Girls in Robotics

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Robotics Platforms at YWCPA

Middle School
● 4H Agribotics
● FLL
● SeaPerch
● VEX IQ

High School
● FTC
● SeaPerch
● VEX
● *Sphero
● *NAO
4H Agribotics

1st robotics platform to be featured in the rodeo!
FLL/FTC

- New to our campus.
- Partnership has made this growth possible.
SeaPerch

- Students as mentors.
VEX IQ/VEX

- VEX IQ summer program.
- Students as leaders.
NAO Robot

- Raspberry Pi and Robotics Camp
Marketing and Messaging

- Stereotype threat
- Role modeling
- Mentorship/peer leaders #eachone teachone
- Celebrate success - girls can win!
- Clear entry point/training for beginners
- Have girls invite friends
Create a “Safe Space”

- Robotics as a class - ideal
- Short, low-risk robotics experiences
- Attend a robotics competition
- Coordinate meeting times with other activities
- Student ownership of the team/workspace
- Growth mindset...freedom to fail - resources to recover
Icebreakers & Connections

- PBJ Robot
- Pipeline challenge
- Lego communication
- “she”bot
- 4H Agribotics

team building
problem solving
communication
What has worked @ YWCPA

- Begin with the starter model
- Teach foundation skills
  - electronics
  - mechanisms
  - programming
  - design process
- Establish team roles.
- Students that don’t feel knowledgeable or purposeful will often leave the program.
HOT TOPIC: “pinkifying” STEM

What’s your opinion?