# Paly Robotics

FRC 8 | 2020



# **Diversity Plan**



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### **Team Overview**

Paly Robotics, FRC Team #8, was founded in 1996 as a club of 20 students at Palo Alto High School. Over our 24 years of activity, we have grown into a team consisting of 68 individuals with various ideas, skills, and backgrounds.

Paly Robotics is composed of 6 subteams — Art, Build, Business, Design, Software, and Strategy & Scouting. Our 6 subteams provide a place for people with a range of interests and abilities to participate as members of FIRST and are a testament to the fact that robotics is multidisciplinary and something in which anyone can be successful. Without the presence of their respective subteams, 63% of Art and 38% of Business members would never have become involved in FIRST robotics.

In 2012, only one of Paly Robotics' 27 members was female, and the team was competitively unsuccessful and unsustainable. Recognizing the importance of diversity, Team 8 has since taken steps to include more groups. In turn, this has allowed us to better represent our surrounding community.

At the beginning of each year, we reach out to students at our school through presentations to incoming freshmen at student orientation, classroom visits, and robot demonstrations. These efforts inform potential team members of Paly Robotics and FIRST opportunities. As a result, the team has seen a rapid increase in gender diversity — female individuals now make up 37% of the team. In turn, this has yielded more opportunities, new ideas, and an overall stronger team.

Additionally, Paly Robotics currently hosts outreach programs that support traditionally underrepresented communities in STEAM. We partner with organizations that serve disadvantaged youth, as we foster inclusion and equal opportunity in robotics. For example, our LEGO Robotics Summer Program has introduced over 60 students of underrepresented backgrounds to the build, design, and programming aspects of robotics.

Team 8 strives to create an environment that supports and enables FIRST opportunities for an ever-growing number of people. We aim to continue to promote acceptance, inclusion, and opportunity within our team and beyond.

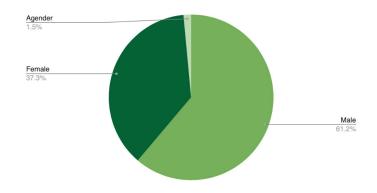
## **Current Diversity**

Paly Robotics has grown greatly in diversity since our inception 24 years ago. Our team currently consists of 68 members representing a wide variety of ethnicities, genders, and grade levels.

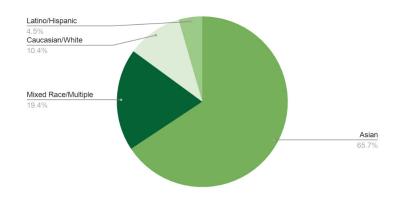
#### **Gender Diversity**

Our team promotes female participation in STEAM by empowering young women to join our team and participate in FIRST. This year, 37.3% of our team members are female, 61.2% are male, and 1.5% identify as non-binary.

#### Paly Robotics Gender Diversity 2019-2020



#### Paly Robotics Racial Diversity 2019-2020



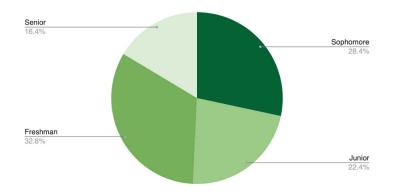
### **Racial Diversity**

Recognizing potential stigmas and barriers surrounding minority participation in STEAM, Paly Robotics strives to provide an inclusive environment for individuals of all backgrounds, ethnicities, and cultures. 65.7% of our team members this year are Asian, 19.4% are mixed/multiple race, 10.4% are Caucasian/white, and 4.5% are Latino/Hispanic.

#### **Grade Diversity**

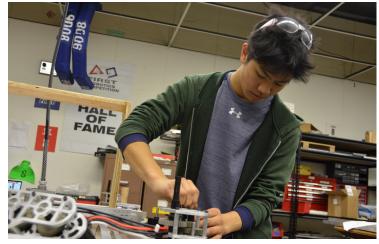
In order to create a sustainable, balanced program, Team 8 promotes equal grade participation through our extensive recruitment and training processes. To raise interest in our program, we present to over 600 incoming freshmen at student orientation, visit 10 classes to talk about our team, and host robot demonstrations as well as Team Info days. This year, 32.8% of the team members are freshmen, 28.4% are sophomores, 22.4% are juniors, 16.4% are seniors.

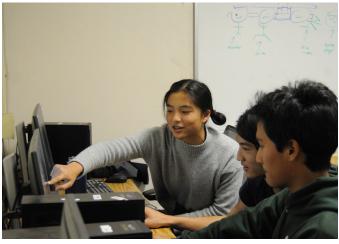
#### Paly Robotics Grade Diversity 2019-2020











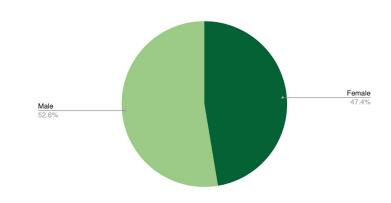
## **Leadership Diversity**

Paly Robotics believes that developing a diverse and inclusive community begins with team leadership. Over the years, our student leaders have come to represent a broad range of backgrounds and ideas, in turn inspiring and diversifying the next generation of STEAM learners.

### **Gender Leadership Diversity**

Paly Robotics' rapidly increasing female participation is a reflection of the gender inclusion within our leadership. This year, 47% of our leadership team is female.

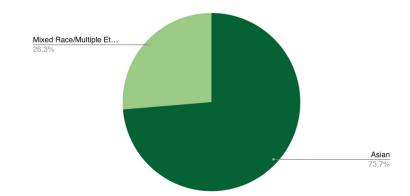
Paly Robotics Leadership Gender Diversity 2019-2020



### **Racial Leadership Diversity**

Paly Robotics works to develop a leadership team that consist of a variety of perspectives and backgrounds.

