



SPARC 5665

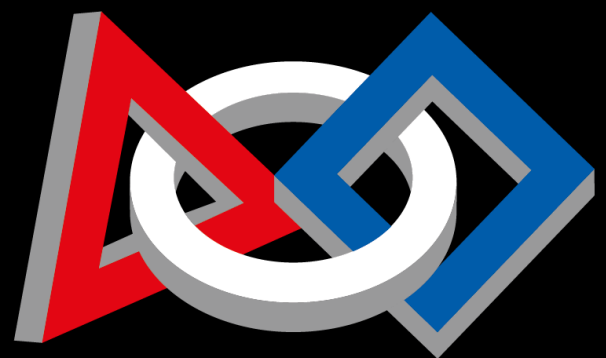
BUSSINESS PLAN

2018

Sainte Pulchérie French HighSchool

Contributers:

- Batuhan Can
- Neda Yusufi
- Duru Karadeniz



SECTION

PAGE

1) Executive Summary	3-5
2) Team Overview	6-8
3) Team Management	9-11
4) SWOT Analysis	11-12
5) Team Impact/Outreach	12
6) Future Plans	13
7) Action/Implementation Plan	14
8) Team Budget	15-16
9) Sponsor Benefits	17
10) Team Fundraising Opportunities	18-21
11) Final Statement	22
12) Team Contact Info	23

1) Executive Summary

Mission Statement

Our foremost principle is not to improve solely within ourselves, but to bring people up with us while improving. We take any measure necessary like building science, engineering and technology to inspire innovation while nourishing crucial skills like curiosity, creativity, risk taking, openness, perseverance, leadership, and self-confidence.

Date Team Begin

Team 5665 (a.k.a SPARC) is the team of Sainte Pulchérie French High School and was established in 2015 with the contributions of Fikret Yuksel Foundation located in Istanbul, Turkey. We have been participating in FRC since 2015.

Team&Program Summary:

Team Summary

We have been participating in FRC since 2015. Having started off solely with 18 students and 1 mentor in the same year, we have successfully expanded our team owing to the welcoming and accepting standpoint on science and technology here in Turkey. With this rather colossal progress, we have admitted students from all over our country and last year, we reached 55 students and 7 mentors.

Currently, our team consists of 26 students and 1 mentor. By learning how to think as one and finding solutions to problems which would otherwise derail people's daily lives, we believe that we are getting closer to our goal every passing day: Developing robots in the finest way possible.

Program Summary

SPARC's main idea is to spread the message of FIRST in the every way possible. We try to inspire children all around Turkey. Our team shows decent examples of hard-working, integrity, kindness and determination

Location of the Team and Current Team Sponsors

Location: Sainte Pulcherie French High School, Istanbul, Turkey

Sponsors:

- Fikret Yuksel Foundation
- Turkish Cargo
- Boeing
- Detay Soft
- Ortosella
- ARCH Architecture
- Ersan Kauçuk
- DekoArt
- Veritas
- Kumport
- Toksan
- Sismak
- Sainte Pulcherie French High School

Team Impact/Outreach

We have formed teams 7134, 6989, 6416 and 7140. We are always at contact with them so that we can always help them. We make presentations about FRC in various schools and encourage them to start their own teams. We train their coaches so that they could be self-dependent in a short time. We have formed 3 FLL teams and actively trained them. We helped with FLL coding so that our motto "Learn the good, teach the best" found its meaning again. We had a FLL and VEX workshop in our Maker Fair. We are the first team who opened VEX workshops in Turkey. We have started VEX workshops in Istanbul, Ankara, Izmir and Aydın.

Relationships & Information Regarding Current Sponsors

- Fikret Yuksel Vakfi, Turkish Cargo - transport
- Boeing, Kumport, Toksan - inscription fees, accommodation.
- DekoArt, Veritas Ortosella - printing charges
- Ersan Kauçuk, Delay Soft and Toksan - manufacturing of our robot
- Sismak - Safety Kit

Summary of Team Growth

Having started off solely with 18 students and 1 mentor in the same year, we have successfully expanded our team owing to the welcoming and accepting standpoint on science and technology here in Turkey. With this rather colossal progress, we have admitted students from all over our country and last year, we reached 55 students and 7 mentors. There has also been several times where we have had to contribute to our goal by spending our ever so loved pocket money. Currently, our team consists of 26 students and 1 mentor.

