

Girls in Robotics



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Young Women's College Preparatory Academy

Robotics Platforms at YWCPA



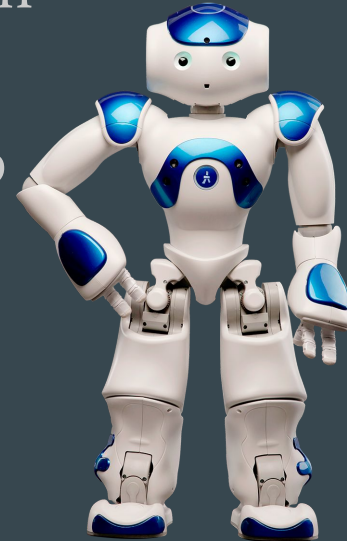
Middle School

- 4H Agribotics
- FLL
- SeaPerch
- VEX IQ



High School

- FTC
- SeaPerch
- VEX
- *Sphero
- *NAO



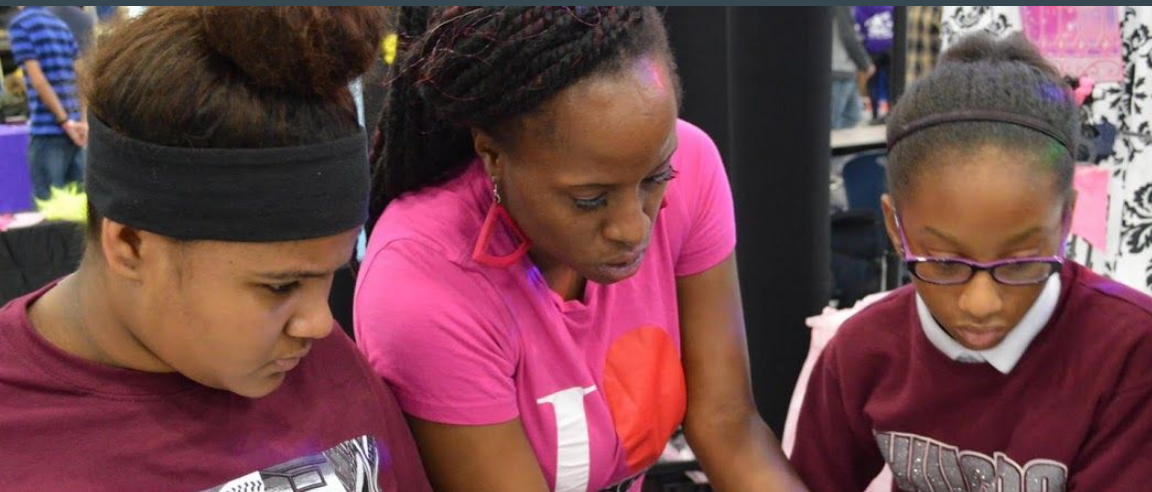
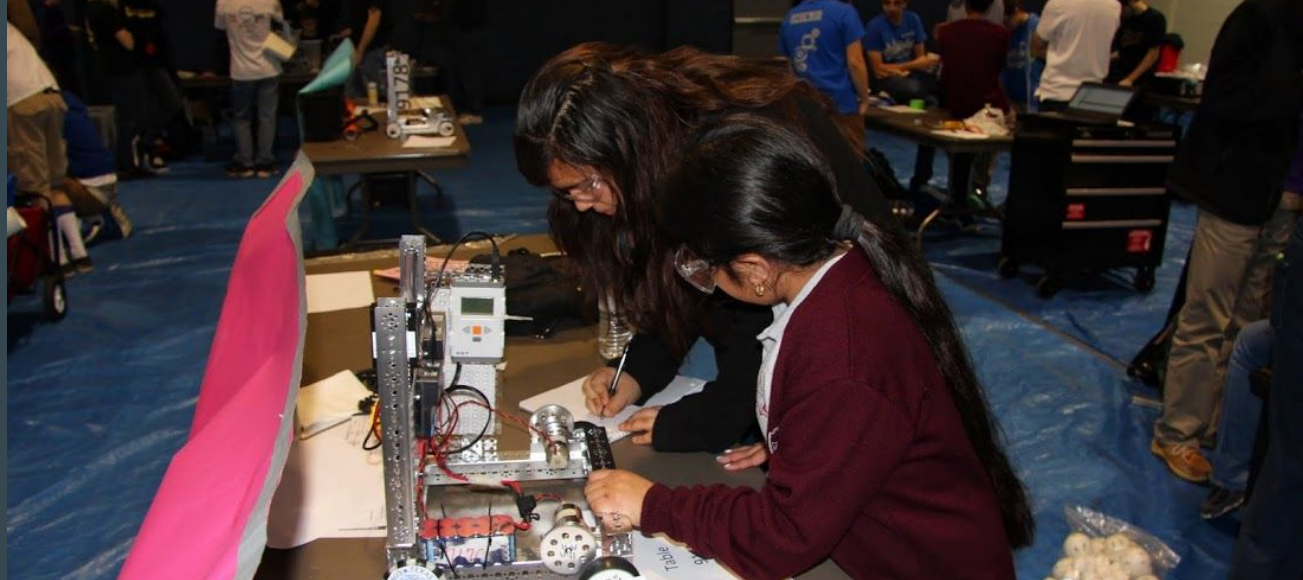
4H Agribotics

