

# Encouraging Self-Advocacy in Students



# About Molly

- Systems Engineer
- Lead Controls Mentor for 177
  - 5 years with 177
  - Starting sibling team 429
- 2 years with 5686: all-girls team
- Passionate about
  - Women in STEM
  - Bright Pink Shoes
  - Making sure our robot doesn't lose comms during a match



# Context

Students reaching for the opportunities they want and not settling for the ones they feel they deserve

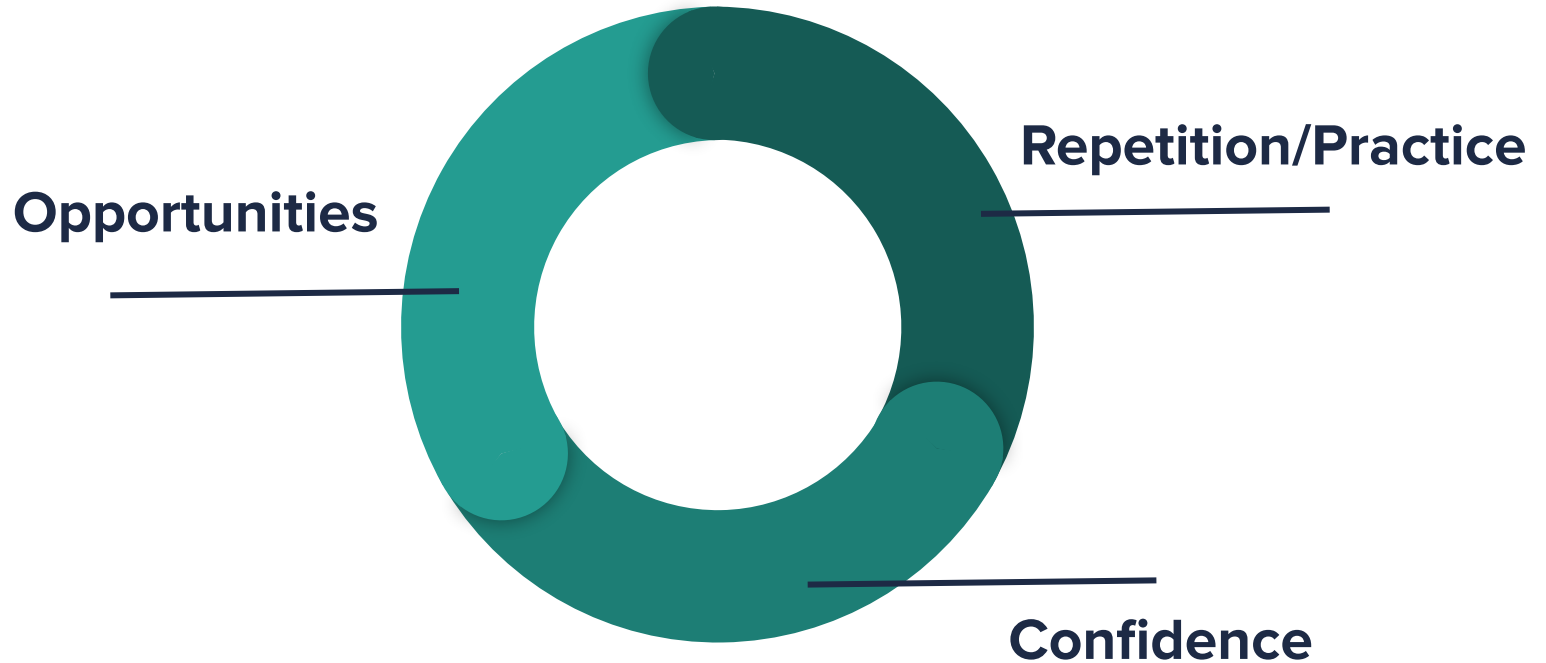
**Definition  
of Self-  
Advocacy**

**What are  
your  
Goals?**

My Goal: I want more girls to try out for lead roles, drive team, and the robot subteams

My Goal: I need my new students to ask for more work if they are bored

# Core Takeaways



# Opportunities



Seeking Entry Level Engineer:  
Requires 3 years of experience

# Opportunities

- Create Opportunities
- Announce Opportunities
- Share Opportunities
- **Be explicit**
- No exclusivity  $\neq$  inclusivity