As a result, SPARC has claimed its well-deserved title of having the most number of students among all Turkish FRC teams. We also presented the FRC to them and helped them by all means to create and manage their own teams. As a consequence of the competitions being held in the U.S., just like any other foreign team, we too have had numerous amounts of problems concerning the transport, the accommodation, the fund and even all at the same time. However, we have learnt over time how to properly plan out our funds which, now and again, has been insufficient.

Summary of Team Future Plans

Our future plans as SPARC are to reach even more students all over Turkey and inspire them to dive into the world of science and engineering. We wish to accomplish this by the help of the extremely positive and motivating comebacks from our recent projects. In the near future, we are planning to acquaint Syrian refugee children with STEM with the generous help of our sponsors. Furthermore, we want to continue installing and building workshops, libraries, etc. for our sister schools who are in need of the mentioned things. In the long run, our plans are to help create even more robotics teams, especially in France and Spain where we would get the support of our sister schools and spread FIRST in Europe in an efficient way. So, we make great efforts to join in a contract with expected sponsors and to ensure our current sponsors by showing them our strong desire to develop technology and science with the help of our projects.

2) Team Overview

Team History

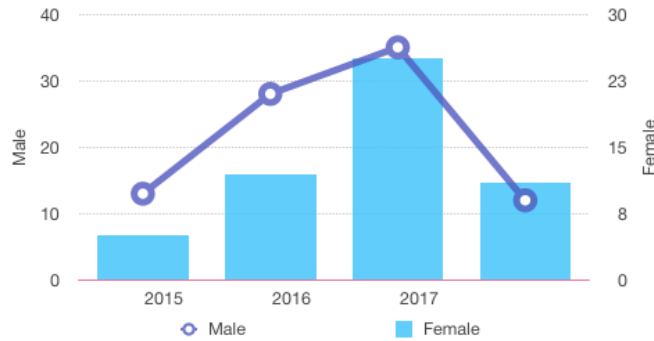
In 2015, SPARC was started in Sainte Pulcherie French High School. The team was formed in İstanbul, Turkey and In March 2015, the team made its debut at the FIRST Robotics Competition Central Illinois Regional in USA. At the competition, 5665 managed to come away with Rookie Inspiration Award. At the FIRST Championships in Orange County Regional last year, 5665 FIRST Dean's List Finalist Award (Alara Degirmenci) and Judges' Award.

Student Team Members

SPARC team includes every student with love of engineering without discriminating by gender or race. Our girl numbers in team increased every each year. In our first year we consisted of just (%28) 5 females to (%72)13 males. In 2016 our team member number rises to (%70 male and (%30 female) 40 from 18. Seeing our accomplishments other students from our school was also started intressing in robotics. In 2017 we formed a joint team with Robert College, ENKA Tech and many other schools and we reached (%58 male and %42 female) 60 students. We also accepted students from various cities in Turkey to show FIRST community to them. And this year we decided to split up because with lots of team members, every one could not find job to do in team. We formed a diverse team with (%52) 12 males and (%48) 11 females and also included students from public high schools from numerous cities in Turkey with the same purpose that we had last year.

