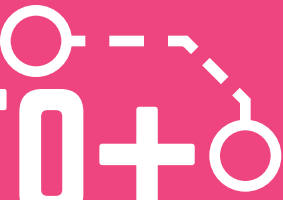
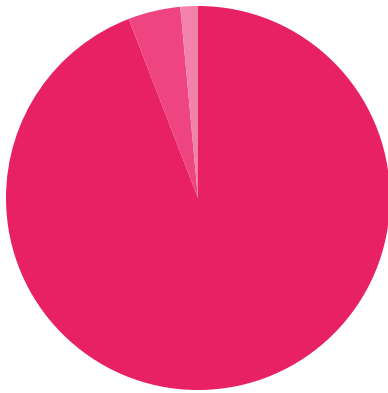


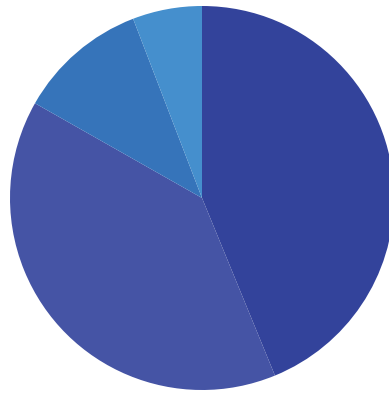
BEING 
LGBTQ+
IN **FIRST ROBOTICS**

LIAM FAY
LGBTQ+ OF FIRST



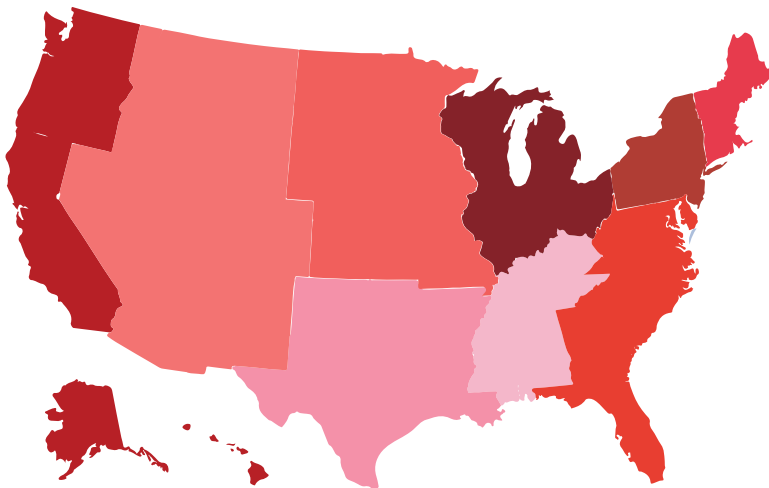
FIRST PROGRAM

94.1% FRC
4.4% FTC
1.5% FIRST GLOBAL



GENDER

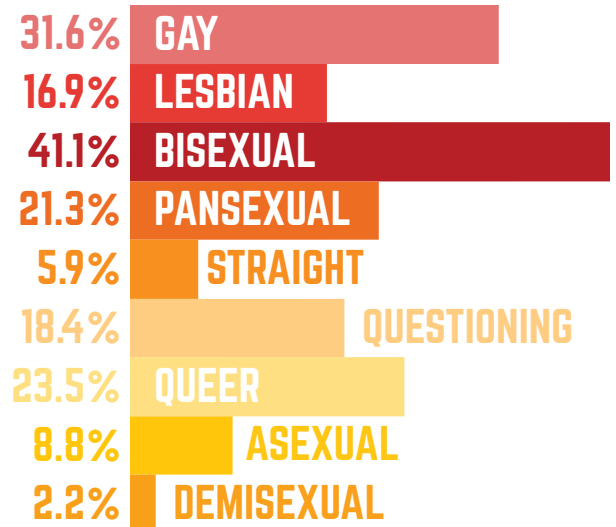
43.8% FEMALE
39.4% MALE
11.0% NONBINARY
5.8% OTHER