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.



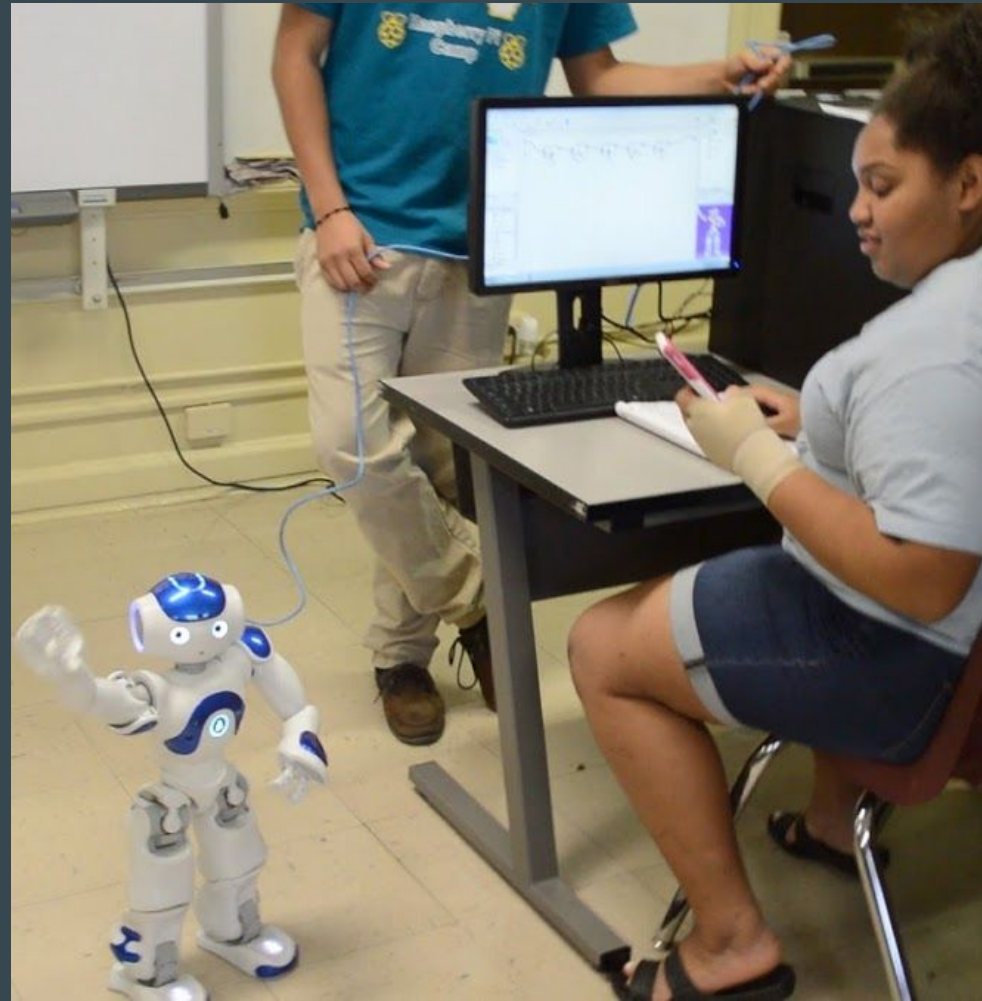
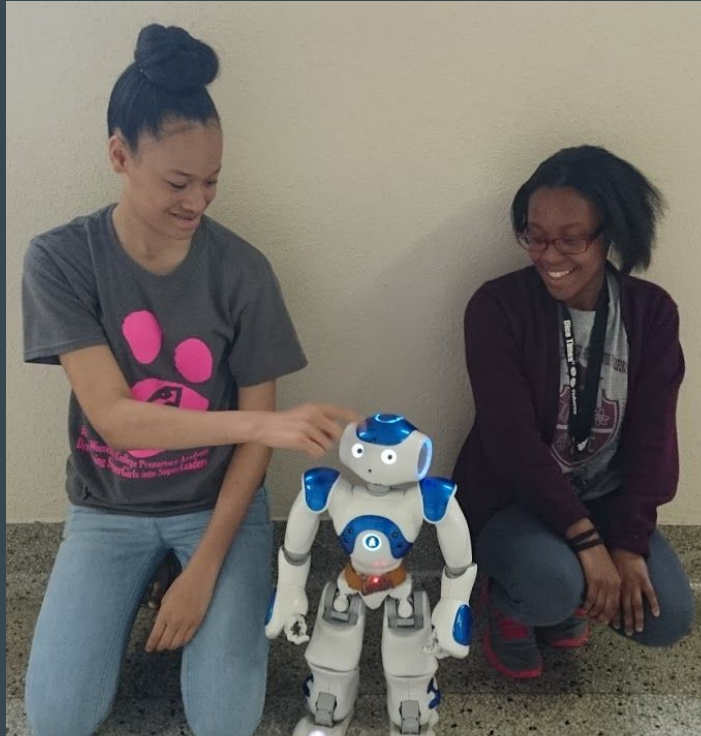
VEX IQ/VEX