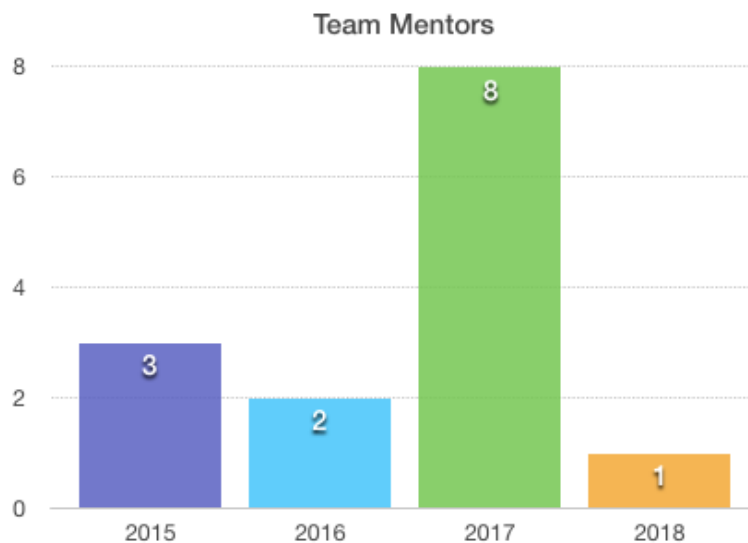
Team Member Chart

	MALE	FEMALE
2015	13	5
2016	28	12
2017	35	25
2018	12	11



Team Mentors

Our mentors are from our alumni team and people who are specialized in robotic fields. We didn't have enough mentors in the first years of SPARC but last year, with the expansion of SPARC, we had 8 mentors. 5 of them were specialized in the fields of engineering, mathematics, science and technology. The other 3 mentors constitute the team's advisory board, which is responsible for creating and enforcing program rules and team policies, and overseeing the overall team organization. This year, we have a mentor who is specialized in the fields of mathematics and science. We think that quality is much more important than quantity, that's why we think that one mentor is enough.



Team Sponsors

Our sponsors are crucial to the financial state of SPARC. As previously mentioned, being students of a private school presents some difficulties concerning the search for sponsorships. Thus, at times; inscription fees, accommodation, the manufacturing process of the robot, transport, materials and printing are hard to work out.

Nevertheless, our current sponsors; such as Fikret Yuksel Vakfi, Turkish Cargo, Sismak, Deko Art, Boeing, Detay Soft, Ortosella, Ersan Kauçuk, Kumport and Toksan play an important role in the continuation of our work. For example, Fikret Yuksel Vakfi and Turkish Cargo helps us with any transport needs while Boeing, Kumport and Toksan pitch in with the inscription fees and accommodation. Additionally, Detay Soft, Deko Art and Ortosella help out with the printing charges. Ersan Kauçuk with the manufacturing of our robot and Sismak with the safety kits.

At the beginning of each year, we plan out a carefully written mail and a detailed sponsorship folder to be sent to any potential sponsors. Afterwards, we get in touch with numerous companies first through our personal contacts and then via email or simply, the phone. Certainly, we make sure to commence this process after having determined our goals according to our budget.



Brochures and flags production.



TOKSAN Otomotiv Yedek Parça Tic. ve San. A.Ş. is a company which supplies automobile parts.



The Boeing Company is an American multinational corporation that designs, manufactures, and sells airplanes, rotorcraft, rockets, and satellites.



Detaysoft provides solutions for software problems.



Global transportation, logistics company and cargo agency in Turkey.



Kumport aims to give perfect service to people with its high-quality port-automation system.



Sismak Otomotiv San. And Tic. Inc. was established in 1980 to produce "steering box" in international standards.



Ersan Kauçuk was founded in 1978 to produce technical rubber parts for Automotive Industry.



DEKOART REKLAM TANITIM PAZARLAMA HİZMETLERİ

Brochures and flags production.



The official name is Private Sainte Pulcherie French High School, a secondary school located in the district of Beyoglu in Istanbul.

3) Team Management

Team Membership

As Sparc, we organise a seminar and a presentation to the newcomers at our school and other students from other schools to tell them about our team, about robotics and about FIRST. In the case that they are interested, they get in touch with us and we direct them to their preferred fields. After that, our members that are experts at that field tell them more about their field and what the newcomers will do at their fields. When they get in the team, we invite the parents of the students to our school to tell them more detailly about our team. After getting the parents' permission these students officially get in our team.