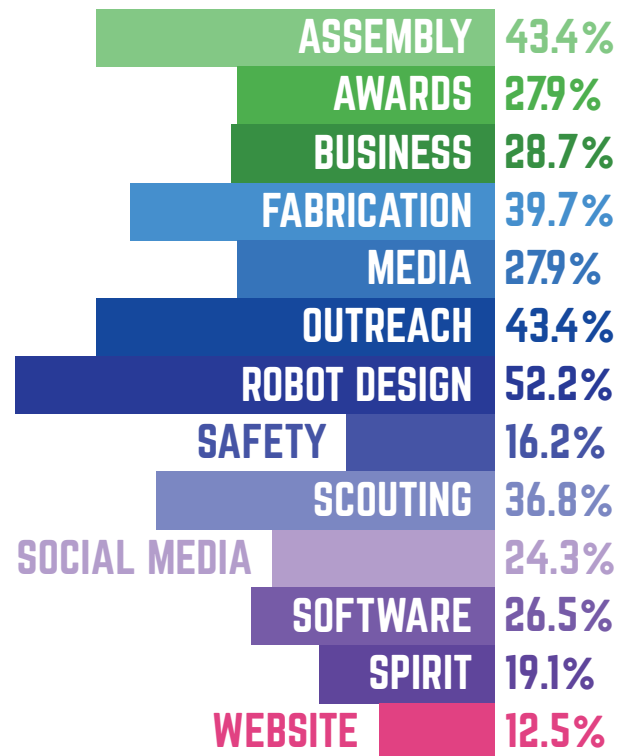
SURVEY RESPONDENT LOCATIONS

28.7% EAST NORTH CENTRAL
23.5% PACIFIC
11.8% MIDDLE ATLANTIC
10.3% NEW ENGLAND
8.1% SOUTH ATLANTIC
5.9% WEST NORTH CENTRAL
4.4% MOUNTAIN
1.5% WEST SOUTH CENTRAL
0.7% EAST SOUTH CENTRAL
5.1% OTHER

SEXUAL ORIENTATION



TEAM ROLE



COMMUNITY SNAPSHOT

The 136 respondents of the community survey provide a snapshot of the LGBTQ+ community of FIRST as a whole. These students are involved in a diverse array of team activities, the most common being robot design and assembly, which 52.2% and 43.4% of respondents, respectively, report being actively involved in. Participants are overwhelmingly involved in FRC, at 94.1%.

Data collected paint a picture of a diverse LGBTQ+ community; no single gender or sexual orientation comprises more than 50% of survey participants.

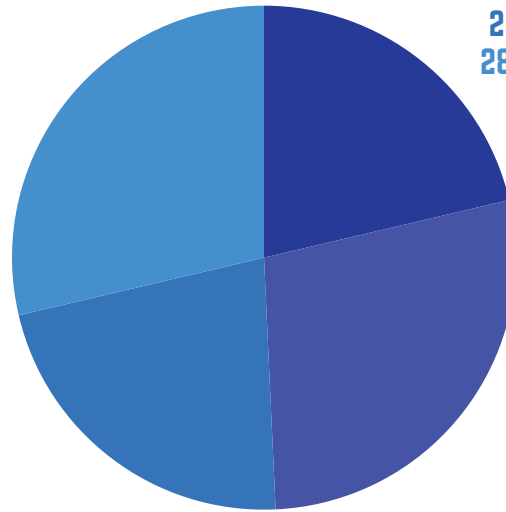
REPRESENTATION

Out of survey participants, only 11.8% had any LGBTQ+ mentors on their team. This, combined with the fact that 78.0% cannot name more than two famous LGBTQ+ scientists, mathematicians, or engineers, points to a lack of representation for LGBTQ+ students in FIRST; they have no one to look up to. LGBTQ+ students can, however, support each other; only 21.3% report being the only LGBTQ+ person on their team.

Representation has been proven to have positive effects on students. In a study of more than 100,000 elementary schoolers, low-income, black students with at least one black teacher in third, fourth, or fifth grade had a 39% reduced likelihood of dropping out of high school. The study points to the “role model effect” - the idea that students benefit from seeing people like them in authority roles. While many studies like these do not exist for LGBTQ+ students, the role model effect can be extended, within reason, to point to the positive nature of having LGBTQ+ authority figures.

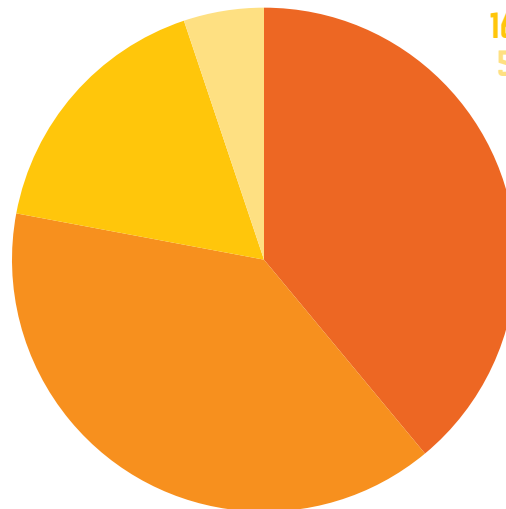
This is reflected in the data collected as part of this survey. Out of all survey participants, 62.5% agreed that their mentors try to understand their LGBTQ+ identity. Considering only students with LGBTQ+ mentors, this number rises to 93.8%.

