

Pro-Prosthetics!

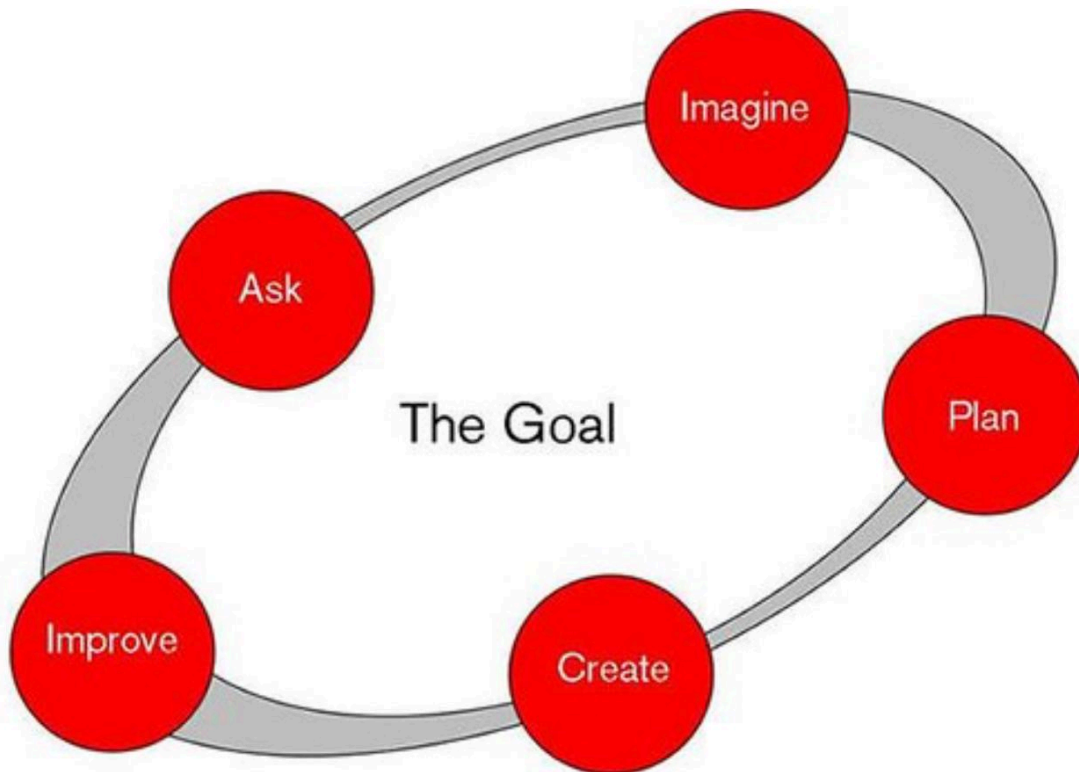
Charlotte
Krisha
Dhanyasri
Ananya

51451G
Cumming, GA

There are many wonderful STEM-related careers, but one stood out to us. Prosthetists. Prosthetists are specialists who make and fit artificial limbs. We decided to choose prosthetists, as they directly help benefit others!

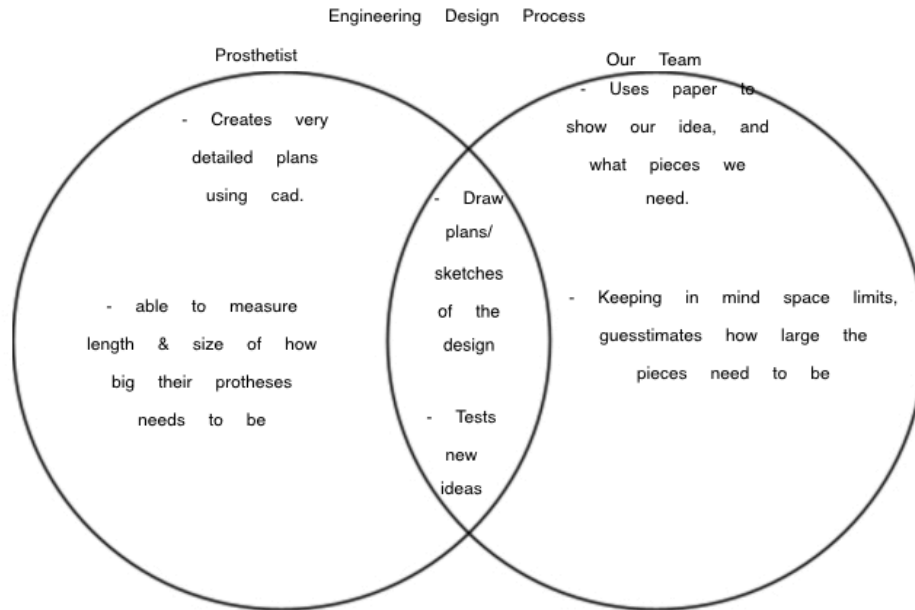
Engineering Design Process

The standard engineering design process looks like this, but how people interpret the steps can be different:



We noticed that

our engineering design process is slightly different from prosthetists, which you can see demonstrated on this diagram



This was just a showcase of the similarities & differences, so these were just the key points.

What's crazy is that prosthetists & our team both face different problems, but using the engineering design process, both prosthetists and us can reach a solution!

How VEX prepares us for a career in STEM.

Vex prepares us for a career in STEM, as it provides us with 3 key skills

1. Leadership, you learn leadership in robotics, even if your team doesn't have a leader. You learn it by showing your alliance your game strategy, and many other things!
2. Knowledge about basic robotics principles, in VEX, you learn about motors, gear ratio, chains, and more!
3. Teamwork, working with your teammates lets you learn how to conquer challenges together.

With these 3 things, we're simply set up for success!

Teamwork + basic principles of robotics



All in all, VEX is an amazing program that is setting students up for success, especially in STEM-related jobs, like prosthetists!

Sources

- College park

<https://www.college-park.com/blog/prosthetic-design-and-engineering/>

- How Stuff Works

<https://science.howstuffworks.com/prosthetic-limb3.htm>

-John Hopkins Medicine

<https://www.hopkinsmedicine.org/>

-All images are from creative commons (asides from the Venn Diagram)

<https://creativecommons.org/>