Team Structure

At the beginning of each season, we carefully divide our team into 5 essential divisions: Mechanics, social relations, safety, programming and design. We also select a 'captain' for each group who then makes sure everything goes swiftly. Being students of a private school, we spend more time and manpower to find sponsors, in contrary to public school teams. After working hard and finally reaching our goal that we had determined in the beginning of the season, we plan out our spendings based on the immediate needs of the team; such as equipment, transport, tee-shirts, banners and accommodation. Afterwards, we put these funds to effective use.

Firstly we zeal to find sponsors by participating in numerous conferences and fairs. Then, we take the opportunity to exercise certain affinity relations if our school presents us some. We send 'thank you' emails to our sponsors after the competitions in order to properly show our respect and gratitude for their support. Furthermore, we demonstrate the abilities of our robot to our school and our sponsors and share any prizes we get with them. By the help of this process, we succeed in the partage of the amazingly entertaining world of FIRST and therefore confirm the continuous participation.

Finally, at the beginning of each year we help new team members to adapt by providing them with presentations about mechanics, programming, etc.

TEAM SPARC 5665

SAFETY:

- Preparation of safety manual.
- Preparation of safety game.
- Collaboration with other teams.
- Gathering the necessary items.
- Preparation of brochures.
- Safety education

MECHANICS:

- SOLID Design of the robot.
- Gathering the necessary tools and pieces.
- Building the robot.
- Programming the robot.
- Driver Team

SOCIAL COMMUNICATION:

- Preparing the award submissions (Chairman's, Entrepreneurship etc.)
- Chairman's interview and video
- Interaction with other teams
- Social Media
- Managing gifts

DESIGN:

- Preparing the brochures/ flags/ banners.
- Designing the uniforms
- Designing the pit

Sub-Team Structure

Awards: They are in charge of the Chairman's Award submissions; the essay and executive summaries, video and of course the presentation and the Entrepreneurship Award which includes its executive summaries.

Social Media: The social media group helps the team by assisting with the creation of the website of the team. Some of the responsibilities of the animation group include the creation of the social media resources (Instagram, Facebook, Twitter, Youtube) and taking photographs.

Safety: The main goal of the safety group is to make the team as safe as possible. This includes reminding team members about always taking safety precautions when in the pit area, developing a safety plan, creating a safety manual and placing safety-related posters, brochures in as many places as possible in the environment.

Design: The design group develops ideas and drawings to not only construct the robot but also making a good pit area for our team. Plus, they also make drawings for our t-shirts and sweatshirts.

Engineering&Electronics: The engineering and electronics group works only for how to make our robot more efficient and powerful. They are also busy with the bumpers and making a safe robot for the competition.

Programming: The programming group has to take human rules, strategies, and ideas and convert them into a form that the robot can understand. They work with engineering and electronics group to ensure that their requirements are implemented in the finished robot.

4) SWOT Analysis

Being one of the oldest robotic teams in Turkey, our introductory years were fairly tough. But we changed this weakness into strength by working harder, devoting longer hours and gaining a lot of experience from our mistakes. Our teammates are well aware of the severity of this competition and have been working accordingly. Thanks to the mature history of our school which dates back more than 170 years, we got lots of attention both from within our community and outside. With this reputation, we believe that it's possible to deliver the FIRST's message to a large audience. However, we are also conscious students in our everyday lives who understand the responsibility of working together and in line with our school's rules. Additional to school hours, we had to devote two weeks of our holidays to create our robot, which we have gladly done. Likewise, we have found an efficient way to prolong our work time by meeting up outside of the school property or collaborating online. Despite all the inconvenience such as those who have been previously mentioned and several others, we have been able to get everything done assiduously before the assigned due dates. From the opportunities point of view, the robotics workshop which our school has had the convenience to host this year (and possibly again in the future) has helped us enormously throughout the building process of our robot. As a threat, we can say that being part of a private school and not a public school, we will always have the need to search for longer hours to find a sponsor.