- VEX IQ summer program.
- Students as leaders.



NAO Robot

- Raspberry Pi and Robotics Camp



Marketing and Messaging

- Stereotype threat
- Role modeling
- Mentorship/peer leaders **#eachoneteachone**
- 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

CHANCES OF SUCCESS:

0% I WON'T

10% I CAN'T

20% I DON'T KNOW HOW

30% I WISH I COULD

40% I WANT TO

50% I THINK I MIGHT

60% I MIGHT

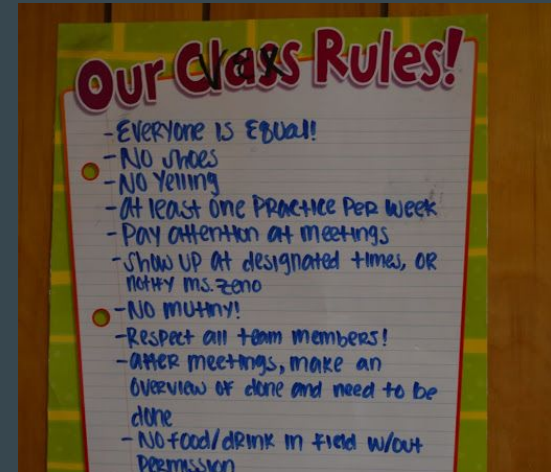
70% I THINK I CAN

80% I CAN

90% I AM

100% I DID

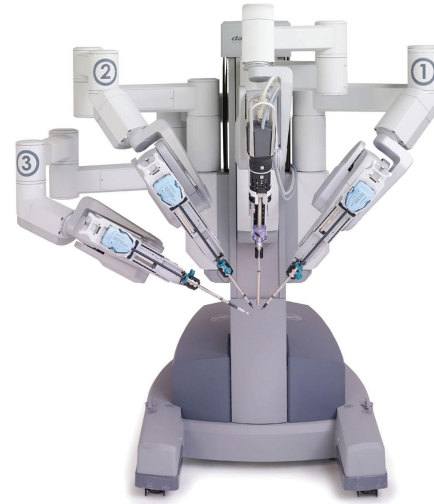
believe-toachieve.tumblr.com



Icebreakers & Connections

team building
problem solving
communication

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



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?