



Newsletter 2020

**“E3RC is the incubation center of the workforce for the future”
- Local Business Owner**

A Brief History

Our staff has been involved with the local robotics programs starting in the Fall of 1999. Over the past 20 years we have worked to get STEM based robotics programs to as many students as possible.

In 2014, we saw the need to expand the impact of the local robotics programming, and in doing so created The E3 Robotics Center.

In 5 years we were able to provide support, professional development training, and grant based funding to grow local robotics programs by 100% across Elkhart and St Joe County.

In 2018 we took another step to turn E3RC into it's very own Non-Profit. Our mission is to provide youth robotics programs to K-12 students and focus on Exploration, Education, and Engagement with the community.



Brand New Space

The E3 Robotics Center has separated from ETHOS Innovation Center. It became clear to us that the visions and directions we each had were going in different paths and we decided to step out on our own to create a 501(c)(3) non-profit, The E3 Robotics Center Inc. or 'E3RC'

We have moved into the wonderful new space at Thermodyne, one of the companies that has been a sponsor of our program over the past couple years. It was a wonderful blessing as we will continue to host all 4 Levels of FIRST, and with the goal of other STEM programs, camps and related activities while we strive to uphold the FIRST Core Values and get back to one of our favorites which is 'Fun', and is a big part of Exploring robotics and STEM.

Still our main driving force are the 3 E's of our program Explore, Educate and Engage.

The E3 Robotics Impact

What school systems our students come from:

- Elkhart
- Concord
- Goshen
- Baugo
- Middlebury
- WaNee
- Mishawaka
- South Bend
- Marion
- Home-school

Over the past 5 years we have

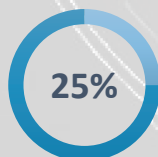
60 Teachers provided with IDOE funded Professional Development

500+ Trained through coach clinics & classes

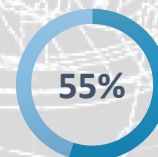
23 Local Robotics Events Hosted

550+ Robotics Teams Impacted

4000+ Robotics Students Impacted



Current Female K-12 enrollment



Current Free/Reduced K-12 Lunch enrollment

“As an educator with over twenty years of experience, I was very impressed with Brian’s approach with children and learning. Brian has a knack for asking the right questions so that the children are not just told the answers, but are directed that they might find them for themselves.”

- Kurt, Elementary Teacher

SouthGate Crossing Events



This year, E3RC partnered with Southgate Crossing for two different events. The first was Southgate Crossing's annual Pumpkin Chunkin' event, in October, where we drove robots and helped to launch pumpkins.



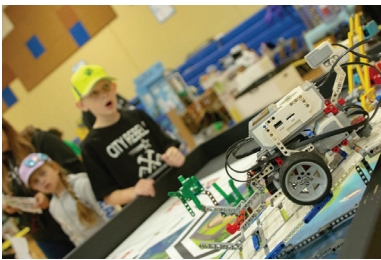
The second was our annual Jr Expo in December, for K-4th Graders to present their LEGO models and Show-Me Boards about this year's theme 'Boomtown Build' all about creating accessible, sustainable and durable buildings. Teams even got a personal tour of the barns architecture.



FIRST LEGO League Teams 2019-20 Season

"It's a great event for the community and the kids in it!"
- Bill, FLL Coach

"Our teams always looks forward to your event each year"
- Tammy, Jr/FLL Coach



On Nov 23rd we partnered with the Success Academy in South Bend to host 25 teams from around Northern IN. These 4th-8th grade students competed in this years theme of 'CITY SHAPERS' where students focused on how architecture and city planning can impact the world around us.



Four of those teams were our E3RC teams. Of the four teams each was nominated in different areas for success ranging from robot design, project presentation and core values. This allowed two of the local teams to advance to the state championship held in December at IPFW in Fort Wayne. (See their robot and awards pictured on the right)



Panama Outreach



On March 30, 2019 – representatives of E3 Robotics Center and First Lego League Team BAWK 776 traveled from Indiana to Panama to share the excitement of Lego Robotics and kick-off new Junior FLL teams. We were greeted at Gamboa City, Province of Colon by excited elementary school students and their parents.

They were eager to learn and experience this new adventure. During the kick-off session, students and parents alike were inspired by the surgical team of Saint Joseph Health System, Mishawaka Indiana who demonstrated the "Da Vinci" used during surgery. This program will continue as those students have now joined the FTC Team 'The Gas Attendants'

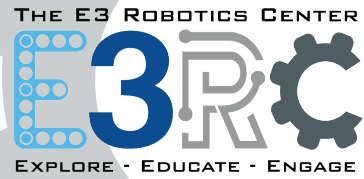


STEM Fest



Saturday, October 26th, E3 Robotics Center partnered with the St. Joseph Valley Section of American Chemical Society to celebrate National Chemistry Week. This year's theme was Marvelous Metals which of course is an important component for our robotics team. The event included a variety of interactive activities with robotics, robotics, robotics. In addition, several groups helped in the celebration including Evans Metals who shared characteristics of

metals and the processes that are used to increase the uses of the metals. Other activities included Green Screen Adventures, Hall of Heroes, origami, augmented reality sandbox activities, liquid nitrogen ice cream, craft shop, face painting, animal adoption, and an amazing silent auction. One of the highlights of the event was St. Joseph Health Systems DaVinci robot that allowed attendees to simulate an operation using robots.