SWOT ANALYSIS

Strengths:

- Being one of the oldest team
- Experienced team members and mentor
- Famous school

Weaknesses:

- School's rules that make working about the robot harder
- School taking a huge time

Opportunities:

- Our new workshop and new materials that will help us building robot easily

Threats:

- Being a private high school, it takes way longer to find sponsors so we are afraid that it will take our time

5) Team Impact Outreach

Since we started we have established 3 FLL, 3FRC, and one VEX teams, and we are still funding and helping them to this day. We made a maker-faire and we are planning on making another one this year. We have also hosted some workshops around our country to teach other students about STEM and FIRST. In the last 3 years our alumni volunteered at various FRC and FLL events. We built a lab for other people that didn't have the economy to build themselves. As SPARC, after creating a program for our trips abroad we have shared them with other teams to help them plan their trip.

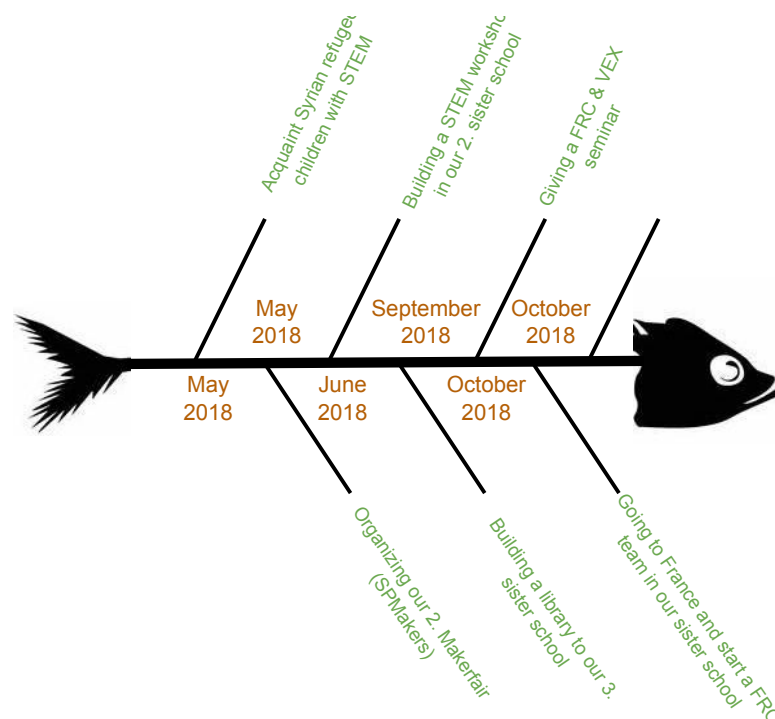
6) Future Plans

Our future plans as SPARC are to reach even more students all over Turkey and inspire them to dive into the world of science and engineering. We wish to accomplish this by the help of the extremely positive and motivating comebacks from our recent projects. Therefore, we carried our knowledge to just about any city that would receive it: Kayseri, Mugla, Manisa, Gaziantep, Bursa, Antalya and Ankara.

In the near future, we are planning to acquaint Syrian refugee children with STEM with the generous help of our sponsors. Furthermore, we want to continue installing and building workshops, libraries, etc. for our sister schools who are in need of the mentioned things. In addition, we would really like to organize yet another MakerFaire and improve it by all means. We also think about a special education seminar on FRC, FLL and VEX that includes workshops. This could be of great use among several Turkish schools too.

In the long run, our plans are to help create even more robotics teams, especially in France and Spain where we would get the support of our sister schools and spread FIRST in Europe in an efficient way.

So, we make great efforts to join in a contract with expected sponsors and to ensure our current sponsors by showing them our strong desire to develop technology and science with the help of our projects.



