Developing Student Leaders
TO SUPPORT DISTRICTWIDE ROBOTICS PROGRAMS

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Website

http://robotleaders.weebly.com/
Let Students Lead!
Let Students Lead!

• Why?
• What?
• How?
To Build & Support Robotics Programs
STEM STUDENTS

• CURIOUS
• PROBLEM-SOLVERS
• ENJOY A CHALLENGE
• RESILIENT
• EFFECTIVE COMMUNICATORS & COLLABORATORS
Communication Skills
TUSD Robotics Mentoring Program:
Developing Effective Communicators

https://youtu.be/fJA1CtHdRvQ
WIN - WIN

Robotics Programs are Supported by Student Leaders & Building Innovative Leaders for Tomorrow!
My Role

- Curriculum Designer
- Summer Teacher
- Site Support
- Event Coordinator
TPSF Summer Program

Curriculum Design Team

Competition Season

Annual Cycle
• PLTW Teachers
• Meet 2x
• Use Haiku LMS
• Problem/Project Based
TPSF Summer Program

- MS Seed Teams
- HS Mentors
- Elementary VEX IQ
TUSD Robotics Mentoring Program: Seed Teams 2014

https://youtu.be/KsNENJCG_34
• Site Teams
• Scrimmages
• Tournaments
Annual Cycle
Timeline

http://startingvex.weebly.com/tusd-timeline.html

Design Team 2014

Summer Program 2014

Competition Season 2014-2015

Design Team 2015

Summer Program 2015

Competition Season 2015-2016
Summer Curriculum

HTTP://ROBOTLEADERS.WEEBLY.COM/CURRICULUM.HTML
ROBOTICS COMPETITIONS

http://www.vexrobotics.com/

15-16 Game: Nothing But Net
https://youtu.be/A8daR6qBw3M

http://www.usfirst.org/roboticsprograms/frc

15-16 Game: Recycle Rush
https://youtu.be/mAN1B7oKDXE

Other Competitions http://robotics.nasa.gov/events/competitions.php
HS LEADERSHIP ROLES

Middle School Mentors

Work with Seed Teams

Set Up

Tournament Design
HS MENTORING ROLES

Elementary Mentors

Mentor Students
Set Up
Run Competitions
HS MENTORING ROLES

Troubleshooters

Research & Development
HS MENTORING ROLES

TEACH

OTHERS
TUSD Robotics Mentoring Program:
Leadership Roles

https://youtu.be/FaZmO3kIqFo
Specific Strategies

PADLET post lessons learned from trouble shooting

http://padlet.com/CariWilliamz/rvw
PADLET

http://padlet.com/CariWilliamz/stem
Specific Strategies

**Google Slides**: present findings to students

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**Step 1: Understand the Joystick**

There are two main channel controls that are usually used for chassis wheels.

There are four buttons in set 7 and set 8 labeled:
- U = Up
- R = Right
- D = Down
- L = Left
How do you Google?
Google Drawings
Train Volunteers
**Think Award**

Team #: ________________

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Expert (3 Points)</th>
<th>Proficient (2 Points)</th>
<th>Emerging (1 Point)</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consistency</td>
<td>The autonomous code works every time it is activated.</td>
<td>The autonomous code works, however it is not completely consistent.</td>
<td>The autonomous code works rarely.</td>
<td></td>
</tr>
<tr>
<td>Easy to understand</td>
<td>The code isn't busy with too much pseudocode. It is clearly written, with clear commands.</td>
<td>The code is a little busy, is written well to a certain extent, and has good commands.</td>
<td>The code is busy, has too much excess code, and has commands that don't relate to the game plan.</td>
<td></td>
</tr>
<tr>
<td>Successful Scoring/Completion of what the programmer intended</td>
<td>Autonomous code did what the programmer intended.</td>
<td>Autonomous code has somewhat completed what the programmer intended.</td>
<td>Autonomous code did not complete what the programmer intended.</td>
<td></td>
</tr>
</tbody>
</table>

**Points During Autonomous**

**Total Points**
Start Your Own VEX Team of League

HTTP://STARTINGVEX.WEEBLY.COM/

Volunteer For Ours

WWW.TUSDROBOTICS.COM
Thank You

Website: http://robotleaders.weebly.com/

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