'Minecraft' used for learning at Denton ISD schools

Students use game for variety of tasks, including coding introduction

McNair Elementary fourth-grader Sydney Schachter (left) and fifth-grader Molly Weiner (right) play "Minecraft" during a meeting of her school's club for the game on April 15. Sydney, Molly and other McNair students meet after school once a week to play as a group.

By Anthony Tosie, atosie@dentonisd.org

When parents hear the name "Minecraft," many just envision a video game. For Denton ISD students, however, it's much more than that – it's a learning tool.

Though "Minecraft" is a video game available across a variety of platforms, it's used at many Denton ISD elementary and middle schools to encourage creativity, foster relationships and learn about coding. Fourth- and fifth-grade students are able to join "Minecraft" clubs at participating elementary schools, while anyone in participating middle schools is welcome to join.

Parent volunteer Rob Justice, an executive at technology company Cisco, co-founded Denton ISD's first "Minecraft" club at Harpool Middle School in 2013, and the group has rapidly grown in size since then. With about 60 active members, the club's student involvement outpaces many other extracurricular activities, and it's just as popular as school sports.

At a recent community event, Mr. Justice said about a third of the club's students want to learn about coding as a result of their participation.

"Some parents definitely thought it was just a game at first, but they realized it's not what they thought now that they've seen it in action," Mr. Justice said. "This club is a gateway – it leads to more technology paths. Parents will often push their children toward sports, and it's great to

encourage good health, but most kids aren't going to be professional athletes. Tech jobs are one of the fastest-growing career paths, but sometimes parents don't want their children to focus on computers because that's not what they did growing up."

Perhaps the best way for someone unfamiliar with "Minecraft" to understand the game is to think of it as a digital version of Legos, albeit with far more building capabilities. Students using the game can create entire worlds with different materials, such as wood or stone, and those worlds can also be shared so that multiple students can exist in one at the same time. That's just the beginning, though – they can also use the game to create interactive elements.

McNair Elementary students said they recently used redstone, a type of material in the game used to transfer power, to create a rollercoaster that everyone in their club could ride.

"I really liked making the rollercoaster because it was simple but cool at the same time," said Molly Weiner, a fourth-grade student at McNair. "I'm still in the basics, so I'm figuring out how to do things like make a light that turns on, but it's really fun."

McNair, the latest Denton ISD school to offer a "Minecraft" club, began meeting every Wednesday after school in January, but that could change soon.

Students involved in McNair's "Minecraft" club play together on a server after school on April 15. McNair's club is limited to fourth- and fifth-grade students, but the school is looking into possibly expanding to include younger grade levels.

Dr. Debbie Cano, principal of McNair, said interest in the club is so great that it may soon expand to include an additional day. The club currently occupies one computer lab after school each Wednesday, but expanding to use both McNair's computer labs is also being considered.

"We may make it two levels because some kids are so advanced, but we want to make sure everyone has a chance to be involved," she said. "We want to look at all the options and see what [the students] want, which maybe means also reaching more grade levels."

Dr. Cano added that she's also looking at ways to expand the use of "Minecraft" to integrate some of the school's curriculum, such as having students create ecosystems with the game's animals to teach science. That may come in time, but expanding the club so more students can be involved is at the forefront, she said.

If McNair's club does expand to two levels based on ability, its current members already know what they want to do next: mods.

Mods – short for modifications – allow users to change the way a game functions, expanding or altering its capabilities. Installing mods requires some technical knowhow, and creating mods typically requires some programming knowledge.

Katelyn Yager, a fifth-grader at McNair, said she wants to create a large amusement park in "Minecraft," and mods may be a way to help achieve that goal.

"A lot of us watch YouTube videos on mods and how they get made," she said. "We really want to learn how to do that on our own."

While Katelyn and Molly both said they aren't sure about what they want to do when they become adults, two of their classmates have plans that involve computers. Jonathan Loftin, a fourth-grader, said he knows the jobs he wants all make heavy use of computers, and Jayce Biondo, a fifth-grader, said he wants to become a video game programmer.

Regardless of the paths they take as adults, all the students in the club said they enjoy "Minecraft" because it allows them to be creative and work with others.

"I definitely want to learn how to create my own mods and learn coding," Jonathan said. "But my favorite thing is how we all play together in one world, where we can build together. I really like [the game's] creative mode because it's fun to make things with friends."

LEARN MORE ABOUT THE GAME

Want to learn more about "Minecraft"? Visit www.minecraft.net to read information on the game's official website, or visit www.minecraftedu.com to learn about an educational variant of the game designed for classrooms.