Starting a sibling team

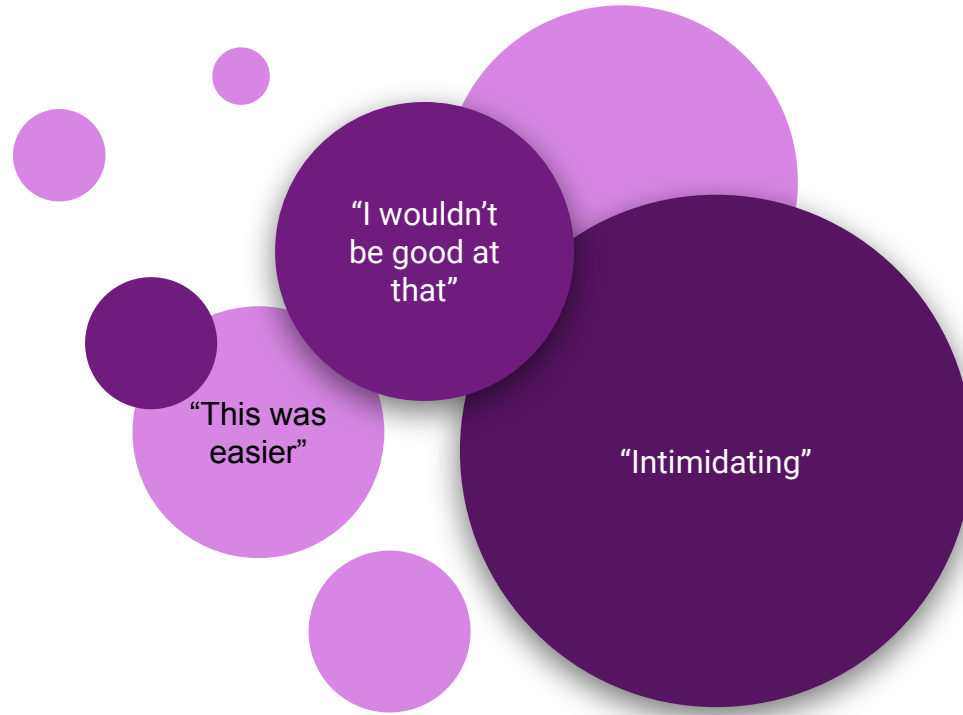
Applications for Dean's  
list etc

Girl's only drivers practice

Increased # open drivers  
practice

# Confidence

When asked why they didn't join the mechanical subteam or try out for drive team



# Confidence

- Prepare for impostor syndrome
  - Relating opportunities or challenges to something the student has done before
- Give positive feedback publicly
- Give constructive feedback individually

“If you like tetris, join the electrical subteam”

“We will teach you what you need to know”



# Opportunities + Confidence

Pushing students out of their comfort zone

Give the structure to succeed

Give the space to fail safely

Team 2 - students work all subteams, build everybot

All girls drive practice

Low stakes independent code projects - LEDs

# Practice and Repeat

- Repeat Repeat Repeat
  - Repeat your goals and policies
  - Repeat your opportunities
  - Repeat feedback from different people
- Self-Advocacy may take practice

Define and announce self-advocacy policies in student presentation, parent presentation

Announce opportunities in multiple ways: google classroom and verbal in meetings

Tag team feedback

Practice Dean list interviews, pit judging

# Tools – Skills Matrix

Controls Hardware	Beginner	Name all components	Cut/Strip all wire	PP & Ferrule Crimps	Molex Crimps	Soldering Lesson	Wire test board	Name all pneumatics	Pass plumbing tubes	Comp Bot Wiring test	Packout Hide and Seek	Group Diagnostic Testing	Measure Battery Charge	Pit Crew	Inspection training	Team Help training	Load-in Pit Crew	Wire organization	Fill out tracking spreadsheet	Color coding complete	Strain relief	Neat test board	Comp Bot Wiring	Judges Training	Solo Diagnostic Testing	Pit Lead	Diagnose Comms issues	Deploy Code / Restart RIO	Pull RIO Logs	Technician	
Student Name																															



# Feedback from Students to Mentors

- Mechanisms for Feedback
  - Surveys
  - Team Feedback Meeting
  - Small focus groups
  - Individually
  - Dedicated Advocate\*
- Kids need to see you implement at least 1 valuable change from their feedback
- Mentor to Mentor feedback and support is Key

# “Case Study”

For offseason events, Team 177 Students run the whole show. This year at Battlecry, the team chose to rotate a different drive team for each match. The lead student suggested themed matches: all Freshmen, all sophomores, all girls etc. But there was a concern about possible negative regarding the all girls rotation.

Are we setting the students  
up for success?

Are we allowing the students  
to fail safely?