STEM Lessons Bridge the Gap Between Content Knowledge and Application

By Brandon Wilson | April 7th, 2017

I have been teaching 7th-grade science for the past five years. Four years ago, I joined the staff at the Winkler Middle School in Concord, North Carolina. North Carolina is a state where the number of STEM jobs is growing, so it is up to today's educators to prepare our students for tomorrow's jobs. When the Cabarrus County School system released a list of online resources available to teachers to help build lesson plans and encourage student learning opportunities, I discovered Defined STEM.

STEM lessons bridge the gap between learned knowledge and applicable circumstances, so it's essential to use a program that helps define these connections and encourage students' critical thinking. After browsing and filtering through the content, I found a <u>literacy performance task on zoos and endangered</u>

<u>Species</u> that I wanted to incorporate with the students. It was not only relevant for my students at the time, but it also helped them learn about the characteristics and necessities of life and how to keep organisms living.

As they thought about how to keep endangered animals alive in zoos and aquariums, my students could refer to articles with different Lexile levels, which were embedded in the task and which helped to differentiate the activity for my students with varying reading levels. The accompanying videos supported the lesson by showing how zoo employees maintain the health of the animals in their charge. Having these resources improved the overall environment of the classroom, and the kids became more engaged.

Finding an adaptive resource isn't always easy, but it is often essential. In my science classes, I need to rely on a variety of tools that can help with the lesson, discussion, collaboration, and application aspects of teaching. I encourage teachers to try Defined STEM as there are numerous lessons and tasks already created to help take the weight off teacher preparation. I paired Defined STEM with an LMS called Canvas that allowed my students to respond to a Defined STEM-inspired conversation in a built-in discussion board on Canvas. This way, every aspect of the lesson remained digital and easily accessible. Each student could see how the others responded, with instantaneous and trackable results.

I love teaching middle school students and I love teaching science. Defined STEM helped facilitate these passions and gave my students the resources they needed to move further down the path toward digital and global citizenship.

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his Business Education degree. After falling in love with middle school teaching, he changed his majors to become certified to teach math and/or science with a specialty in middle grades. Wilson has taught classes in Jackson and Gaston County Schools, and is now employed at Cabarrus County Schools.