7) Action/Implementation Plan

Action/Implementation Plan

Strategy	Actions	Group Responsible	Planned Completion
Add new team members into our team	Making conferences and presentations in schools	Team 5665	June 2018
Add new mentors into our team	Making conferences and presentations in schools	Team 5665	June 2018
Mentor and educate potential team members for being one of the future team mentor	Presentations in school	Actual team mentors and team captain	July 2018
Planning of the new season	Organizing meetings	Sub-team leads and team captain	August 2018
Start new FRC&FLL teams	Organizing meetings and making conferences in various schools.	Team 5665	September 2018
Increase collaboration with our sponsors	Organizing meetings and giving them special gifts for their support.	Team mentor, Team Captain and Sponsorship Team	July 2018

8) Team Budget

Team Income and Expenditure

INCOME	
SSARCH ARCHITECTURE	USD 80
Toksan	USD 135
Ortosella	USD 270
Detay Soft	USD 540
Kumport	USD 945
FIRST (BOEING)	USD 3.000
Hançar Robotics	USD 6.000
Student Families	USD 48.000
TOTAL INCOME	USD 69.940

EXPANDITURE	
Participation Fees	USD 9.000
Logistics-Custom Clearance	USD 2.800
Production Tools	USD 1.800
Robot Construction	USD 3.000
Means of Advertisement	USD 800
Aire Faire & Accomodation	USD 48.000
Miscellaneous Expenses	USD 50
TOTAL EXPENDITURE	USD 65.450

Additional Opportunities for Support: In-Kind Donations

IN-KIND DONATIONS	
Bus to Travel to Events	USD 2.000
Robot Material Cost	USD 3.000
Large Tool Box	USD 300
Food	USD 1.000
Pit Banners & Sponsor Banners	USD 600
Pit Area	USD 280
Safety Materials	USD 100
Big Tools (drill, saw, stoning machine...)	USD 2.000
TOTAL	USD 9.280

Additional Opportunities for Support: Mentors

Mentor Roles Chart

Mentor Roles	Role Description
Desing	Create and draw logos, t-shirts, sweatshirts and pictures for competitions
Programming	Work with the programming team members and decide how to make the best program for the robot.
Management	Work with team members and assist them to being on time and do not missing the deadlines.
Engineering	Work with the engineering team, think about the strategy and the best design for the robot.
Electrical	Show students how to wire, organize an electrical board, and update and check the robot
Speaking	Work with all team members and teach them how to speak in front of sponsors, juries and visitors.
Writing	Show the clues to team members which ensures a good quality of writing and teach them how to write an essay foe award applications.
Website	Show students an example website and materials which needs to be in the website.
Finance	Teach students how to finance the budget of a team and how to control the expenses and incomes.
Social Media	Work with social media team and show them how to add photos, paragraphs on social media resources and how to make them more striking.
Mechanics	Work with the mechanic team and teach then how to use tools in a safe way and how to work more efficient.

9) Sponsor Benefits

Degrees of Sponsorship

Gold Sponsor : 1000USD - + (Toksan)

- **School Display Case:** Logo displayed in showcase
- **Robot:** Large logo of business
- **Banner:** Large logo on own private panel (displayed at events & tournaments)
- **Website:** Banner & link on sponsorship page & logo on the front page
- **Team T-shirt:** Name of individual/business in large font

Silver Sponsor : 500 USD - 1000 USD (Veritas, Ersan Kauçuk, Turkish Cargo, Boeing)

- **Team T-shirt:** Name of individual/business in large font
- **Banner:** Small logo on banner (displayed at events & tournaments)
- **Website:** Picture & link to Sponsor's website on sponsorship page
- **Social Media:** Name of individual/business on social media pages

Bronze Sponsor : 100USD - 500USD (Detaysoft, Kumport, Sismak, Dekoart)

- **Banner:** Small logo on banner (displayed at events & tournaments)
- **Website:** Name of individual/business on sponsorship page

