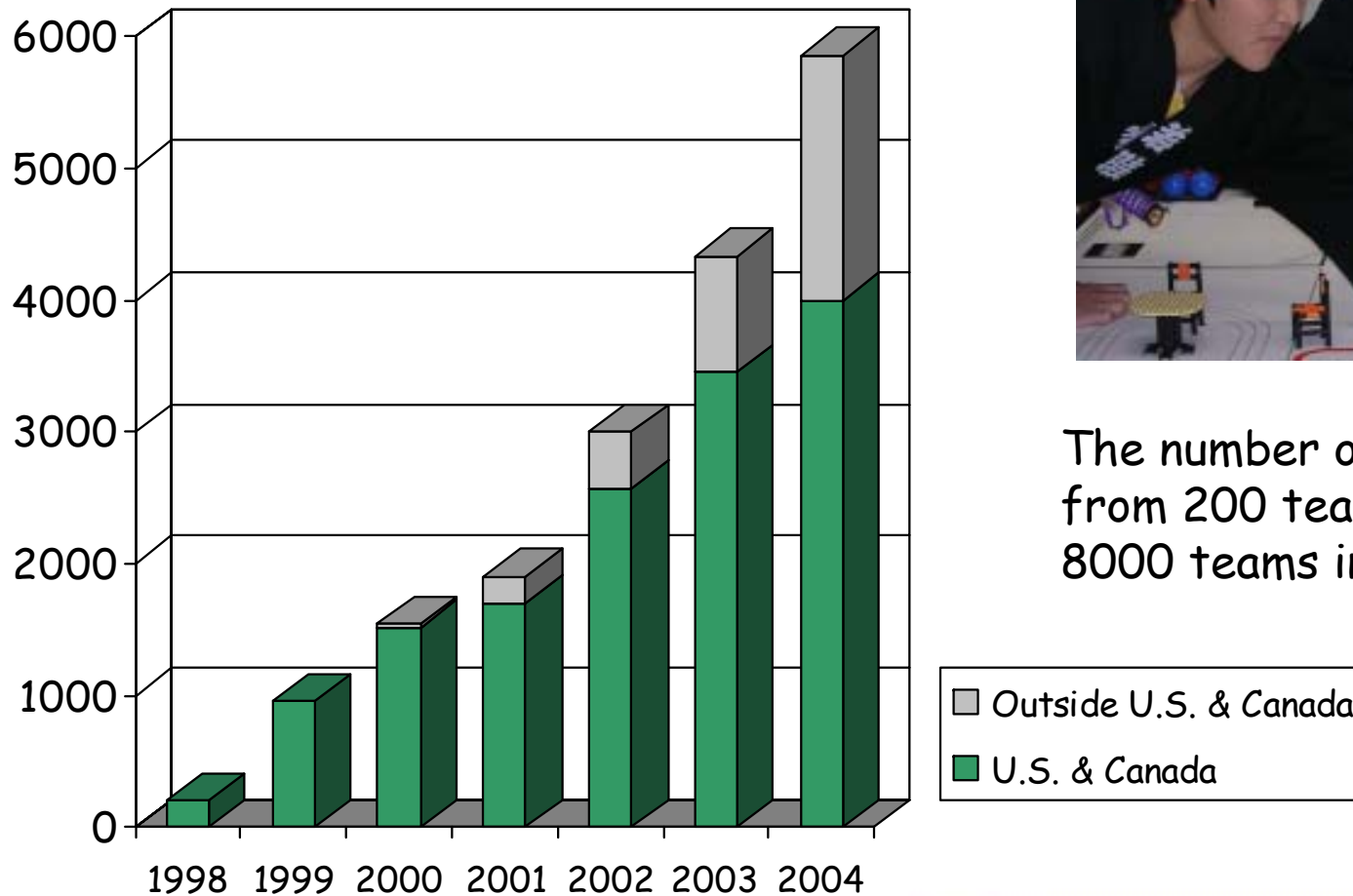


FLL History:

50% US/CAN growth since 2001

120% International growth

Teams



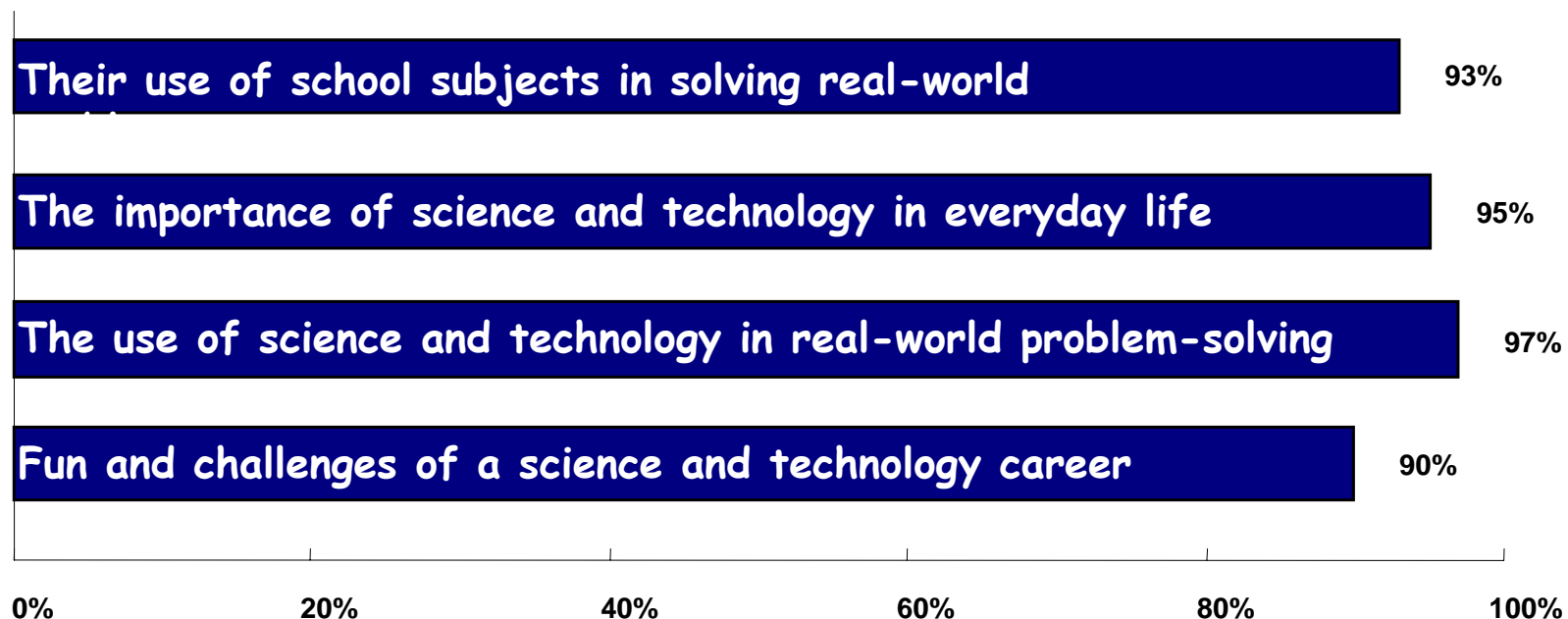
The number of FLL teams has grown from 200 teams in the U.S. in 1998 to 8000 teams in 20 countries in 2007.