Paly Robotics Leadership Racial Diversity 2019-2020



## **Diversity Growth**

In the past few years, Paly Robotics has taken strides to promote an inclusive and accepting STEAM experience, both within our team and across the global community. We aim to open the opportunities of FIRST Robotics to individuals of all backgrounds, interests, ethnicities, genders, and grades.

Team 8 views equal opportunity as an issue of utmost importance — something visible in our team's rise in gender inclusivity. Reflecting on the setbacks of the 2012-2013 season, Paly Robotics has since made efforts to promote equal access to FIRST programs. In 2012, female members made up only 4% of our team. Since then, the number of female members has increased to 37%, and students who identify as agender compose 1.5% of the team. This increased representation results from our recruitment process, including team presentations and robot demonstrations within our school, which serve to introduce students to STEAM and garner interest in our program. This year, 45% of our new recruits are female, 52% are male, and 3% identify as non-binary.

Additionally, we have promoted female participation in STEAM internationally through our 6-year long partnership with Townley Grammar School, an all-girls school in England. We host annual tours of our lab and invited them to a Girls in STEM pannel in 2018. Our team hopes to continue to expand our existing programs while pursuing new opportunities to promote diversity and inclusion.

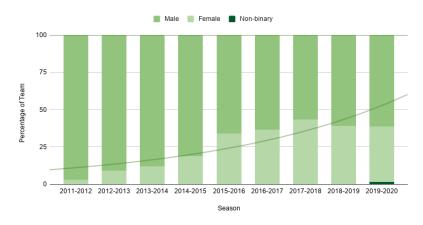
Paly Robotics continues to focus on providing an accepting environment in order to make STEAM a pursuable opportunity for all.





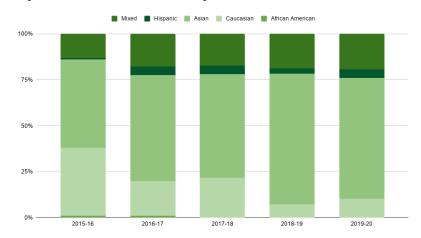
### **Gender Diversity Growth**

Paly Robotics Gender Diversity Growth 2019-2020



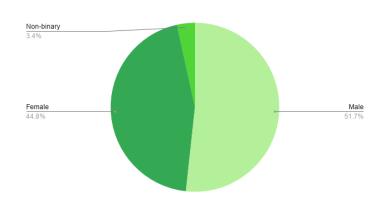
### **Racial Diversity Growth**

Paly Robotics Racial Diversity Growth 2019-2020



### 2019 New Members Gender Diversity

#### **Recruitment Gender Diversity 2019-2020**



Paly Robotics strives to create equal opportunity for everyone regardless of how they identify. This year, around 45% of our new recruits identify as female, 50% as male, and 5% as non-binary.

### **Diversity Promotion**

Team 8 has developed and maintained a strong focus on promoting all ideas, interests, and experiences by creating and supporting a wide variety of subteams, outreach initiatives, and opportunities for members and community.

Paly Robotics has made an effort to expand the boundaries of what is considered robotics within our community. Our six separate subteams — Art, Build, Business, Design, Software, and Strategy & Scouting — allow students to explore their interests in diverse fields. Our Art and Business subteams, established in 2014 and 2015 respectively, are testaments to the fact that robotics is an interdisciplinary activity and one in which people with varying interests can be successful. 63% of our Art members and 38% of our Business members report that they would not have considered joining FIRST without the existence of their respective subteam.

We have also made a continuous effort to increase the inclusion of traditionally underrepresented minority groups, ensuring that robotics is a pursuable opportunity for everyone. Our annual LEGO Robotics Summer Program utilizes an engaging LEGO Mindstorms curriculum to introduce elementary and middle school students of a local disadvantaged community to robotics. The program, which runs entirely free of costs for participants, has served approximately 60 students in its 3 years of activity. Our team also furthers these efforts through our partnerships with the Lauren's House 4 Positive Change and Dreamcatchers, local mentorship programs that serve underprivileged youth. These connections help us broaden access to robotics while providing a meaningful and inspiring opportunity to young disadvantaged community members.

Moreover, for the past 5 years, the Paly Robotics Summer Camp has provided a unique experience for middle schoolers to explore STEAM. In order to open the world of robotics to students of all socioeconomic backgrounds, camp fees are waived for those unable to pay registration costs. In 2019, 13% of campers attended for free.

Through our efforts to increase representation and access to robotics, Paly Robotics continues to foster the values of diversity and inclusivity within our team and community.

## Why Diversity?

Paly Robotics recognizes the importance of opening the world of robotics to people of all backgrounds. We believe that having members that represent a variety of perspectives, interests, and ideas encourages creativity, collaboration, and a positive team environment.

Team 8 acknowledges that there are stigmas surrounding participation in STEAM for many individuals and communities. To counter this, we strive to provide a diverse and accepting environment for people of all backgrounds.

Creating and maintaining a diverse body of members and ideas is a key component of success as it encourages creativity and collaboration. In turn, this allows our team to operate effectively and sustain our impact. Incorporating a variety of perspectives is important to fostering a knowledgeable and cohesive working space, and Paly Robotics aims to uphold the values of inclusion and acceptance in our team's operations.

While Paly Robotics values diversity, our team does not believe that a specific background can define success. We value the benefits diversity can bring to the team over superficial statistics. Every individual offers different ideas, skills, and capabilities to Team 8, and we strive to continue providing STEAM learning opportunities to everyone in our community.