OTHER LGBTQ+ STUDENTS



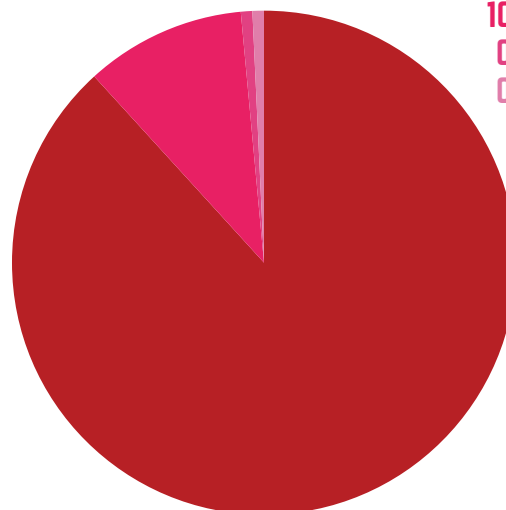
Category	Percentage
NO STUDENTS	21.3%
1-2	27.9%
3-4	22.1%
5+	28.7%

LGBTQ+ STEM PROFESSIONALS



Category	Percentage
NONE	39.0%
1-2	39.0%
3-4	16.9%
5+	5.2%

LGBTQ+ MENTORS

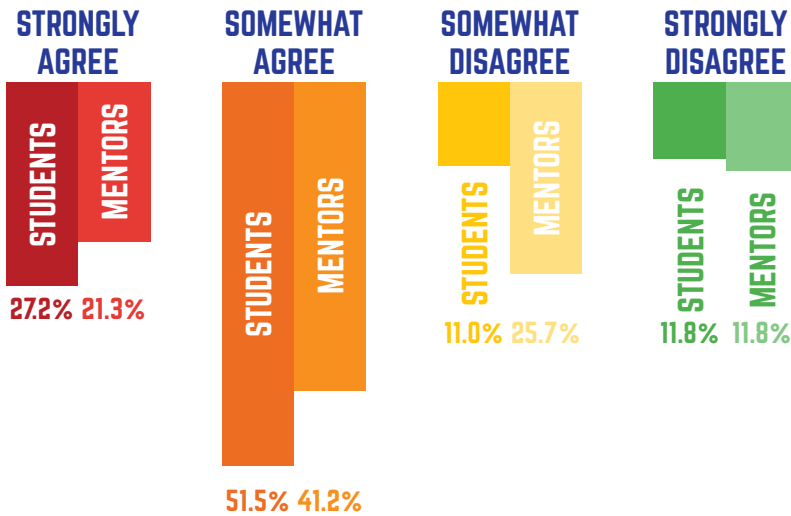


Category	Percentage
NO MENTORS	88.2%
1-2	10.3%
3-4	0.7%
5+	0.7%

CLIMATE

TEAM ATTITUDES

“The students/mentors on my team try to understand my and/or others’ LGBTQ+ identity.”



Like so many other things in FIRST, creating an accepting climate on a team starts with the mentors. Unfortunately, not all mentors are doing a great job of creating such climates.

37.5% of LGBTQ+ students reported that their mentors did not try to understand their LGBTQ+ identity. Even more troubling, 18.4% reported having heard mentors use slurs such as “fag” or “dyke”.

LGBTQ+ students continue to face negative climates at events. 20.2% of respondents, including 26.0% of trans respondents, did not feel comfortable expressing their gender identity at events. Furthermore, 19.6% of respondents and 66.7% of trans respondents reported having changed the way they express their identity for better chances at awards.

ALL STUDENTS TRANS STUDENTS

Do not feel comfortable expressing gender at events

20.2%

26.0%

Are not allowed to room with same gender

18.4%

36.4%

Have changed their expression for awards

19.6%

66.7%

CONCLUSION

At its core, FIRST Robotics provides an inclusive space for students of all backgrounds to become excited about and excel in STEM and surrounding fields. Unfortunately, within this community, LGBTQ+ students of all sorts are subject to discrimination and destructive behavior, without much support through representation.

However, there are steps teams can take to improve the climate for LGBTQ+ students. In-depth answers to frequently asked questions, resources for friends and families of LGBTQ+ youth, definitions of LGBTQ+ terms, and more can be found on the LGBTQ+ of FIRST website, at <https://lgbtqoffirst.wordpress.com/>.

If the results of this survey have proven one thing, it’s that the FIRST community is an incredibly diverse one, and that it is just another frontier for LGBTQ+ people to gain equality and representation.