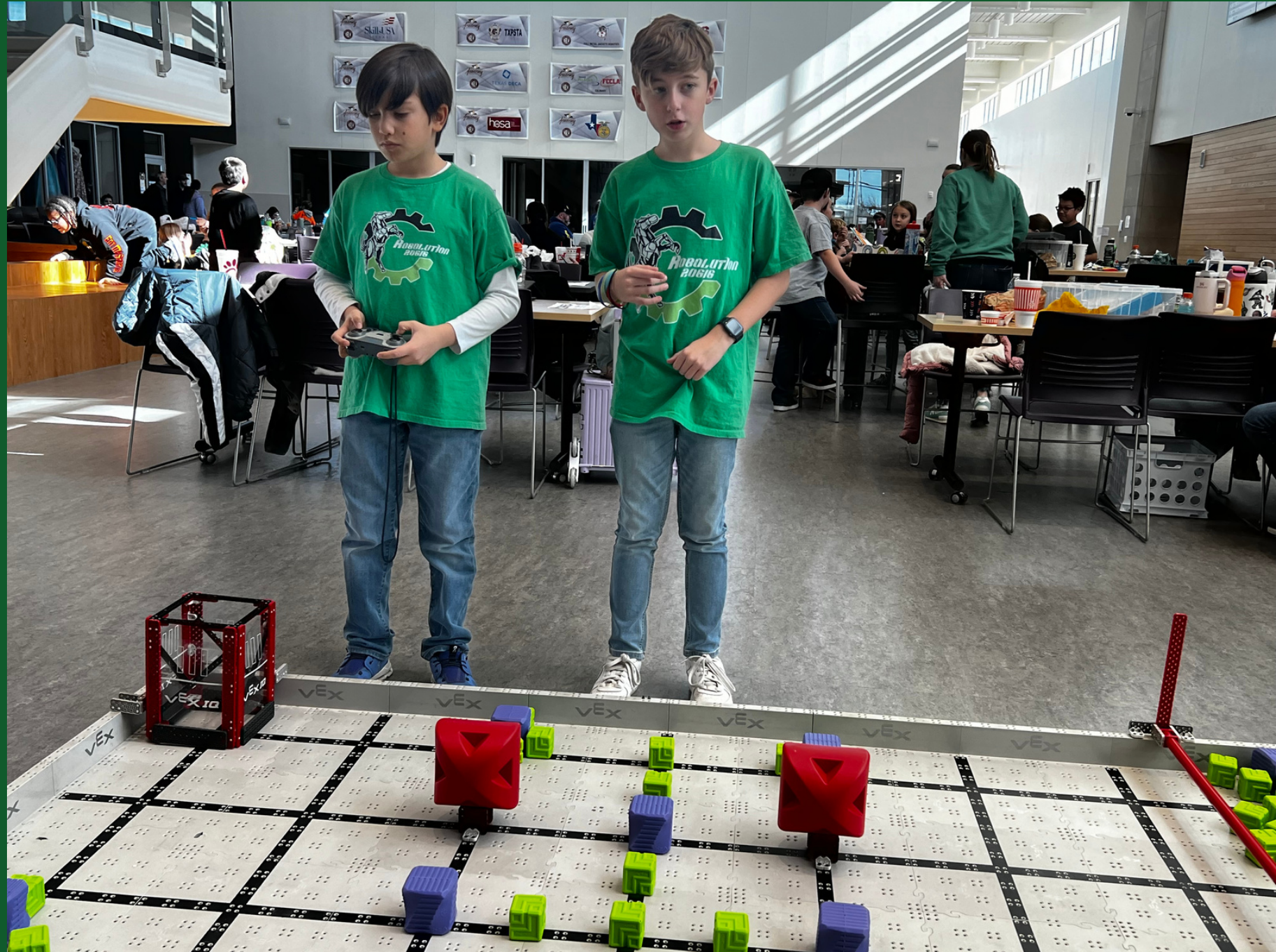
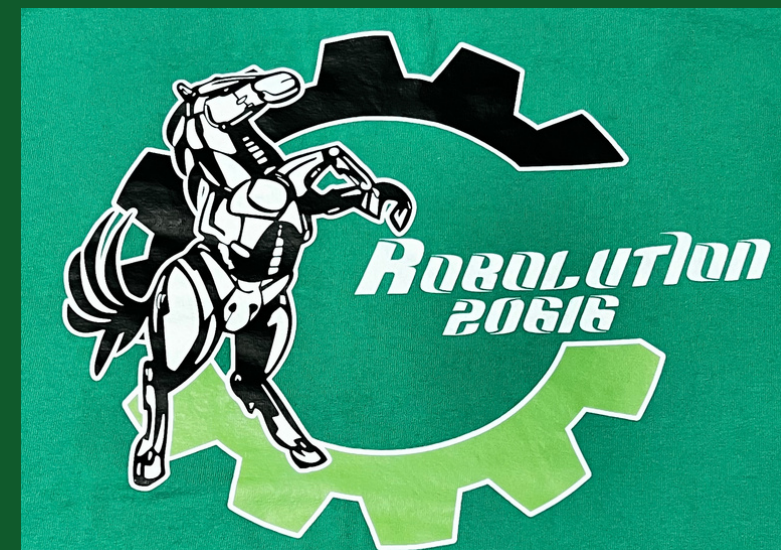


