



FIRST LEGO® LEAGUE

Presented by
Los Altos Robotics



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- Introduction
- Video of Last Year's Tournament (5 minutes)
- Presentation (20 minutes)
- Question & Answer (10 minutes)
- End Meeting

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



FIRST Foundation



"... 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



- 501 (c) 3 not-for-profit organization
- Founded in 1989 by inventor Dean Kamen
- **FIRST LEGO League** for 9-14 year olds
- **FIRST Robotics Competition** for high-school-aged young people

FIRST LEGO League for ages 9-14

- Introduces children to the wonders of engineering, science, math, and technology in a fun and engaging way.
- Table-top sized field with theme-based challenges solved by autonomous robots
- Children have fun while building self-confidence, knowledge and life skills



How it Works

CHALLENGE RULES ANNOUNCED EACH FALL

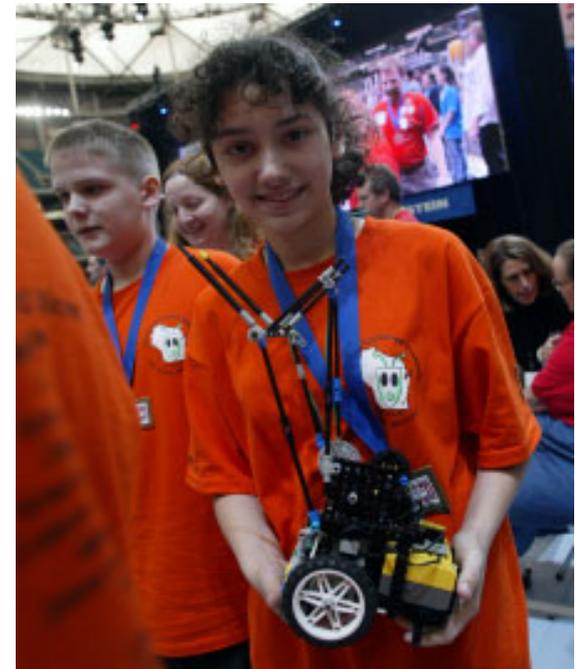
- Present kids with a real-world problem
- New, theme-based challenge each year

TEAMS OF STUDENTS GET ORGANIZED

- Work as a team of up to 10 players (4-6 is best)
- Learn with adults and mentors

CHALLENGE SEASON FOR 8 WEEKS

- Design, construct, program, and test solutions
- Use LEGO MINDSTORMS™ Robotics Invention System
- Competing with peers in high-energy tournaments
- Presenting solutions to a real-world problem to a panel of judges



2005 Challenge: Ocean Odyssey

FIRST LEGO League travels into the depths of the ocean to explore the mysteries that lie below.

- **EXPLORE** our vital oceans which are importance to the health of the Earth and to everyone that lives on this planet
- **BUILD & PROGRAM** a robot to find solutions that will sustain the health, biodiversity, and productivity of the world's oceans for present and future generations
- **KICK-OFF IS SEPTEMBER 12** with a world-wide unveiling over the internet

