They say necessity is the mother of invention, but we believe dreaming is. The Spikes started as a dream of 2 students in 2007. Their dream became our reality thanks to their passion. Now, 11 years later, we’re 40 pupils who never stop believing and dreaming together with the help of our mentors, our school, our city and *FIRST*. So why are dreams so important?

In order to make our dreams come true we follow 3 core values. We always uphold Gracious Professionalism, whether it’s in our interaction with other teams, our schoolmates or at the places we volunteer. Secondly, we promote our community with special emphasis on our city. Although few of us live in Lod, it’s our town and we strive to make it a better place. Thirdly, our team is dream-led. Most of our successful programs start with a Spiker’s dream and that makes us believe in the power of dreams.

One of our missions is to encourage everyone to realize their dreams and make them a reality. Whenever possible we insist that sophomores be included in as many meetings and decisions as possible."I always feel like my opinion is valued. It makes me feel part of the team”, says Tomer K, sophomore. Tomer is one of the many who prove our vision works like a dream.

Our alumni show that they continue to dream. Aside from volunteering in many *FIRST* events and mentoring, teams in Israel enjoy another competition thanks to them. In 2011 our alumni felt that the time between the offseason and the build season could be put to good use. They founded the Falafel/Spinoff competitions in which over half the teams in Israel participate. Another alumnus together with other FRC alumni, developed the purchasing and registration system FIOS used by all *FIRST* Israel programs. In addition, one of our alumni was the manager of FRCIsrael for 3 years. They’ve definitely changed the landscape of *FIRST* Israel.

There is no doubt many of our dreams come true thanks to our sponsors. We appreciate their support and generosity. Our relationship with them goes beyond supplies and manpower. We send weekly updates, keep in touch with their employees and are often invited to lecture on robotics and the values of *FIRST*. It has become a tradition to demonstrate our robot at Motorola Solutions and Nesher. This year we gave a lecture to Atid (an educational network that specializes in STEM) principals and strengthened our connection.

Our school has been there for us, from the first day, from thefirst dream. It has given us our workshop, supported us and has helped us make a difference. In the past, the 2 original members went largely unnoticed, but now everyone, from the principal to the janitor root for us at competitions and are inspired by our passion. Every year, our freshmen robotics club is completely full and the number of people that come out on our annual Spikes Day to cheer us on is a source of pride. Also,the continued success of our co-run learning center program is a dream come true.

In order to recruit the next generation of dreamers we use our 4E System. Expose - we expose all potential students to our robot and team during our school’s open days. Excite - we excite students about robotics on Spikes Day and in our weekly robotics club which encourages them to join the team. Explain - we explain to the freshmen about us and encourage them to sign up to our annual summer workshops, and Educate - we teach all aspects of FIRST and about our team at our annual summer workshops in our school. We see the huge impact of the system by the growing number of our new members.

When we dream, we see the world of STEM as a leader in gender equality. In order to promote this we encourage women everywhere to dream BIG. Last year we worked with 1902 from Florida to bring their #*FIRST*LikeAGirl project to Israel. Its goal is to inspire women by sharing stories of women in *FIRST.* As a part of the project, we filmed over 15 girls including 7 from other teams in Israel. In thanks, 1902 chose us as their ambassadors in Israel. Additionally, this year we started our very own initiative in our school- the LIGHT conference. 8 Israeli women, business leaders and university scientists including a Spikes alumnus, lectured about their growth as women in STEM. They inspired teens from our school, city and other teams to learn what women are capable of. Never in our wildest dreams did we expect this to be so successful and we’re looking forward to holding our second one next year.

We believe in the strength of dreams. Yet, not everyone has the opportunity to fulfill their dreams. This is why 5 years ago we started a biweekly learning center for underprivileged kids in Lod. This year 15 Arab children joined our center (bringing the number to over 80) to learn Hebrew. They felt that learning Hebrew would bring them one step closer to the world of academic studies in Israel. Their teachers have told us that we’ve had an emotional impact on them. They come to class with their homework ready, confident enough to believe they can understand and even ask questions. That confidence might be the little boost they need in order to fulfill their dreams.

