

# The Apache Way with Kids

## Using Community over Code in the First Robotics Competition

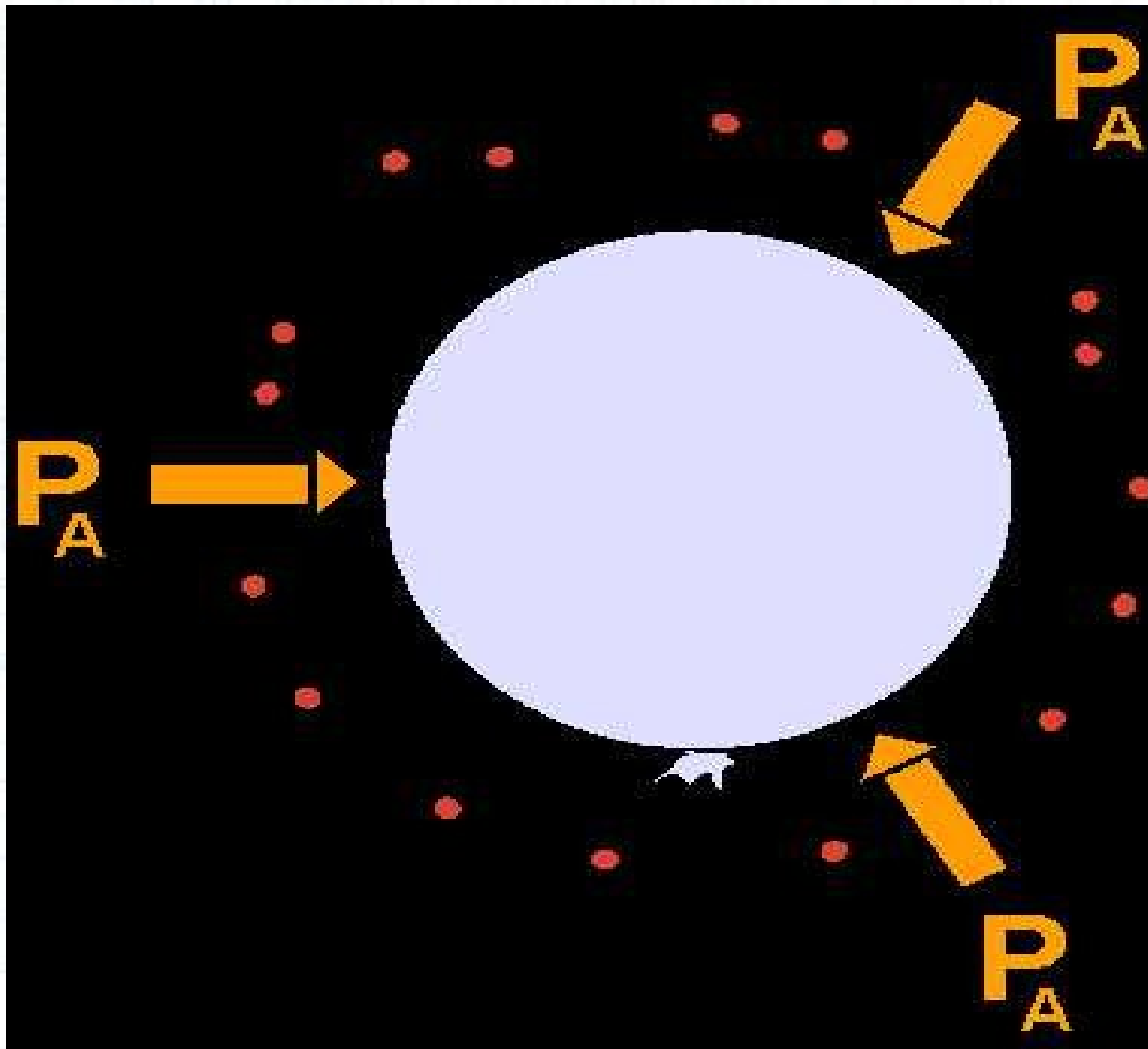


**In 30 years...**

**We have no idea**

**"The best way to predict your  
future is to create it"  
- Abraham Lincoln**

**But what about kids?**



[http://www.indiana.edu/~geog109/topics/10\\_Forces&Winds/GasPressWeb/Image10.gif](http://www.indiana.edu/~geog109/topics/10_Forces&Winds/GasPressWeb/Image10.gif)