Engineering Design Process and Social Workers



20616D Robolution D
Alex Sanger Preparatory
Dallas, Texas



By: Hunt and Joaquin

20616D ROBOLUTION D





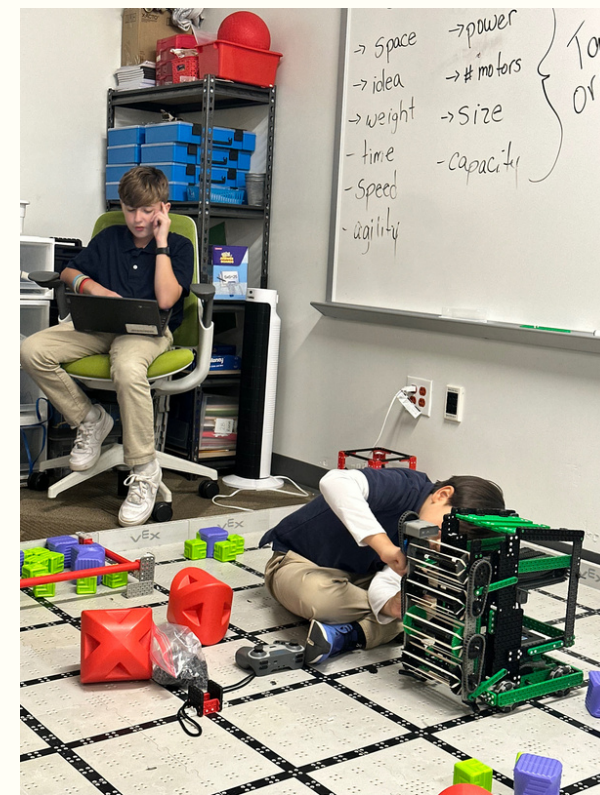
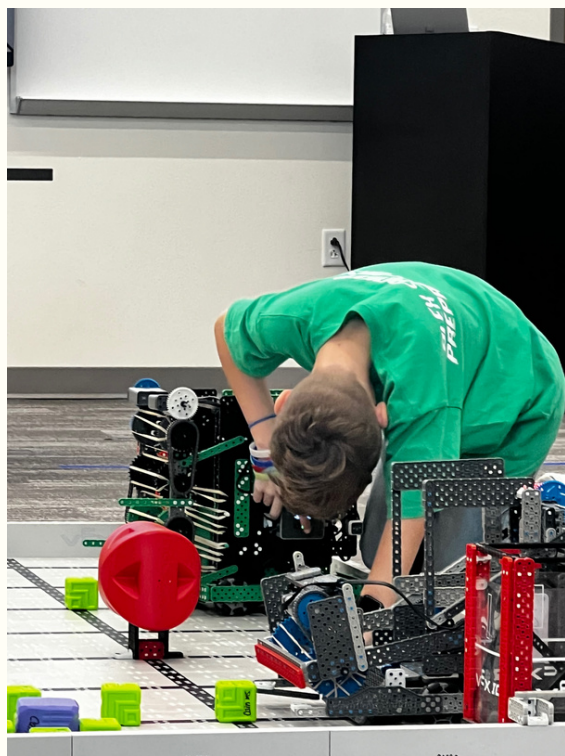
My name is
Hunt and I am
in 5th grade. I
am a driver.



My name is
Joaquin and I
am in 4th
grade. I am a
driver.