FLL Impact

In the 2004 evaluation of FLL, Brandeis University also found:

Increased knowledge of:

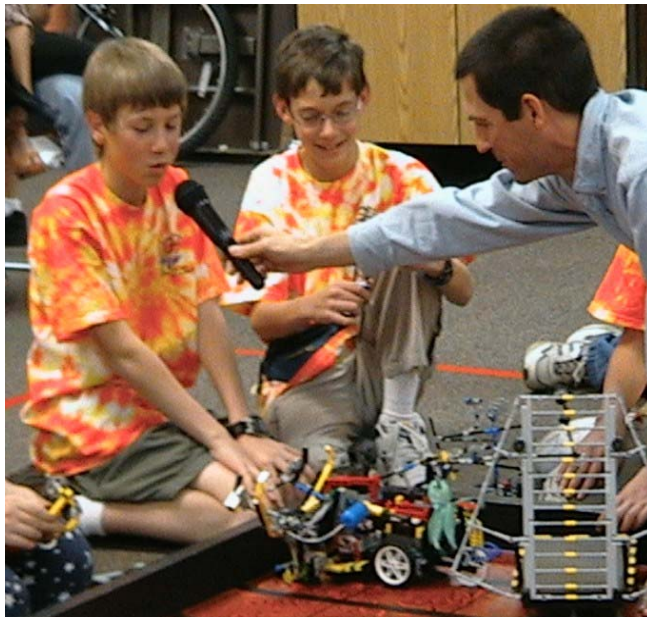


Source: FLL Program Study by Center for Youth and Communities, Brandeis University, May 2004



What is Los Altos Robotics?

Los Altos Robotics is dedicated to providing the opportunity for our children to challenge themselves and experience the joy of building and programming robots



- Promote **First Lego League** in Los Altos area. There were 26 teams last year with over 140 players. Los Altos FLL qualifying event was one of only 12 such events last year in California.
- Promote and organize **Botball teams**, a robotics activity directed at grades 7-12
- Support **FIRST Robotics** activities in Los Altos area high schools

Who To Contact: Los Altos Robotics FLL Board

How to Contact: Get Email Addresses on Web Site

- Team Registrar / Information: Mike Murray and Michael Schuh
- Volunteer Coordinator: Mike Murray
- Judging Coordinator: Finbar Crispie
- Head Judge: Eitan Fenson
- Referee Coordinator: Ogen Perry
- Head Referee: Scott Shearer
- Coaches Meeting/Training: Gordon Elder, Mike Murray
- Playing Fields: Gordon Elder
- Treasurer: **OPEN**
- Facilities: Finbar Crispie
- T-shirts: Diane Silverman
- PR/Advertising/Articles: Dave Lordemann and Ogen Perry
- Board Coordinator: Edmond Macaluso
- Email / Inquiry Coordinator: Michael and Wyn Schuh



Los Altos Robotics FIRST Lego League 2008 Calendar

- Aug 20 **Los Altos Robotics Participation Registration begins**
- Tue, Sep 2 * **Parent orientation**
- Fri, Sep 5 **FLL 2008 challenge unveiled on web**
- Sep 20 **Teams should be organized** (kits and challenge ordered by now)
- Sun, Sep 14 * **Coaches meeting** (coaches, assistant coaches, team managers)
 All coaches are **required** to attend. (meeting followed by training)
- Sep - Nov **Challenge season** (8 week research, build, program, and test)
- Sat, Oct 25 * **Rules review for Coaches and Players** (Blach, 4-6?)
- Sun, Oct 26 **Los Altos Scrimmage** (Blach, Sunday, noon - 5 pm)
- TBD in Nov **Los Altos Local Competition** (Blach, Sunday??, noon - 6 pm)
- Jan **Northern California State Tournament** (San Jose)

* - Team Assistance Meetings



Participation: How Are Teams Organized?

- Parents Are The Only Ones Who Organize Teams.
- Teams may be formed from: friends, schools, churches, youth organizations
- Parents post messages to **TigerBots Yahoo Group** to request teams/teammates
- LA Robotics DOES NOT organize teams or register players

WHAT PARENTS CAN DO TO ORGANIZE A TEAM

- Volunteer to be a coach or team manager
- Check with your child's friends to gauge interest level
- Teams generally work best with children at the same grade level
- Keep a copy of the Los Altos Robotics flyer with you and talk to teachers
- **TigerBots is a great place to ORGANIZE AN ALL-GIRLS TEAM**



What Are The Team Requirements?