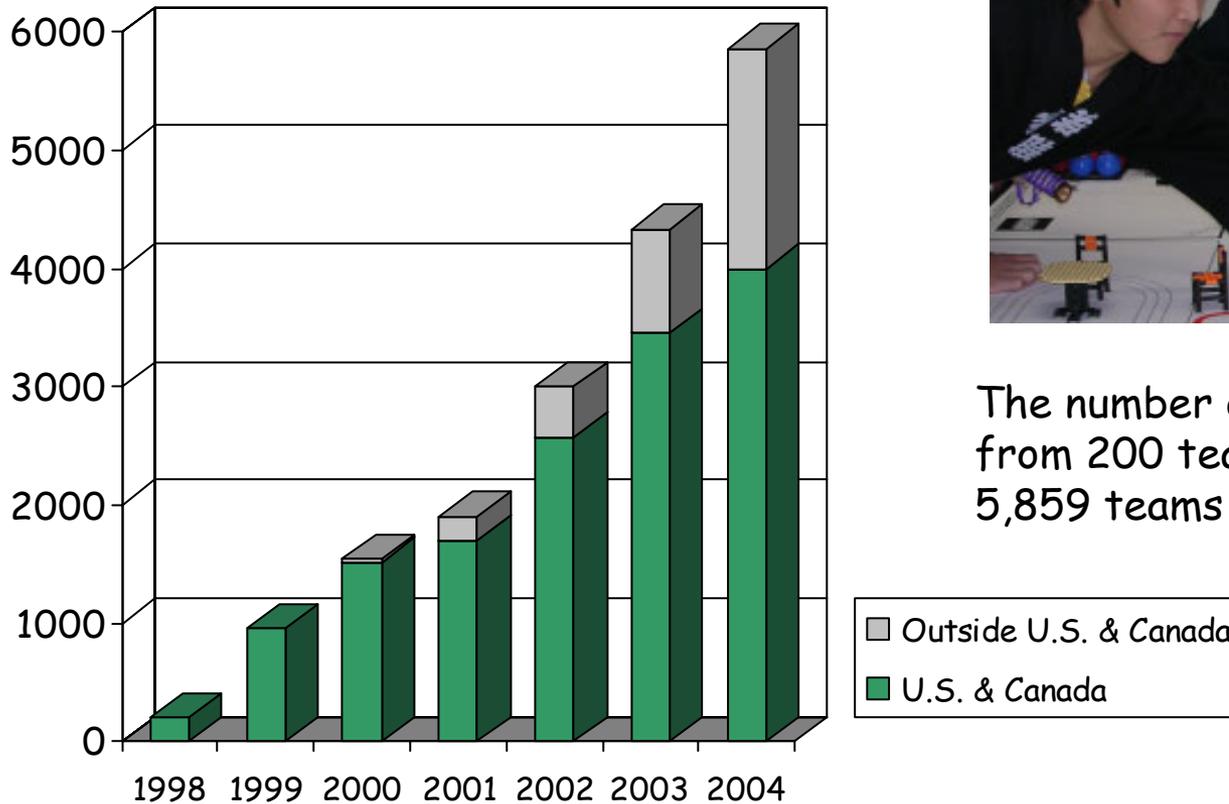


FLL History:

50% US/CAN growth since 2001

120% International growth

Teams



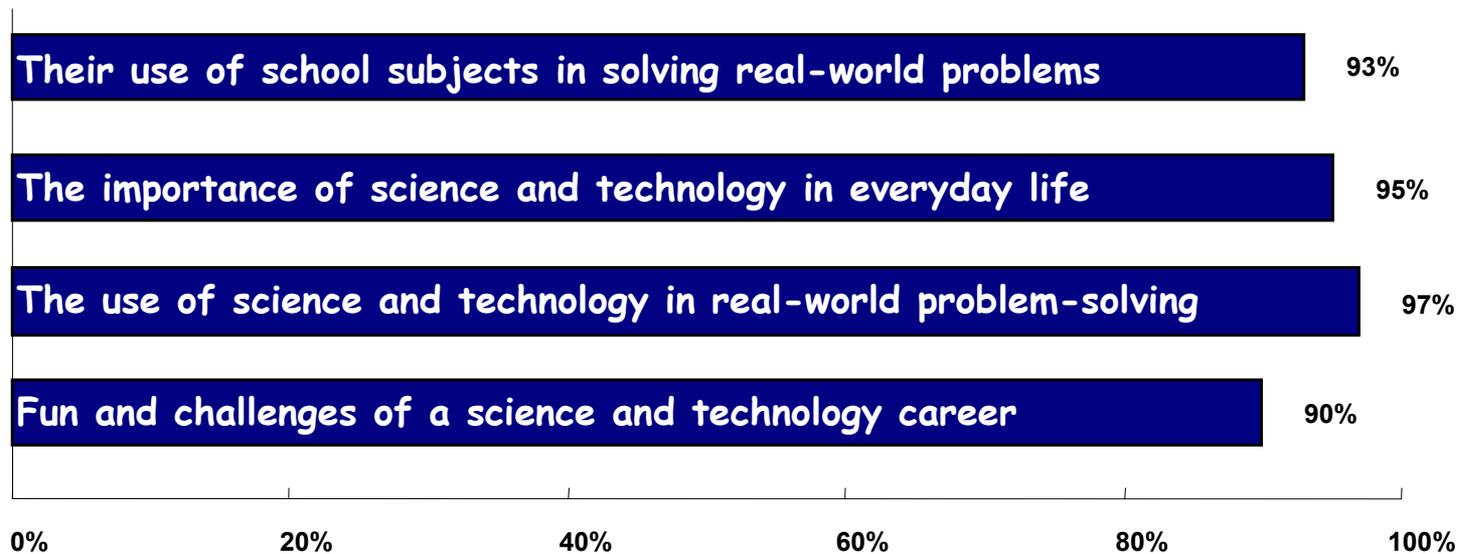
The number of FLL teams has grown from 200 teams in the U.S. in 1998 to 5,859 teams in 20 countries in 2004



