

#### 1.Team Introduction

#### 1.1. Mission

The mission of Cymurghs is to reach a wide variety of communities in the cities and regions where its members are located, to spread STEM and FIRST values, to increase awareness and scope by preventing inequality of opportunity. While doing these, it provides a learning process full of fun and discovery without being exposed to gender inequality, being stuck with geographical barriers, and in which economic conditions are not discriminatory. It brings people together from many different structures of life and combines different perspectives with STEM and FIRST values to make the base the science and engineering of the future.

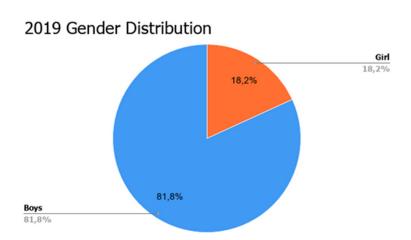
#### 1.2. Vision

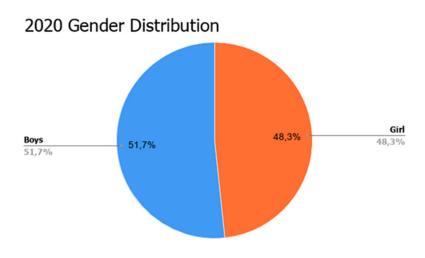
Cymurghs' vision is having members from all cities of Turkey, all ages, all socio-economic levels and bringing them together in its own structure which has the people related to science and engineering without making any kind of discriminations. In this way, it is able to produce concrete projects for the benefit of humanity by nurturing ideas derived from their different perspectives with proven training programs like FIRST leagues & competitions and to become a team that enables children to easily access and integrate FIRST from all the cities of Turkey, especially from places where there is a lack knowledge of STEM education models .

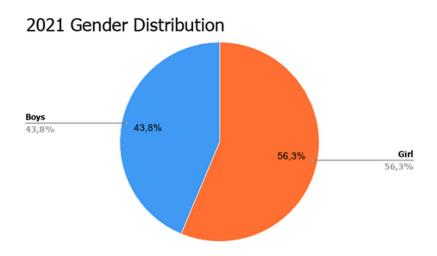
#### 1.3 Team Structure

The team structure of Cymurghs is very diverse as the first FRC team which is independent of schools in Turkey. Cymurghs received applications from 11 different cities of Turkey during last season. The presence of members from many different regions of Turkey in the team, which allows it to be a combination of people from different ethnic backgrounds. The different ethnogenesis that the team has included in the team since its establishment are as follows: Lazi, Circassian, Kurdish, Immigrant, Belarussian and Persian. These differences do not prevent members within the team; on the contrary, it enables one to look from different windows and to be open to differences. The bond between team members who support each other and complete their deficiencies is impressive enough to be seen from the outside. Cymurghs often receives such feedback from other teams and the community around him. In addition, he embodies the concept of "Robotics for Everyone", which is the team motto, with his behaviors, and brings disadvantaged youth to society, showing that everyone can build robots. In total, 32 of the 81 applications which last season's received were girls, which is equivalent to 39.5%. The team in which 14 girls, 15 boys completed past season 2020 with these applications received, had %48 as a rare rate as in teams of Turkey. This number reached 18/18 right when the team was at peak period in terms of crowd, after the season, which allowed the team to achieve 50%, one of its short-term goals. All members recruited right after the season went through a learning process from scratch for the next season. And now, Team Cymurghs is ready for the 2021 season with 9 girls, 7 boys and continues growing via its applications. To see the team's commitment and determination to its goals, it is a concrete enough example that the ratio of female members to the team, which was 18% in the year of rookie, is now 56.25%.

#### 1.4. Team Demography







## 2.Equity & Action Plan

Strategy	Actions	Budget	Planned Completion
Finding and mentoring the FLL teams from the disadvantaged regions of Turkey	Contacting the team managers	-	December 2020
Meeting with the authorities of schools in Azerbaijan and leading the establishment of FIRST teams	Implementation of the formal process, introducing <i>FIRST</i> to students & school principles	-	March 2021
Organizing events, distributing badges, banners and bandanas to remove prejudice against LGBTQ + individuals in the country	Creating the event calendar, producing the products	2\$ x 50 badge 3\$ x50 banner 5\$ x 50 bandana	Depends on the pandemic
FRC 101 video training with sign language support for the Hearing Impaired	Learning sign language, creating FRC 101 content, creation of the video	20\$ x 5 sign language course	January 2021
Driver station design for physically disabled people (wheelchair users)	CAD design, prototype, product finalization	300\$	March 2021
Writing and publishing monthly FRC newsletters in Braille alphabet for the visually impaired	Monthly content creation, monthly printing, distribution	15\$ x 15 for 1 month	January 2021
Organizing a STEM summit/workshop event for the children in Mediterranean Region	Hiring an hotel for conference hall and workshop rooms for the participants, shuttle expenses, robotics kits	\$1800 for the hotel \$500 for the shuttle expenses \$50 x 20 for the robotics kits	Depends on the pandemic

### 3.Team Impact/Outreach

#### Erzurum Robotics Training, July 2018

Team Cymurghs organized a two-week training on robotics and Arduino in Erzurum to spread STEM values beyond metropolitan cities. The team has reached more than 45 hearted middle schools. In addition to being the first project to increase STEM accessibility and provide equal opportunity, the connections with the students here were not broken afterward. Notifications are still received from them and support is provided. This can also be called informal mentoring. So much so that with this training, there was even a software developer member who met with the team and robotics, and was recruited with the application last season.

