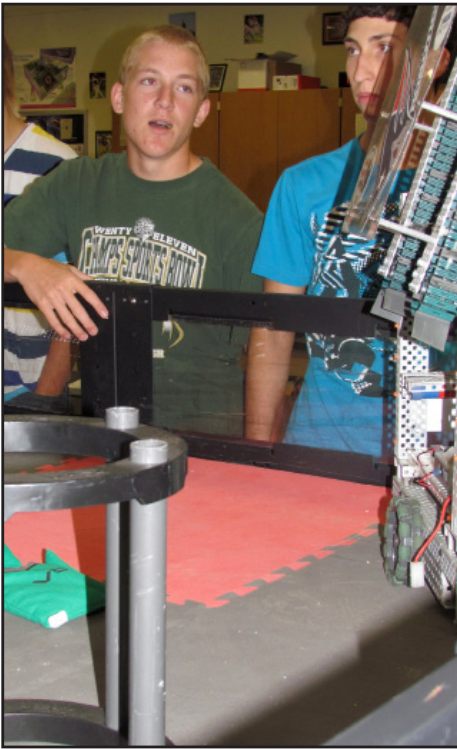


Project-based learning

Robotics students excel in world contests



The Gateway VEX Bot, which earned Jay County's Robotics team honors in the World competition, is explained by team president Austin Wendel. The team of five Jay County students, plus mentors and other supporters, traveled to Anaheim, California for the contest. The students' expenses were picked up by the school, local businesses and organizations, and through grants. At Jay County, students need not worry about the cost to compete. All are encouraged.

VEX BOT:

VEX Bot is one of two robotics team competitions. In VEX Bot the student team receives the task and the kit to create the robot. Since all teams use the same kit pieces, creativity is stressed, says team president Austin Wendel.

FIRST BOT:

This second type of robotics competition allows teams to use all of the resources and people available to complete a task by planning and building a robot. This type of competition really emphasizes teamwork, according to sponsor Doug Tipton.

The room is crazy busy. Students, working in groups of three, are trying to solve a problem and build a machine that can perform the task.

A freshman student approaches electronics teacher Doug Tipton about how he should connect two pieces of metal for his lesson in mechanisms.

"I don't know. What do you think?"

"Well, I suppose I could line up these holes and get a bolt and nut and..."

In his 19th year of teaching classes in electronics, engineering and auto maintenance, Tipton is enthused by the energy and industry the students have when he provides the resources and lets them discover their own answers.

It's called "Project Based Learning."

And it's the very best way for students to learn in Tipton's opinion.

In the past two years, the Jay County Robotics team has qualified three teams for the Worlds Event. Jay County is the only Indiana school to accomplish this. Trevor Robinson, Ph.D. graduate student at the University of Utah's School of Applied Sciences, Technology & Education has included the team as an "expert" for the university's "Delphi Study" to determine

the outcomes of student participation in VEX Robotics.

"The students are really committed," Tipton said. "They come in all summer; work before school, after school, and on weekends."

Cheerleader and honors student Cydney Huey said that she initially experienced some resistance from the boys in the class who didn't think she could do anything "except use a screwdriver."

Now Cydney is not only using all power tools, she is actively sought out by her classmates to be on both the VEX Bot and First Bot teams.

"I love the hands-on learning," Huey explained. "I learn as much as in my AP classes. I really prefer to learn this way."

Tipton emphasized that all students have the opportunity to be on the Robotics team. The competition kits range from \$1,000 to \$5,000.

"The kids are just great," team sponsor Tipton said.

"We couldn't be this successful and offer all of these opportunities to the students without the support of the administrators and the school board."



"Can You Lift It?" is the lesson in mechanisms being tackled by the team of Michael Bruggeman, Andy Koehler and Trevor Sudike.



CYDNEY HUEY, JUNIOR
SECOND-YEAR ROBOTICS TEAM MEMBER

"I didn't play with Barbie dolls when I was younger; I played with Legos. So my mom said, 'why don't you try some classes in electronics and engineering?'"

"I signed up for this class (Electronics I) because I like to work with computers and would like to go into a career in music production or sound engineering."



DERC DEMUYT, SOPHOMORE
ELECTRONICS I STUDENT