Available to Sponsors of \$100+

10) Team Fundraising Opportunities

Current Team Fundraisers

<i>STEM CENTERS</i>	<i>THE EDUCATIONS AND DONATIONS</i>	<i>NUMBER OF STUDENTS</i>
Çankırı	<ul style="list-style-type: none"> • 8 Mindstorm kits • 8 VEX kits • 30 Arduino kits 	750 students per month
Payas (Hatay)	<ul style="list-style-type: none"> • 20 VEX IQ kits • 60 VEX kits 	1250 students per season (a season is 3 months)
İzmir (Denge Schools)	<ul style="list-style-type: none"> • VEX and VEX IQ education 	15 students
Gaziantep (DEVA Schools)	<ul style="list-style-type: none"> • VEX education 	50 students
Balıkesir	<ul style="list-style-type: none"> • building STEM Center • 8 Mindstorm kits • 12 VEX IQ kits 	33 students
Trabzon	<ul style="list-style-type: none"> • Mindstorm education • VEX education • FRC education 	42 students

Donation to ÇYDD

Every year our team gives 10th grades the opportunity to make their dreams come true by providing them the possibility to design a piece of cloth or a jewelry according to their own pleasure which are made collaboration with big companies such as Urart or Cacharel. Furthermore this project serves something much bigger than only one person's happiness, the money collected at the end of the disposal is donated to ÇYDD (Association for the Support of Contemporary Living)



Sale for the Valentine's Day

In the meantime, in our team, heart shaped chocolates sold in the valentine's day for ÇYDD (Association for the Support of Contemporary Living) and then we donated them.

Making Robotic Laboratories

This year, with the economic help (50.000 TL) of the Kocaeli Municipality, we established STEM and Robotic laboratories in the schools without the possibility to reach robotics in Balıkesir and Kocaeli and gave STEM, FRC and FLL education to more than 200 students.

Library for Our Sister School

Every year, a school that doesn't get hands on any books and doesn't have any library is chosen among all Turkish schools as the sister school. Then, all the students compile all the books for the sister school. Once the boxed spare books are ready to go, a tutor and a number of students go to the chosen sister school and build a library.



Donations to ‘Anadolu’da Bir Kızım Var’ (I have a daughter in Anatolia)

We have been donating money to girls in Anatolia for their education by collaborating with our school. For the teachers day in our country, we have been collecting money and then use this money to fulfil the educations of two girls every year. Last year we have collected approximately 1.200.000 Turkish liras.

Future Team Fundraisers

Name of Fundraiser: Laboratory for Disabled Students

Short Description: In our team, as we know that in our life there are no disabilities and all students must have a possibility to have relationship with science and technology, we planned to establish laboratories for disabled students.

Materials Needed:

We donate VEX IQ Kit, Arduino Kit, Mindstorm Kit

Total Money Collected: 10.000 TL

Total Team Cost for Fundraiser: 1000 TL

Fundraiser Net Income: 9000 TL

Number of Students & Mentors/Parents needed to run the Fundraiser: 10 students
1 Mentor

11) Final Statement

Every child in the world borns as a scientist, engineer or a world leader, and while growing up they start to lose or sometimes even kill that child inside of them, we, team SPARC aren't one of that kind, in every single of us, there are scientists , politicians, engineers and doctors, thus we know that in every single child's heart out there lies a cure to cancer or the answer of unanswerable questions, so we try to inspire, to touch every single child's heart and show them that they can change the world!



12) Team Contact Information

Website: www.sparc-5665.com

Team Email: sparcrobot@sp.k12.tr

Youtube: 5665 SPARC

Facebook: SparcRobotics 5665

Twitter: sparc5

Instagram: sparc5665

Main Contacts:

Mentor Name: Abidin Zenginler

Title: Mentor

Email: abidin.zenginler@sp.k12.tr

Phone: +905339313751

Team Meeting Information:

Location: Sainte Pulcherie French High School

Dates: Monday, Tuesday, Wednesday, Thursday, Friday

Times: 11.55-12.55 & 14.45-19.00

Sponsorship Information:

Checks should be made payable to: (SPARC Robotic)

Donations may be tax deductible; please contact us for more information.

Mailing Address:

(SPARC)

Attn: SPARC Robotics Team - Çukurluçeşme Sok. No: 7 Parmakkapı 34433
Beyoğlu/ İSTANBUL - 0003