

More Than Robots

Purdue FIRST Forums

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Hola, me llamo Rufus Cochran

- 447 student from 2001 to 2006
 - From Co-Operation FIRST to Aim High
- FIRST mentor for a decade+
 - 447, 5010, and 6721
- Rose-Hulman Alumni
 - Computer Engineering
 - Mechatronics
- Systems Analyst at Roche Diagnostics
 - Business Analytics and Artificial Intelligence
- Started a BattleBots team
 - denkbots.com
- Executive Director of Indiana Sciences
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Alternative Presentation Titles

- “You’re doing FIRST wrong, and how to fix it”
- “Why your team can’t keep students and keeps losing mentors”
- “How to NOT lose friends and alienate people”
- **“I’m not having fun anymore...”**

QUESTION

- What is your team's culture?
 - *Describe your team like a person:*
 - What is your team's personality?
 - What is your team's defining traits?
 - How do other teams view your team?
- Write your answers to the above questions down for later.

The Problem

- Our perception doesn't always align with reality.

QUESTION

- What internal challenge(s) has your team faced?
 - Interpersonal conflicts?
 - Administrative issues?
 - Student and mentor retention?
- Write your answers to the above questions down for later..

The Problem

- We organize our teams to build robots, and don't always focus on building individuals.

QUESTION

- Do you ever ask yourself: “Why am I doing this?”
 - Do you feel frustrated by the way your team operates?
 - Have you experienced interpersonal conflict with teammates?
- Do you ever feel like your not really on your team?
 - Do you feel like your perspective is ignored when you voice it?
 - Do you feel like your not really contributing, despite your efforts?
- Do you ever feel like your team is out of control?
 - Does your team feel like lord of the flies?
 - Do you ever feel like you have no power to fix things?

The Problem

- We don't teach Emotional Intelligence in school or at work.

Root Cause

- All of these issues we have noted are rooted in team culture.

Team Culture

- A good team culture comes when you put the “why” first.
 - The “why” is FIRST #puncity

The Why

- Every team has to define their own “why” but some examples include:
 - Building a better tomorrow
 - Building young leaders
 - Empowering students with science and technology
 - Improving our communities
 - Inspiring the next generation

The Why

- If you are trying to tackle a problem like "team culture" you can use the Five-Whys (5Ys) technique to try and find the real root cause of the problem. You have to be honest with yourself and your team if you want to really address the problem.

The What

- To change your culture you need to make the “why” your primary objective.
 - Step back and see what you can do to improve your culture and get back to the “why” your team has defined.
 - Focus on soft-skills like interpersonal communication, conflict resolution, and leadership.
 - Reinforce skills like time-management, stress management, and project management.

The What

- **Communication is the key**
 - Open and honest communication is the foundation of any team made of humans (and autonomous robots for that matter).
 - No one on your team has ESPN, they can't read your mind, they don't know what is eating at you.
 - Speak honestly and openly, while always being respectful, to your team if you have a concern.
 - **Be mindful of the emotional state of your team when you communicate (if someone is having a bad day, they probably are not as receptive to feedback).**

The How

- "Changing the culture of a team can be really hard, and it's not a fast process."
- Kanban
 - A change management philosophy that might fit your situation is [Kanban](#): "The method does not prescribe a specific set of steps, but starts from existing context and stimulates continuous, incremental and evolutionary changes to the system. It aims to minimize resistance to change to facilitate it."
 - Basically, determine the end-state you want to achieve, then break down how to get there into small incremental changes, that individually will face no resistance. This takes time, but is how change can be executed in large established environments.

Live long and prosper...

- Hopefully this process can help you and your team start a new season off right.
- Feel free to adapt these exercises and methods to fit your team's style.
- Most importantly, remember why you do this:
 - "The direction in which education starts a man will determine his future in life." Plato
 - "Education is an ornament in prosperity and a refuge in adversity." Aristotle
 - "Education is the most powerful weapon which you can use to change the world." Nelson Mandela