But it wasn’t enough for us. We wanted to show that STEM is more than homework- STEM is a door to a world full of new dreams. We created a new project- Science Holiday. During Hanukkah, we created and handed out 1200 science kits in different elementary schools in Lod. Each kit contained an activity and an explanation written by us about the science behind the experiment. It was great to see the spark in their eyes as they conducted the experiment. We’re sure it was the beginning of their new dreams in STEM.

A few years ago we understood the importance of establishing a *FIRST* infrastructure in Lod. We dreamt of inspiring the littlest citizens in Lod. We knew that for kids to embrace the STEM fields they need to be exposed to them as young as possible so that they will grow up thinking of *FIRST* and STEM as part of their future. Now, a few years later, we are excited to say that we have opened our 3rd FLL Jr. team in Lod. It’s wonderful to witness the children’s dreams become a reality as they research, build and program their projects.

We also dream of using the skills we acquired through *FIRST* to make the world a better place. In 2013 we created the SpikesTikes project to help children with physical therapy treatments which are often painful and dull. Programming and designing games using the Xbox Kinect camera makes kids focus on the game rather than on their pain. Thinking outside the box, we expanded our vision by helping emotionally-challenged kids with their disorders as well. Heading into our second year, we definitely see changes. “It's great to see how better the kids communicate with their surroundings since the SpikesTikes project”, says Mali Z. Principal of Maapilim Elementary School.

*FIRST* lit a spark in our earliest alumni to make their dream come true and start The Spikes. Now, our dreams give back to *FIRST*. Our commitment to volunteering in *FIRST* is well-known in Israel. We do it to see the difference we can make not only for *FIRST* but also in the lives of people. “Every competition with the Spikes as our volunteers is a relief. They’re the backbone of our volunteer core", says Keren M., FLL and FLL Jr. director.

But our impact on *FIRST* doesn’t stop at competitions, we also believe in enlarging the *FIRST* community. We’ve started 9 FLL teams, 3 FLL Jr. teams and 1 brand new FTC team 12989. Today, we mentor 13 teams in Gedera, Shoham, Modiin and Lod. We founded and mentored 2 FRC teams 5961 & 5635. We’re proud that 4 years ago we started our very own FLL Jr. and FLL mentor seminars and this year we expanded them to include an FTC seminar. We also ran and hosted a 3rd annual FLL kit build day. Together with FRC teams 2231, 2679, team alumni and other *FIRST* members, we assembled over 50% of the Israeli FLL competition kits. We’ve hosted *FIRST* events in our school-an annual FLL referee seminar and an FLL Jr. festival.

Coopertition enables us to share and create dreams with other FRC teams. Last summer, we visited 3339 for an inspiring meeting about community work and marketing. We also co-mentored *FIRST* teams with 2231, 5990, 3835 & 3316. Since our annual summer workshops inception a decade ago, many teams have joined our new team members to learn what it takes to be an FRC member. There is no doubt we’ve influenced the position of FRC in Israel. Last year we gave a successful lecture on awards and helped with programming to 2096. This started a chain reaction: teams 6738, 5636 and 5987 asked us to assist as well. We provide published resources through our online library called SpikesLib which extends *FIRST*’s programming library and encouraged other teams to use it. 5747 has already started programming with SpikesLib. This year, we’re working on a joint project with 4568 to make a shared dream come true- to create our first ever science fair. As always, we won’t just dream of doing it, we will make it a reality.

Our team was founded in a multicultural city. Despite that, kids don’t often get the opportunity to experience other cultures. Our dream is to create interactions among different cultures. Through the language of *FIRST* we made that happen. During a competition we met 5636 from Majd al-Krum. Our mutual admiration was instant and it was our pleasure to visit and assist them when they needed our help. The same happened with 6168 from Iksal (near Nazareth) during this year’s kickoff. When they asked for help with the Chairman’s submission, we were thrilled to drive over there and lend a helping hand. Our relationship with those teams went beyond assistance; we feel a friendship was made.

Our dreams have definitely become a reality; a reality where The Spikes aspire to inspire the next generation to fulfill their dreams because we believe dreams are power, dreams are inspiration, dreams are passion. So now do you see why dreams are so important?