## **INDUSTRY 4.0 CAREER PATHWAYS PARTNERSHIP**



Potterville Public Schools teams up with LJ Create and Aidex East to create and implement a new middle school STEM lab environment.

Designed to provide students with an introduction to Industry 4.0 concepts and applications across multiple industry sectors, this new program utilizes the LJ Create "Industry 4.0 Careers Pathways" program.

Ms. Kelly Leonard, previously a math teacher at the school, volunteered to teach the new class. Named "Destination Innovation" by the school, this class focuses on Industry 4.0 skills and related career pathways. Ms. Leonard

tells us a little more about the implementation of the program, and the excitement she's seeing from the students:

We are offering this to our 6th through 8th graders, so for the first year we start everyone off with the Core course, in which students develop 21st Century skills including Design, Problem Solving Creativity, Critical Analysis, Collaboration, and Coding.

Following the Core course, 7th and 8th graders can choose from a variety of Career Pathways Courses. They take the 21st Century Skills they learned and apply them within a specific career area, choosing from construction, health and biomedical, information technology, manufacturing, transportation, logistics and supply chain, or agriculture.

What I've noticed so far is that our students seem to be very engaged, even the ones that typically struggle in class, where they're not interested in





Ms. Kelly Leonard, Destination Innovation Instructor

"I think that's the best part of this program – that they're having to do that critical thinking aspect of it. And they're not just being given information that they have to memorize."



"I've had a few students tell me, "the electrical circuits part is my favorite part." I would have never expected that from the students! So, I'm glad to see them trying new things and being able to do it in a safe way."

Ms. Kelly Leonard, Destination Innovation Instructor doing any of the work . . . they are so engaged in this class! They love all the hands-on activities and the interaction and collaboration they get with the other students on their projects. They get to experience real life things and how it can affect their everyday lives.

We start the program with an introduction to careers and how different careers use all of the skills that we learn in this program. So, they can see how it's a real, real thing for them. I think this program is giving them a great foundation of basic skills for anything in life, preparing them for further education or the job field that they're going to go into.

This program is giving them an opportunity to try and explore different things that they that they don't always get to experience. I've had a few students tell me, "the electrical circuits part is my favorite part." I would have never expected that from the students! So, I'm glad to see them trying new things and being able to do it in a safe way.

The students have been getting creative and they're learning troubleshooting skills as well. They're learning that not everything works the way it's supposed to the first time. And they're also learning that they actually have to do the critical thinking aspect of it. It's not being laid out for them. They have to figure out "What does this do? What do I need it to do? What is it I want it to do? Well that's not quite right, so now I need to make some adjustments. What adjustments do I need to make?" They're learning all of that as they go, and I think that's the best part of this program – that they're having to do that critical thinking aspect of it. And they're not just being given information that they have to memorize.

Ms. Kaytie Palmiter is the Principal at Potterville Middle and High Schools, and was thrilled to discuss how the LJ Create "Industry 4.0 Careers Pathways" fit the needs

in her school and her students' futures:

I started this year, and one of the items that I noticed is that we didn't have a lot of electives. Our students were very apathetic and didn't spend a lot of time on selection of career pathways, or future jobs and careers. And so, when we were looking at different opportunities, I asked our CTE team, "can we have some conversations about how can we take career pathways, and take items that are meaningful for students to understand, but tie it back to the content area?"

And as you can see on all the posters behind us, the LJ Create program mapped perfectly into the different pathways that we wanted students to explore and to understand. For them to then see connections to the content area is awesome. Students are seeing how the content relates to the real world. These are real world problems, and



Ms. Kaytie Palmiter, Principal, Potterville Middle & High Schools

"The LJ Create program mapped perfectly into the different pathways that we wanted students to explore and to understand. For them to then see connections to the content area is awesome." they see how we don't always have an answer to something. And sometimes the struggle is even getting meaningful answers, and how that's okay. We have a lot of students that just want us to tell them the right answer, and they will just follow the steps. But we want people who are creative thinkers, and I think this program does that; it helps us move in that direction. I think it will also help students see what they like and what they don't like, and choose different career pathways.

We have a lot of factories in our area, a lot of companies that can utilize the skills they are learning in this program. And so, our next steps are to strategically invite the area businesses in to see what we're doing. The middle school is building a foundation. We are going to look at the different employment opportunities that are in the area, and bring in those employers to see what we're building at our middle school before we get to the high school. So then, they can help shape that vision of what do we need at the high school level to make the students employable.





## WHAT ARE THE STUDENTS SAYING?



"I think having taken this class you have a better understanding of the background so when you get to high school you won't be so overwhelmed with the complex classes. "I like how we get to see a sample of a project, and then I try to understand how it works. And then we kind of get to make it work better, or find an alternative solution to a problem."



"I really liked the team aspect of working through a problem and making something cool."

## ljcreate.com/industry-4.0

Tel: 1-800-237-3482 Email: info@ljcreate.com