

Pine-Richland Middle School students use old-school and high-tech skills to build molecules

ASHLEY MURRAY | Tuesday, June 6, 2017, 9:00 p.m.



Submitted

Pine-Richland Middle School students Stella Lapinski and A.J. Lachimia are shown here using Happy Atoms to build molecules.

In Brian Kantz's eighth-grade chemistry class, students can now use their tactile and tech skills to learn chemistry.

"Chemistry is a very difficult topic for the students to understand, so I was looking for an innovative way to explain bonding and how atoms come together," said Kantz, who's taught middle-school chemistry for 24 years.

That's when Kantz saw an article about Happy Atoms, a kit developed by Jesse Schell of Carnegie Mellon University's Entertainment Technology Center and Schell Games, a Pittsburgh-based game design company.

The kit consists of atom models that magnetically connect to form various molecular combinations. The Happy Atoms smartphone application then allows students to scan the molecule they built and learn more about its function.

"It's a great combination of using old-school manipulative techniques with newer technology that interests the kids with regard to the app and using their phones," Kantz said.

Through the help of one of his student's parents, Kantz secured a grant through PPG to buy the teaching tool this spring.

"In fact, I used it on 'Take Your Child to Work Day,'" Kantz said. "I had a lot of teachers and children who really enjoyed it."

Eighth-grader Aakash Kottakota, 13, loves the tool so far.

"You take the app on whatever device you have and scan the molecule you built to find out what it is, what state of matter it's in, and other interesting facts," Kottakota said.

Kottakota said chemistry and math are his favorite subjects. He hopes to pursue a career in computer science.

"This helped us learn about what kind of bonds and molecules are built," he said. "It's a more hands-on way of learning the kind of information that's presented to us."

Kantz loves that for a student like Kottakota, the app allows him to go as deep as he wants into learning about the molecules.

"You can adapt to the level of the students," Kantz said. "It allows for basic remediation but it also allows for enrichment."

Kantz said he is pleased so far with Happy Atoms and plans to incorporate the tool even more next year.

Ashley Murray is a Tribune- Review contributor.