FLL Impact (Student Survey)

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

Increased knowledge of:



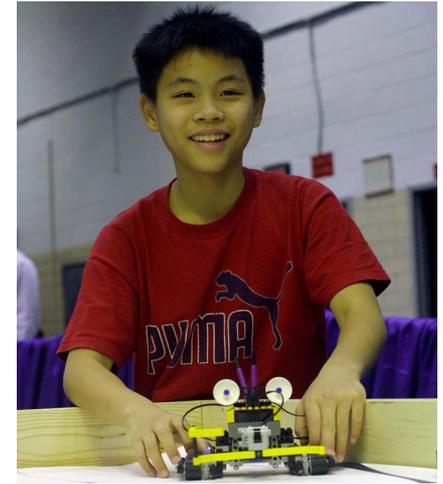
Source: FLL Program Study by Center for Youth and Communities, Brandeis University, May 2004



FLL Impact (Coaches Survey)

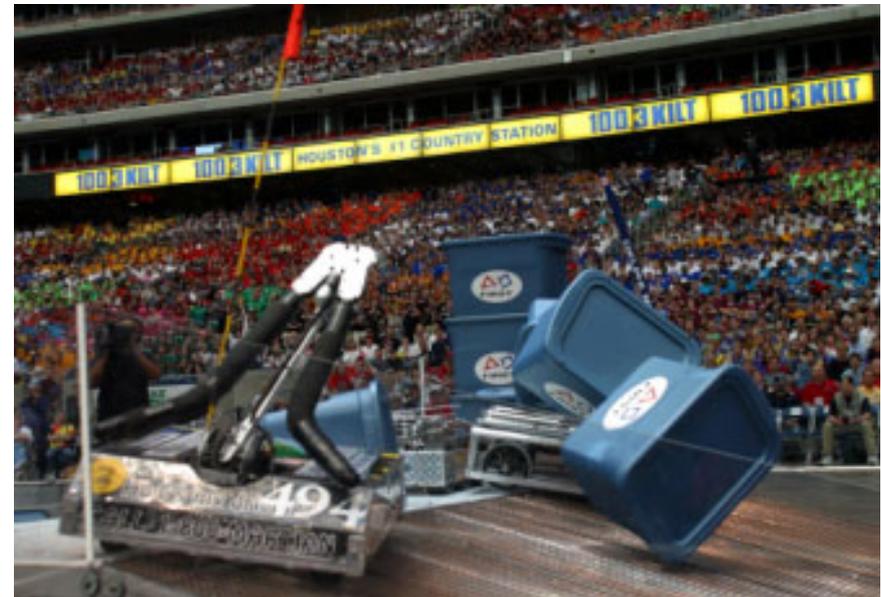
In a 2004 evaluation of FLL, Brandeis University found:

- ✓ 94% of coaches reported an increase in students' understanding of how science and technology can be used to solve problems



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 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 17 teams last year with over 100 players.
- Organize the **Los Altos Local Competition**, an FLL qualifying event since 2001 and one of only 7 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

Los Altos Robotics FIRST Lego League 2005 Calendar

- Aug 10 **Registration begins**
- Aug 28 * **Robotics kit leasing begins** (Kits@LosAltosRobotics.com)
- Aug 30, Sep 6 * **Parent orientation**
- Sep 3 **Registration due** (for players who need help finding a team)
- Sep 9 **Teams should be organized** (kits and challenge ordered by now)
- Sep 10 * **Coaches training** (coaches, assistant coaches, team managers)
- Sep 12 **FLL Ocean Odyssey challenge unveiled on web**
- Sep - Nov **Challenge season** (8 week research, build, program, and test)
- Oct 16 **Los Altos Scrimmage** (Covington and Oak, noon - 5 pm)
- Nov 19 **Los Altos Local Competition** (Covington and Oak, noon - 6 pm)
- Dec - Jan **Northern California State Tournament** (San Jose)