# My Origin Story



# Sports Worldview

**Courage**

**Teamwork**

**Winning**



# First Job



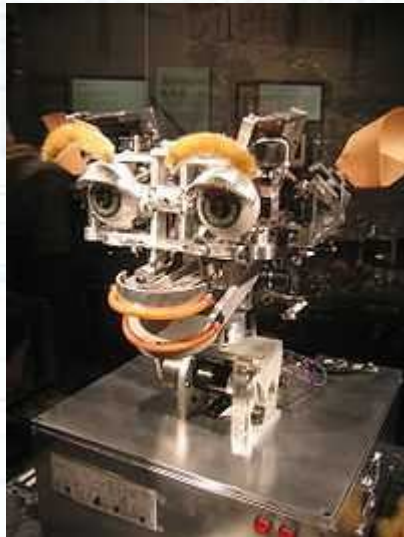
<http://fistfuloftalent.com/wp-content/uploads/2013/12/funny-graduation-pictures-20132-500x320.jpg>

# How much is transferable?



**But there's a lot more to life than  
sports can possibly teach us...**

# Differences between Engineering and Sports



[http://upload.wikimedia.org/wikipedia/commons/thumb/0/01/Kismet\\_robot\\_20051016.jpg/200px-Kismet\\_robot\\_20051016.jpg](http://upload.wikimedia.org/wikipedia/commons/thumb/0/01/Kismet_robot_20051016.jpg/200px-Kismet_robot_20051016.jpg)  
<http://en.wikipedia.org/wiki/Portal:Sports>

# Collaborative Competition





# **Consensus Driven Decision Making**

# Documenting Failure

# Discovering the Apache Way



TM

The

# Apache

# Software Foundation

<http://www.apache.org/>



# Discovering FIRST



**Jr.FLL**

*Junior FIRST® LEGO® League*

**FLL**

*FIRST® LEGO® League*

**FTC**

*FIRST® Tech Challenge*

**FRC**

*FIRST® Robotics Competition*

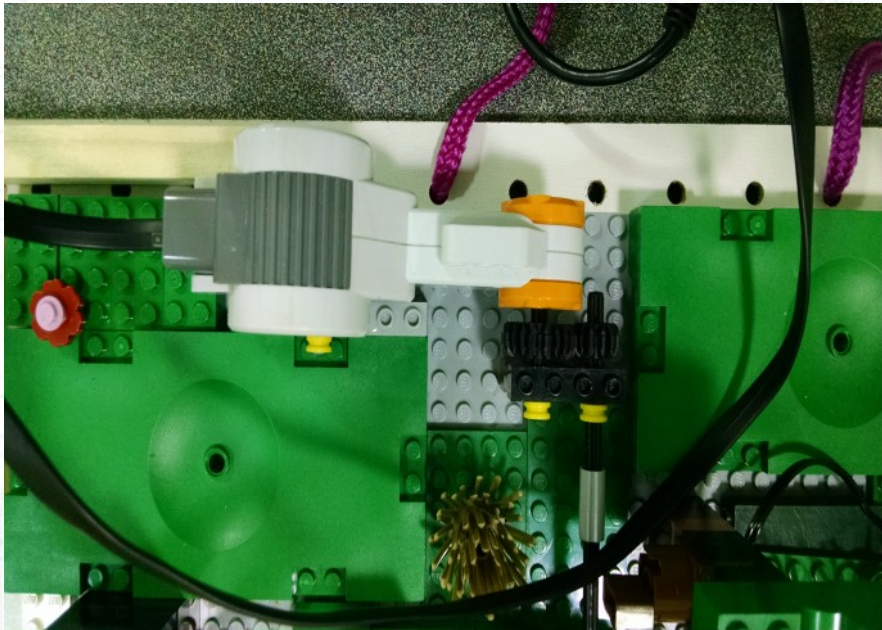
# Core Values

# Values



- Gracious Professionalism
- Teamwork
- Outreach/Inspiration
- Limited Resources
- Community Over Code
- Meritocracy
- Transparency
- Pragmatism