ROBOLUTION'S ENGINEERING PROCESS

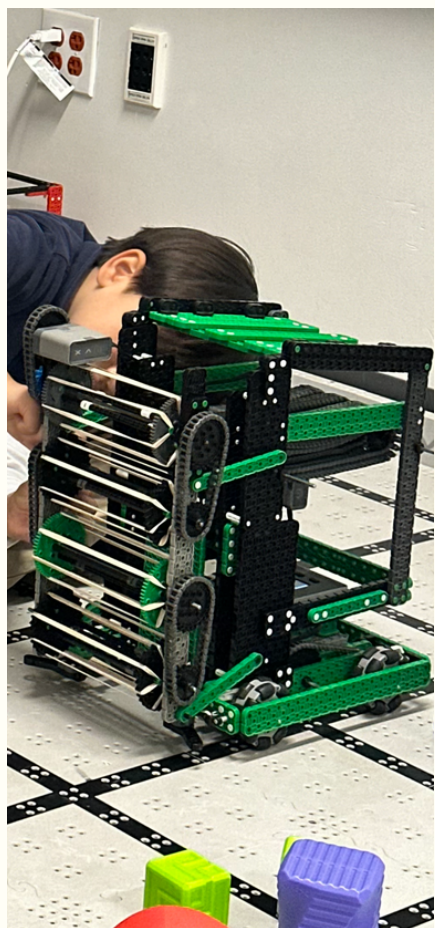


IDENTIFY WHAT OUR CHALLENGE IS, AND THEN WE SET WHAT GOALS WE WANT TO HIT.

BRAINSTORM IDEAS FOR DESIGN OF ROBOT, AND STRATEGIES FOR PROGRAMMING AND TEAMWORK.

CHOOSE A SOLUTION, AND BEGIN OUR BUILDING PROCESS, AS WELL AS OUR PROGRAMMING.

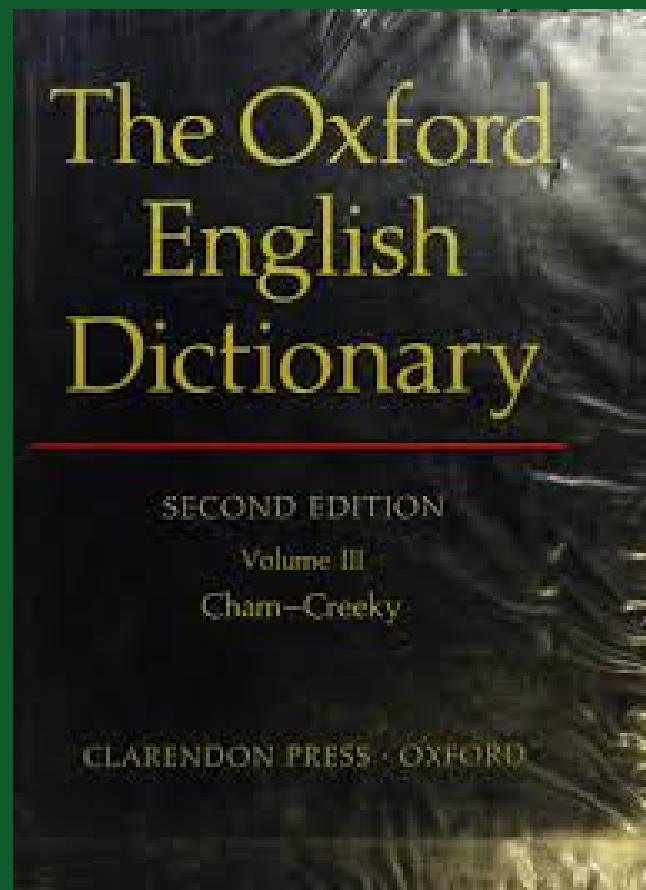
TEST OUR DESIGN TO SEE IF WE ARE ABLE TO HIT OUR GOALS, AS WELL AS OUR PROGRAMMING.



There are many companies and careers that use the engineering process in their everyday practices, such as Software Engineers, Surgeons, even UPS and Amazon.

While brainstorming ideas on either a company or career which uses the Engineering design process in everyday work I asked my dad if that is something that he uses as a social worker in the psych ER, and to my surprise he said yes.

Neither of us had any idea that as a psych social worker that my dad uses a process like this when seeing patients in the ER.



Definition

Social Worker: A person who undertakes social work, especially in a professional capacity.

confused a little, thats ok here is the definition of Social Work

Social Work: Work of benefit to those in need of help or welfare; especially such work provided by trained professionals for those with family or social problems.

According to the National Association of Social Workers, social workers in hospitals are there to provide frontline services to all patients. Psych social workers help their patients and their families (when needed) to understand their illness, help work through any emotions of their diagnosis, and to offer counseling about the decisions that are needed to be made.



Interview:

Please state your name and what you do for a living?

Tom Earnshaw, LCSW, I am a psych Social Worker in the Psychiatric Emergency Department at Parkland Hospital in Dallas, Texas.