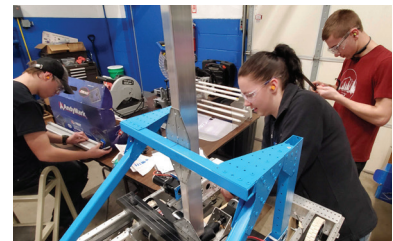


Our FIRST Tech Challenge and Robotics Competition Teams

Our two upper level programs have been busy as well, when they weren't mentoring or coaching our younger program students. They have been hard at work on their own robots.



'The Gas Attendants' FTC Team 8711 competed and won the West Virginia State Championship, qualifying them for a top level international event in June 2020. They also won 2nd Place Inspire (One of the top awards) at the Indiana State Qualifying Tournament, which advanced them to Semi State Championship Feb 29th.



'Cryonics' FRC Team 1555, started their competition season Jan 4th and have been working non-stop to get a robot ready for their first competition of the season hosted at Penn High School on March 14th-15th.



Program Goals and Objectives

Over the past years we have strived to build a standard of best practices for robotics programming. This is something that we continue to refine each year for improvement

Besides focusing on the 3 E's, Exploration, Education and Engagement, we are creating a robotics program for everyone that wants to be a part of a team.



One of our robotics students won Bristol Teen Queen, and part of her platform she is working to create 'All Embracing Robotics' with the focus to help others that are on the spectrum like her to have the opportunity to work with robotics.

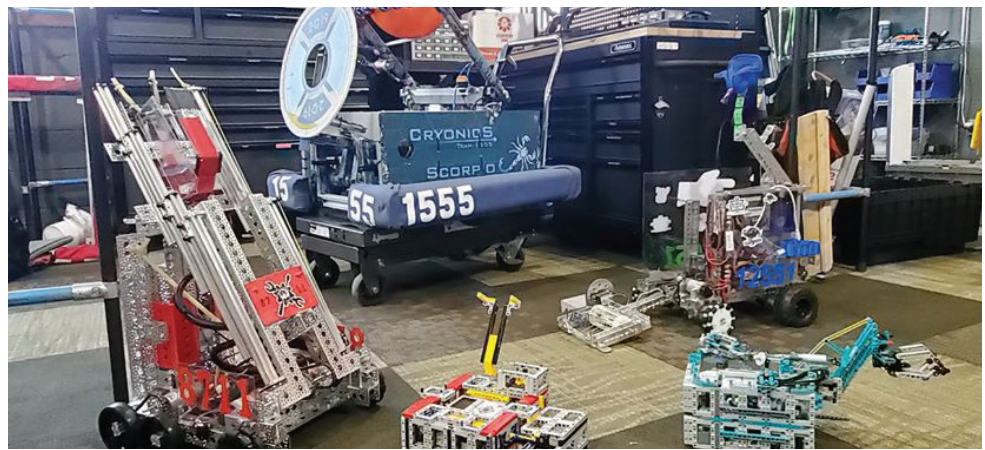
Our FRC Team has also started #FIRSTDiverse with the goal to partner with worldwide STEM robotics programs to create a robotics program that supports



all students. Part of this plan is to reflect the demographics of the robotics program to match those of Elkhart County by collaborating with various youth programs in the surrounding community.

"Everyone accepts me for who I am, I feel like I have a place I finally fit in"
- FRC High School Student

"Before robotics, I didn't really have friends, that has all changed now"
- FTC Middle School Student



"I came for the LEGO. I stayed for the people"
 - 6 Year E3RC Robotics Student

"E3RC has used robotics to build a family"
 - E3RC Parent

A word from our Directors

First we would like to thank everyone for all you hard work and support, it really does take a village to help create such an impact. We are starting to see the ripple effect with more and more students being impacted by STEM based robotics programming.

Our sponsors, supporters, teachers, coaches, mentors, parents and students are the reason we continue to see the impact grow.

While in some ways it has already been a long road of some amazing times, we realize that this is just the beginning.

We are excited to continue this journey of expanding robotics with the end goal of providing a opportunity for any student that wants to join a local robotics team.

Brian Boehler
 Executive Director

Brent Soper
 Co-Director



Up Coming Events for E3RC

- Feb
 - 25th - Hosting Biz-Ness Chamber Afterhours
 - 29th - FTC Team 8711 Competes in Semi State in Lafayette IN
- March
 - 2nd - WRO Robotics Teams Start
 - 10th - FIRST Robotics day at Indy State House
 - 14th-15th - FRC Team 1555 Competes at Penn High School
 - 21st - FTC Team compete at State Championship
 - 27th-28th - FRC Team 1555 Competes in South Indy
 - March 31st - E3RC Open House
- April
 - 4th-5th- FRC State Championship
 - 22nd - Earth Day Event at Elkhart Library
 - 25th - Earth Day, ACS with Environmental Center
 - 28th-2nd - Robotics World Championship in Detroit
- May
 - 16th - WRO Robotics Competition
 - Sign Up for Fall Robotics Teams Open.
- June
 - Summer Camps Start
 - 19th-21st - FTC Team 8711 attends Maryland Tech Invitational
 - Summer Camps Continue
- July
 - Summer Camps Continue
- August
 - Fall Robotics Teams Start

Connect with Us

www.e3robotics.org

E3RoboticsCtr

E3RoboticsCenter