Putting a Rap on Science

Lighting cheese balls on fire, blowing up pumpkins, and explaining double helices through original rap music are all in a day’s work for ‘Ville Alumni Brian Heisey ’03. An excited and attentive group of students await him daily at Central York Middle School. Where did this Elizabethtown native cultivate such creative expression in the classroom? One could suggest teaching was in his genes. “I was interested in teaching from a very young age because both my mother and my aunt were educators,” recalled Brian. “My mom raised my brother and me in an atmosphere that respected education and the learning process. I remember at a young age my aunt, Dr. Linda Itzoe, took me to Penn State York to help her during the summers. I helped her to grade her papers and check her mailbox, and I thought teaching would be a pretty fun job.”

Brian’s interest in education continued throughout high school, thanks to his sophomore biology teacher, Chris Eurich. “Mr. Eurich left a lasting impression on me. He had a way of interweaving humor into all of his lessons which made his class so much fun,” said Brian. In 1999, Brian entered Millersville University as a dual major in music and biology with a secondary education emphasis and later decided to focus primarily on biology. Brian recalled, “I fell in love with the open spaces at MU, and enjoyed meeting the faculty. They had such a passion for science and supported my desire to educate, rather than become a researcher.”

According to Brian, the coursework at Millersville was tough, but the relationships he forged meant the most to him. “Retired biology Professor Dr. David Dobbins was invested in making sure you truly learned and embraced the content and grew as a student. Dr. Timothy Ladd (associate professor, biology) made learning microbiology fun and showed individualized care for each student. Dr. Ed Rajaseelan (chemistry professor and department chair) tirelessly championed student success,” Brian remembered fondly.

Today Brian builds relationships with young learners through an innovative and interactive approach to teaching. He has morphed his coursework into customized lessons over the past three years. “All students begin on the same unit, but following that, the pace of instruction is based upon individual student needs. They are all learning the same content, but at a speed and intensity that’s appropriate for each child,” said Brian. He also conducts small group instruction and aims to foster encouragement and positivity through student teamwork.

Always seeking innovation in education, several years ago Brian began using technology to connect with students in very unique way. His preferred media platform, YouTube, boasts 1.3 billion users. “Mr. Heisey’s Science Channel” features more than 100 videos with content that includes words of encouragement, homework assignments and rap music with a twist. Brian said, “I love utilizing technology to connect with students for better learning.” His latest production, "DNA (Just Replicate)," is a lesson on the double helix coiled up in a rap. With more than 1,500 views, this was his most advanced work to date. His wife, Sarah Heisey ’03 (whom Brian met at Millersville), fellow faculty, students, and the Heiseys’ children helped with the production. It took months to create, but he believes the payoff for the students is worth the time investment. “You have so much more impact on kids’ lives than you may think. Over a career, you reach and influence thousands of kids,” said Brian.
Science isn’t Brian’s only focus in the classroom. He loves to teach the importance and power of giving back. He has personally spearheaded a project with Central York Middle School’s Aevidum Club to collect funds and food items from local businesses to thank local first responders with a free lunch. “Giving back to the places and people that have helped you become who you are is so very important,” said Brian. He credits his spirit of philanthropy to Millersville, where he was crowned Charity King during Homecoming 2001 after raising money for the Milagro House in downtown Lancaster.

Still young in his career, Brian plans to continue growing as an educator, exploring new teaching methods that will leave a lasting impact with local youth. “I left Millersville knowing that my subject is important, but relationships matter. Teachers need to be there for kids no matter what. For some students, their educators are the only adults they have to look up to.”

To learn from Brian’s educational raps and see the famous exploding pumpkins, visit his YouTube Channel: Mr. Heisey’s Science Channel.

1) Scene from DNA (Just Replicate) 2) Giving a classroom demonstration 3) Homecoming 2001