What are your degrees in, and what type of license did you have to get in order to do your job?

**Bachelor of Arts
in Psychology
From University
of Mississippi
(2005)**

**Masters of
Science in Social
Work form
University of
Texas at Arington
(2010),**

**Licensed Master of Social Work
(2011) Licensed Clinical Social
Worker (2014)
Either one is required to practice in
the state of Texas**



With Dr. Ivanova

*Due to HIPAA, no
photos could be
taken in the work
area*



How he opted to stay
warm during the icy
January weather.

1. How do you identify the challenge with the patient, and do you set any goal for their care?

We assess the patient and identify areas for intervention, during this the provider is there to complete a History and Physical focusing more on physical illnesses. I am doing a Psychosocial Assessment and am focusing more on social factors. Together we are able to complete a holistic view of the patient. Our goal is to get them the most clinically appropriate intervention.

2. We Brainstorm ideas for robot designs, as well as strategies for programming and teamwork, do you brainstorm with a team about a patient, and if so how?

As a team we review any past encounters for interventions previously attempted.

3. We come together as a team to choose the design we all like and programming and teamwork strategies from our brainstorming meeting, and begin our building process and programming. Do you do anything like that for your patients?

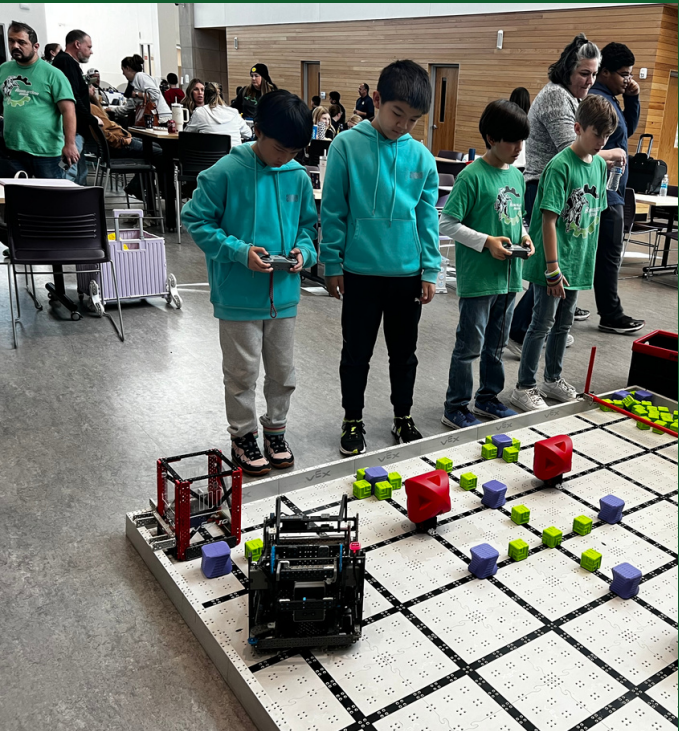
Yes, after we have reviewed all previous charts and looked at any past interventions we create a more refined intervention to try.

4. We test our design to see if we are able to hit our goals, as well as our programming, and if we don't get our hoped results we start back over from the brainstorming session and keep trying, how would you say you test yours?

We implement the intervention and will evaluate its progress every 12 hours. We are always working together, always evaluating the intervention and we will continue to gather information. Refining the intervention to provide the best outcome for the patient.

In order to make sure that the Psych ER is running smoothly social workers and Drs always need to be working on the same goal, just like you as drivers, with the programmer on your team. There may be a design that you feel is better for teamwork, but the programmer may see a different design that is better for the programming. You have to come together with the best design that will get results as you are driving in teamwork and working on the programming skills. Drs and social workers always go see the patient together to assess them. Afterwards we are in constant contact about our observations we each made during the assessment, as well as what interventions we feel are appropriate. This does not mean that we do not have obstacles, as I'm sure you have had your own. We never let variables we cannot control get in the way of designing an intervention, instead we only alter when the variables make themselves known to be barriers.

How Robotics Competitions helps us with our Future



Alliances

We will need to collaborate with fellow workers or companies to come up with a solution that is beneficial to both parties, just like we do in our Teamwork challenges.



Interview

This process will get us ready for an actual interview. We will be able to go in with the confidence that we need to show how much we want the job.



Autonomous Programming

It has helped us to understand no matter how much we practice and prepare, we should always expect the unexpected, and know life can always surprise you in either way.



Teamwork

We are far better successful together as a team, than just 1 person. No matter whose idea its starts as, with our team we can accomplish anything.