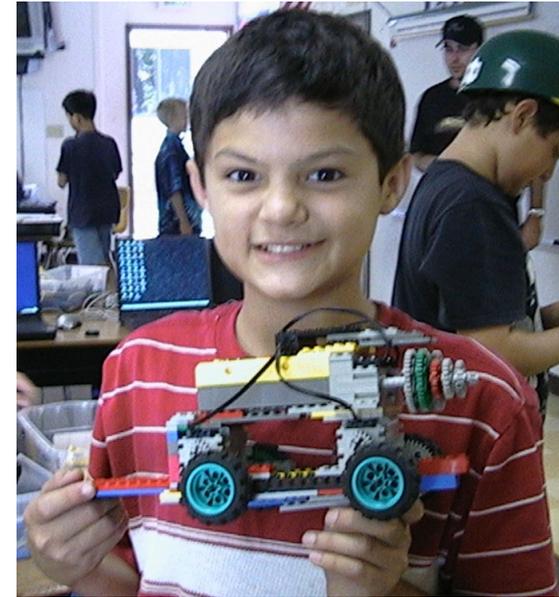
* - New for 2005



Get Involved: Volunteer

OPPORTUNITIES

- **Coach a team**
- Manager or assistant coach
- Tournament role - see web site
- Be a mentor for helping other coaches
- Be a young mentor for helping other players



"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

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. We track status and communicate contact info.
- 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.
- My child wants to participate, but I don't know anything about robotics or programming. How can I help? Team manager, assistant coach, listener.
- My 4th grader is 9 years old and the age range says 9-14, can he participate? Many 4th graders are excited about it but end out mostly playing with legos.
 - Are they good at math, chess, or puzzles; or want to build or program games
 - Can they stay reasonably focused in a team setting



Get Involved: Organize A Team

- 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
- Have each player register with Los Altos Robotics
- Register team with National FLL ASAP (National FLL will send coaches manual, challenge set, field insert, and optionally, one FLL Robot kit)
- Acquire additional robot kits (one for every 2 players)
- Order 4' by 8' field from Los Altos Robotics
- Attend coaches training
- Send in Los Altos Robotics scrimmage fee and t-shirt order





Get Involved: Parents Are The Only Ones Who Organize Teams

- Teams may be formed from: friends, schools, churches, youth organizations
- Until Sep 3rd, LA Robotics will notify parents of other players at same school and same grade level
- After Sep 3rd, LA Robotics will notify parents of remaining unassigned players
- LA Robotics DOES NOT assign players to teams and DOES NOT guarantee a player will find a team even if the player is registered on our web site

WHAT PARENTS CAN DO TO FACILITATE

- Volunteer to be a coach or team manager
- Check with your child's friends to gauge interest level
- Check for player recommendations from your child's teacher
- Keep a copy of the Los Altos Robotics flyer with you

LA ROBOTICS WILL WITH RECRUITING GIRLS AND HELP YOU ORGANIZE AN ALL-GIRLS TEAM





Who To Contact: Los Altos Robotics Board (listed on web site)

- Tournament Coordinator: Michael Schuh Michael@LosAltosRobotics.Org
- Tournament Coordinator: **OPEN**
- Registrar: Edmond Macaluso Registrar@LosAltosRobotics.Org
- Kit Leasing: Lew Yobs, Kits@LosAltosRobotics.Org
- Coaches Training: Gordon Elder
Sudip Nag
- Playing Fields: Gordon Elder
- Treasurer: Gita Bhargava
- Infrastructure: Eitan Fenson
- Webmaster: Fritz Mueller WebmasterLosAltosRobotics.Org.
- Girl's Participation: Gita Bhargava
- Junior FLL (8 year olds) **OPEN**
- School District Liason: **OPEN**



Get Involved: Schools

OPPORTUNITIES

- Spread the word about FLL
- Encourage parents to form teams
- Provide space for teams to work
- Be a tournament site



Get Involved: Sponsors and Donations

LOS ALTOS ROBOTICS

- Support The Young Mentor Program
- Kit Donation Program (DONATE YOUR OLD KITS!)
- Tournament Sponsorship Program
- Travel Fund For FLL and Botball





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