

Real Robots



Union City Elementary kindergarten enrichment student Ricky Pocernich showed his excitement as he opened a robot box to meet his new “friend.”

Photos by Chris Menees, Senior Staff Reporter/Photographer



First-graders Kylee Weatherspoon (left) and Ava Devito compared robots.



Second-grader Kobe Maddox (left) and kindergartner Lydia Coleman bonded with their robots after meeting them in enrichment.



Twin brothers Jesse Whitesell (left) and Jack Whitesell, first-graders, let their robots become acquainted during class.

UCES enrichment students ‘Dash’ to get their hands on new robots

By CHRIS MENEES
Senior Staff Reporter

It’s hard to tell who’s more excited in the enrichment classes at Union City Elementary School — the teacher or the students.

The excitement level is high with the addition of robots to an enrichment curriculum designed to challenge the 33 young students chosen for the program.

Enrichment — in its second year at UCES — provides daily opportunities rich in thinking, problem solving and logical reasoning derived from a number of tasks for the purpose of enriching students’ academic experiences, according to K-2 enrichment teacher Cheryl Stewart.

The students are pulled from their regular classroom for 35 minutes each day for enrichment, where they engage in daily tasks such as problem solving; logical reasoning; computational thinking; perseverance; solving problems efficiently; and sequential thinking.

Among this year’s enrichment students are 13 second-graders, 10 first-graders and 10 kindergartners.

Last year’s enrichment students were introduced to computer coding and excelled at the task.

This year, enrichment is moving to yet another level with the addition of robots.

“The robotics and coding is probably the most exciting for the kids, but it also is very much based in problem solving — even for the little ones,” Mrs. Stewart said. “Even the kindergarten tasks are problem solving, sequencing, computational thinking, where they have to break down a task into smaller parts and discuss (strategies to solving the problem).”

Dash — a real robot from Wonder Workshop — was introduced to enrichment students last week.

It was like Christmas morning as the students carefully unboxed the colorful blue Dash units and clicked on the power buttons to meet their new “friend.”

The robotics is new to this year’s enrichment curriculum and Mrs. Stewart explained it will utilize four or five different apps that go with computer coding and are meant to be used along with the robotics curriculum.

“It’s really interesting,” she said. “They’ll get the robotics and coding twice a week. The other two days a week they’ll get the Wordly Wise vocabulary instruction and the fifth day they get something like the brain teasers, which are mathematics based.”

Many of the robotics tasks will also be highly math-related.

“They get a lot of really rich tasks, really good thinking tasks,” Mrs. Stewart said.

All of the tasks throughout the year in enrichment are primarily worked in pairs due to shared thinking — and the robotics that they will be doing with the use of their iPads is no different.

“They encourage collaboration with coding and robotics, so pretty much all year they’ll be partnered with someone,” the teacher said.

Each pair of students will have a robot and they will decide on a name for it. Their teacher will also have a robot and will work the tasks right along with them.

To add to the learning fun, a second smaller robot — Dot — will be added for the students’ use around mid-January or February of next year.

Wonder Workshop offers a wide assortment of apps and accessories which will be utilized for the remainder of the school year in UCES’ enrichment classes.

“We’ve got an inordinate amount of things we can do this year with this

program,” Mrs. Stewart said. “To add the robotics to the enrichment program just makes it that much better really.”

Some of the students in enrichment this year were in the inaugural program last year and, because they have an understanding of coding, are already asking questions related to the coding app that Mrs. Stewart hasn’t yet introduced.

“They’re already kind of anticipating what they’re going to be able to do with these robots, which I think is pretty cool,” she said.

They will start with a very basic app that will introduce them to the basic things the robot can do — such as movement and where its sensors are located — with the use of an iPad touch screen.

As they study, they will come to understand directionality, patterns and

the basics of how the robot moves around the room. Later in the year, Mrs. Stewart is planning an activity where she will use painter’s tape to square off areas and the students will complete challenges in which they will learn how to program the robot to go in a maze, staying within the tape boundaries.

“There are just so many things you can do with these robots,” she said.

Each time she goes online to look up one thing, she invariably finds so many more options for the robotics curriculum.

“It’s great,” she said, adding that the students’ generation is naturally inclined to learn the new technology even faster than the generation before them.

After Mrs. Stewart attended a Tennessee Educational Technology Conference, she realized how big computer coding has become nationwide and realized the need to add robotics in the future. She shared her thoughts with the Union City School System’s IT director when she returned.

“I thought to myself last year when I attended, ‘Wow, we really need some robots,’ so I am so happy that the school supports

the program and wanted to provide the robots,” she said.

She noted that former director of schools Gary Houston was very instrumental in supporting coding and its implementation, with that support continuing under new director Wes Kennedy and with the help of UCES principal Rene Flood, curriculum coordinator Vicki Wilkinson and many others in the system.

“It’s really good,” she said. “I’m excited because I know how far these

kids can go with coding, period. And it’s not that I’m looking at ‘Well, I want these kids to become engineers or scientists.’ That’s great if they do. It’s great if they go into the STEM (science, technology, engineering and mathematics) fields, but just the problem-solving growth that I saw last year with my students — as a teacher, you watch it from beginning to end and you just think, ‘This is amazing.’”

It’s not likely anyone will get bored in enrichment, where the new robots will offer endless possibilities to challenge the students on a whole new level of learning.

“It’s very engaging,” Mrs. Stewart said. “They’re eager to learn and they’re high energy and they want to know everything they can.”

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Kindergarten enrichment student Andi Walker was mesmerized by robot Dash when she was introduced to it last week.



Second-grader Marley Waddell (front) couldn’t contain her excitement as she and classmate Mikaelee King met their robots during enrichment.