The Lion Roars: Loogootee HS Manufacturing Program

by Kara Kavensky for Radius Indiana

Trends are encouraging in the Radius region of Southern Indiana when it comes to productive engagement between the private sector and schools. Across the eight Radius counties, community stakeholders are realizing a stronger bridge between education and local industry is critical for future growth.

As a result, high schools are becoming more focused upon students positively contributing to economic development.

“Schools play a major part of economic development and our schools are really hitting it out of the park right now,” says Tim Kinder, Executive Director of Martin County Alliance, a local economic development organization. “The Ready Schools program has really helped to foster this and plan for the future.”

Loogootee High School (LHS), a recently certified STEM school, is setting a national example of what’s possible. Loogootee isn’t waiting for its students to return to the community after earning a post-secondary education or after graduation from high school to participate in the local economy; LHS is engaging their students while still in high school.

Martin County, where Loogootee is located, is nationally ranked (#4) for concentration of STEM jobs thanks to NSA Crane. Crane is the 3rd largest Naval installation in the world and occupies the northern third of Martin County.

“There are fourteen departments of the Federal government within the Crane fence line, taking up 98 square miles,” says Kinder.

Thanks to a grant by the Lilly Endowment supporting the Regional Opportunities Initiatives (ROI) Ready Schools program, the Loogootee School Corporation was able to initiate a design thinking process to help bridge education to area industry.

“Loogootee is in a beautiful part of the state [of Indiana],” says Tina Peterson, CEO of ROI, who oversees eleven counties in the Indiana Uplands region. “There is substantial opportunity given the incredible assets of the region, but there isn’t strong post-secondary achievement [data]. We asked the question, ‘How are we going to help this region fill its potential?’”

As part of the Ready Schools planning process, community stakeholders convened to identify challenges for their area and create a systematic approach to prepare for their next steps. One segment of their research was to visit Cardinal Manufacturing in Strum, Wisconsin, a community similar in size to Loogootee in the size of both school and community. Of the Ready Schools ideas proposed for LHS, the winning concept was to create Lion Manufacturing, a student-run business.

“It is always scary to start something new in education. It can be a daunting task. The best advice we received from our research is that you will never be completely ready - no matter how much you prepare,” says Chip Mehaffey, Superintendent of Loogootee Schools. “At some point, you just have to jump in and get started!”

Loogootee High School’s synergistic hiring of Chris Woodard also helped move the concept of a student-run business into a reality. In the summer of 2017, Woodard was hired to teach engineering and technology as part of the Project Lead the Way curriculum. He was also able to bring 20 years of manufacturing management experience.

“Since college, I wanted to work in industry and teach, and I made the transition to teaching in 2017,” says Chris Woodard, who worked as a student in a student-run business while earning an Industrial Technology degree at California State University Chico.

A pivotal partner for Lion Manufacturing is Loughmiller Machine Tool & Design. Both Jason and Pam Loughmiller are graduates of Loogootee High School and their office is down the street. Loughmiller has donated more than just equipment to the Lion program, they have donated customers.

The school launched an effort to transform its 1960s-era “shop” classroom space. LHS had a HAAS Mini-mill, a computerized machine (CNC), donated in 2006. It had not run since 2010 when the relevant instructor left. During 2010 - 2017, the CNC machine remained dormant. The Loughmillers worked with Mitch Mathias (of L-Machine) during the 2018 summer and were successful in getting the HAAS mini-mill functional. It was programmed to make a specific part – LM2800 – which is a part sold to the U.S. Navy for its radar systems, and which is meaningful to the Radius region because of the radar work done at Crane.

“During the transformation, many old pieces of equipment that were no longer usable were discarded and the area received a fresh face lift,” adds Mehaffey.  “Students were thrilled to be a part of that process.”

The Lion Manufacturing area in the school – the old shop classroom – now looks up-to-date and more like a professional business environment for manufacturing. There are eight welding stations for Lion Manufacturing growth opportunities for their business. A second CNC machine and a laser engraving machine will soon be added.

In the fall of 2018, three students were recruited to run production on the machine. By spring semester (2019), Lion added two additional production team members and three office staff. All of the positions are students.

“Loughmiller Machine Tool & Design is a wonderful corporate partner with Loogootee High School,” says Woodard. “We love them. They are community-oriented, heavily involved, and a great partner.”

“I was sold when I saw Cardinal Manufacturing in Wisconsin,” says Pam Loughmiller, whose company has consistently supported the shop program at LHS. “We [Loogootee] have a lot of similarities and I knew that we could make this happen in our school. With an emphasis leaning towards trades, it only makes sense for us to be the ones to help facilitate success for Lion Manufacturing.”

The experience for the students is unmatched. During their first year, Lion Manufacturing hired students to work in other areas in addition to the machinists. Students from the business department were hired to run the office of Lion Manufacturing. Their responsibilities included accounts receivable, billing, marketing, and public relations. Students from the Art Department were also hired to develop a logo for the business and to create clothing and apparel.

The students are experiencing problem-based learning, as there are no answers in a book on how to solve a specific issue. Students must figure out how to fix the machine if there is a power outage or how to fix drill bits. They must diagnose, solve, and implement a solution.

“They are running a business,” says Woodard. “This learning model provides real world experience. This is less about building parts than it is about building students into becoming good people.”

Becca Hollaway, a recent graduate, served as the Director of Marketing and Communications for Lion Manufacturing. During her senior year, she planned an open house, organized tours, coordinated all elements of Lion Manufacturing events.

“I did more work with Lion Manufacturing than I thought I would be doing,” says Hollaway, who be will a marketing major in the fall at the University of Indianapolis. “There is no other area opportunity [in Loogootee] that would have given me the same experience. Lion helped me discover what I want to do after high school. It’s definitely a useful program at school!”

The tenets for the Ready Schools initiative include: collaboration, immersive student engagement, a shared vision with the community, and the goal of prosperity for the area. These best practices align with economic development.

“We have incredible schools, dedicated educators, and wonderful young people who are full of potential, yet we fail to recognize this, as rural communities are often overlooked,” says Peterson. “The Loogootee community has created a model that has incredible capacity for success.

These young people will develop soft skills, work as a team that will serve them well in life, and what they have created in their small community is something replicable across the country.”