# FIRST Experiences



# The Team



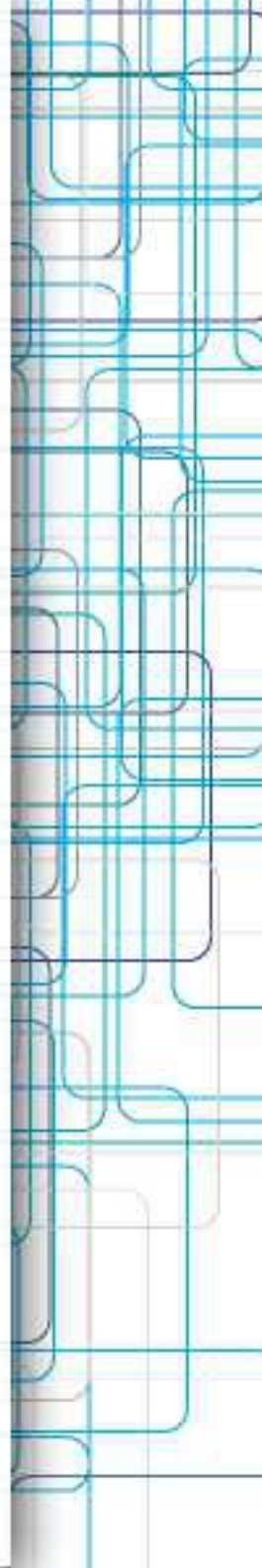
# The Problem



# Coaching FIRST vs Sports



# Invest in Team Building



# Kids don't have Masters in Mechanical Engineering



# Putting your Ego Aside



# Setting Goals



# Building Consensus with Kids



**Kids play politics too**

# Voting Strategies

**+1**

**0**

**-1**

# Building Outreach



# Get girls involved





# **Embrace the Community**

# Use Failure to your advantage



# **FIRST Worldview**

**Merit**

**Research**

**Coopertition**



# **How you can get involved**

Coach

Judge

Referee

Organizer

<http://www.usfirst.org/community/volunteers>



# **Other Kids Focused Tech Organizations**

DEVOXX<sup>TM</sup>  
4 KIDS



CHICAGOLAND





The logo for the VEX Robotics Competition is centered on a white rectangular background. It features the word "VEX" in a stylized font where the 'V' and 'X' are grey and the 'E' is red. Below "VEX" is the word "ROBOTICS" in a grey, spaced-out, sans-serif font. At the bottom is the word "COMPETITION" in a bold, red, sans-serif font. The entire logo is set against a background of a light blue grid with rounded corners, which is part of a larger pattern of blue circuit traces on the right side of the page.

**VEX**  
ROBOTICS  
**COMPETITION**

C O  
D E

# What's important to kids

**MINECRAFT**



# Leave a Legacy Make the Future!



# References

<http://www.usfirst.org/>

<http://www.foxvalleyrobotics.com/>

<http://www.vexrobotics.com/vex/competition/>

## Team Credits

**Team Thundershock**

**5294 "The J is Silent"**

**7737 "Technical Difficulties"**

**7738 "Vaders"**

**"Dee's Angels."**

**"Order2Chaos."**

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**<http://bobbpaulin.com>**

**<https://github.com/bobbpaulin>**

**<http://www.devoxx4kids.org/usa/chicago/>**

**<http://www.meetup.com/ChicagoJUG/>**