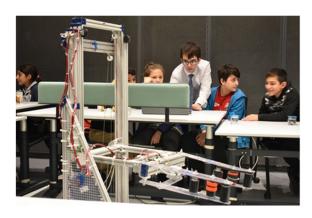
#### Bilge Çocuk Akademi Robotics Training, October 2018

The team has collaborated with Bilge Çocuk and reached 40+ gifted elementary school students to give simplified FRC programming education. It aimed to spark their interests and teach them another field of science that they have ever not been introduced to before. This training was carried out to provide equal opportunities for children who are talented but do not have the opportunity to meet FIRST. Although they are not yet old enough to compete in FRC, they are following and are not disconnected to be included in the team in the future.



#### Zemin İstanbul Robotics Training, November 2018

By collaborating with Zemin İstanbul, Cymurghs has helped 40+ elementary students from different backgrounds to learn about algorithms. More than 40 children who may not be able to come together in most places, from different parts of Istanbul came together to "understand the robots". Studies are also underway to give them the opportunity to "build robots" together in the future.



# Ibrahim Suheyla Izmirli Science High School "Dreammates" Conference, December 2019

In Zonguldak, over 340 high school students were given a speech on the values of FIRST at Ibrahim Suheyla Izmir Science High School. Within the scope of this conference, Cymurghs explained to the students how to build their own teams, team spirit, the importance of cooperation, and how valuable STEM values are to humans of the 21st century.



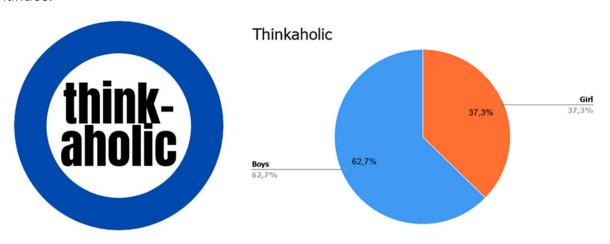
#### Cyber Marathon, February 2020

Through organizing Cyber Marathon, an online programming contest, the Team have reached 101 people from 19 different cities. Certificates approved by Galatasaray Student Community, Galatasaray High School Robotics Club and SAYTEK were sent to the contestants. A presentation was made about FIRST and Cymurghs. Through hosting a hackathon, Cymurghs has been the first FRC team that has connected with the committee of Turkish competitive programmers who are passionate and dedicated to finite mathematics and programming. It is now planned to traditionalize the Cyber Marathon and keep in touch with the Turkish competitive programming community.



#### Thinkaholic, April 2020

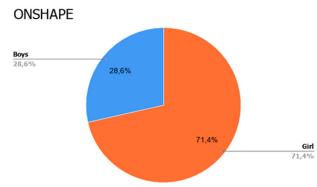
Thinkaholic is a discussion group organized to create an environment where high school and university students interested in popular science, such as active debate, can think critically, enjoy learning, and exchange ideas. Thinkaholic aims to integrate critical thinking and STEM fields together in order to help high school and university students question big problems humanity has faced by establishing a platform where professionals advanced in their field join to debate upon given topics. 53 students and 4 professionals were reached and the work continues.



#### **ONSHAPE** Robots to the Rescue

Robots to the rescue is a virtual design competition organized by Onshape. In this challenge, students develop a robot that follows the FRC's 2020 robot rules. Aim of the robot, solving a world problem. A total of 1,006 individual participants, 98 FIRST® Tech Challenge (FTC) and 53 FIRST® Robotics Competition (FRC) teams were from Brazil, Canada, Colombia, Cyprus, Greece, India, Mexico, Romania, Turkey and the USA. Cymurghs, besides being the only team participating in the competition from Turkey is proud of the members who participated in the contest consisting of 5 girls and 2 boys.





#### Mentoring FLL Team ROBOTIHO, January 2020 - Present

Cymurghs mentored ROBOTIHO, an 8-person FIRST Lego League team founded by the students of Orgeneral Edip Başer Imam Hatip Secondary School and Ortasu Secondary School in Şırnak. Sırnak is one of the most disadvantaged areas in the country and the team has nothing but team spirit. Cymurghs has inspired young minds with limited access to technology and is already sharing their experiences with them.