- Up to 10 children (4-6 recommended), 4th grade to 14 years old
- At least one adult coach (we recommend a team manager too)
- For young teams (4th, 5th grade), at least one assistant coach

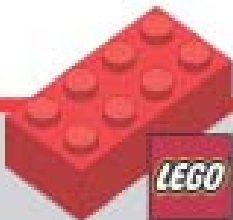
ORGANIZING STEPS

- Get team members, coaches, and manager
- Register team with National FLL ASAP (National FLL will send coaches manual, challenge set, field insert, and optionally, one FLL Robot kit)
- It is best to register and order kits by August 1 to get supplies in time
- Acquire additional robot kits (2 kits per team) and have kids do training labs before the challenge is announced
- Build a 4' by 8' field or request one from Los Altos Robotics (we have several)
- **Attend coaches meeting/training!** (coaches, asst coaches, managers - parents too)
- Send in Los Altos Robotics tournament registration, fees and t-shirt order



How Much Does It Cost?

➤ Item	Team Cost	Player Cost (Team of 6)
➤ FLL Team Registration	\$200	\$33.32
➤ Field Challenge Set	\$50	\$8.33
➤ Robotics Kit (buy / lease) (1 or 2 kits per team)	\$300 / \$600	\$50 / \$100
➤ LAR FLL T-shirt	\$96	\$16 (per shirt)
➤ LAR Tournament Fee	\$50	\$8.33
➤ LAR 4' x 8' board	\$40	\$6.67
➤ Misc expenses (batteries)	\$30	\$5
➤ Total	\$766 / \$1066	\$127.65 / \$168.65



Frequently Asked Questions

- When do you assign my child to a team? We DO NOT assign players to a team. Teams are formed by parents. Organize w/friends or TigerBots yahoo group.
- What are typical meeting times? The coach sets meeting times with input from the team. Often there is a shorter meeting on a weekday and a longer meeting on the weekend.
- What is the time commitment for the children and parents? My child attends soccer, music lessons, and Scouts, so I want to make sure there is not a conflict before I sign them up.
Players: 4-6 hours per week (about the level of a recreational soccer team).
Coaches: Player meetings plus prep time.
- I don't know anything about robotics or programming. How can I help? Team manager, assistant coach, or tournament volunteer.
- My 4th grader is 9 years old and the age range says 9-14, can he participate? Some 4th graders are excited initially, but end out mostly playing with legos.
 - Do they like math, chess, or puzzles; or want to build or program games?
 - Can they stay reasonably focused in a team setting



Frequently Asked Questions

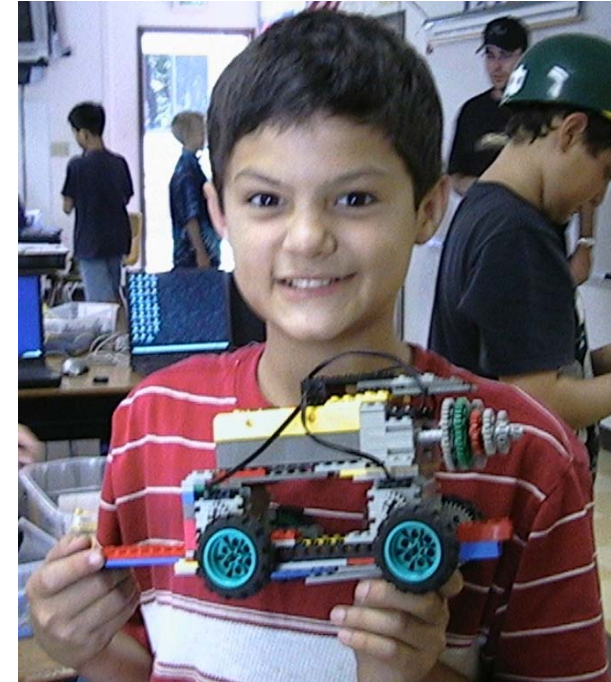
- What is the NXT kit? LEGO's new generation of robot kits was announced in January of 2006 and is called NXT. When you register your team, you have the option to order a new NXT kit or an older generation RCX kit. NXT kits are the new technology and now used most often.
- How do NXT kits compare to RCX kits? NXT has more capability and newer software than the RCX kits. NXT is the technology going forward, so RCX will be quickly outdated.
- Is there a competitive advantage with NXT vs RCX? For FLL, much of the challenge lies in mechanical building and creating clever solutions with technology that is somewhat imprecise. NXT is generally any more precise and it is somewhat easier to create a working solution in NXT than RCX.
- What kit should my team use? If you plan to order a new kit, it is best to order the NXT rather than an older generation RCX kit.
- What's new with Los Altos this year? We no longer lease kits. We no longer manage team formation - use TigerBots instead. We have expanded the coaches meeting/training and added the rule review meeting. More scrimmage runs.



How Parents Help

- **Coach a team**
- **Manager or assistant coach**
- **Tournament role - required for each team**

- **Join the Board Of Directors!**



"This is a great organization and wonderful for learning about Robotics. We've been involved with the program for two years and I would certainly encourage this as a school or extracurricular activity. "

-- **Dr. Sharon Moerner**, Blach Intermediate School

How Schools Help

Teachers and PTA

- Spread the word about FLL
 - School calendar
 - Frequent Flyer
 - School newsletter and web site
 - Jr High Science Teachers
 - Host an on-site demonstration (e.g. at science fair kick-off)
- Encourage parents to form teams

Administration

- Provide scrimmage and tournament venues!
- THANK YOU!!!
 - Leslie Crane (Blach Principal)
 - Tim Justus (LASD Superintendent)



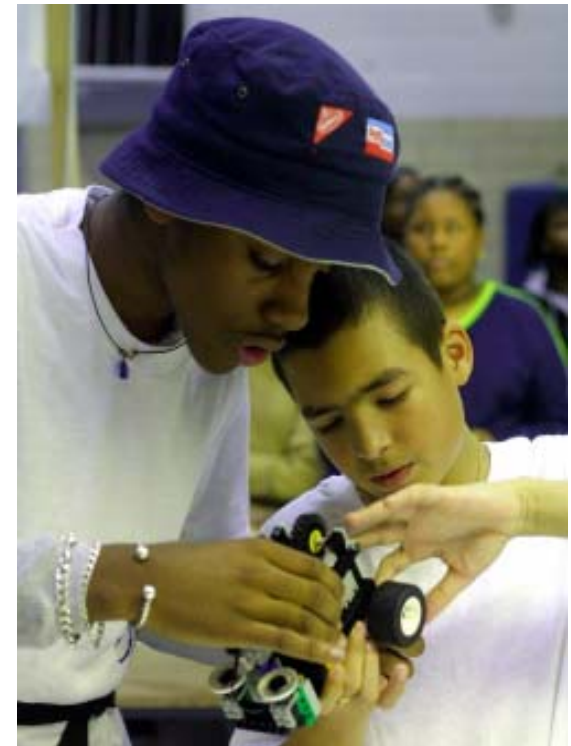
How Supporters and High School Students Help:

Sponsors

- Make a donation to NCaFLL (see our web site)
- Sponsor Botball teams (see our web site)

High School Robotics

- Referee at the FLL tournament
- Demonstrate FIRST robots at the FLL tournament
- Mountain View Sparten Robotics and Los Altos Eagle Robotics have provided **OUTSTANDING** support at Los Altos FLL tournaments.





FIRST LEGO® LEAGUE

Presented by
Los Altos Robotics

- Introduction To FIRST and FLL
- Los Altos Robotics Organization
- How To Participate
- How You Can Help
- Question & Answer (10 minutes)
- End Meeting

Post-meeting: Q&A for potential coaches,
managers, and team organizers

