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Since then, the AJC has cleared out its archives, so it is now only available in the form in which I originally submitted it to Maureen Downey's Get Schooled education blog.

A Great Teacher of Life Sciences at Ebenezer Middle School, Mark Weese

By Peter Smagorinsky



When I was a kid, I had all the makings of being a good science student. [My father was a pioneering meteorologist](#), and my mother was the first woman statistician ever hired by the Weather Bureau (now NOAA). Even though we lived quite close to Washington, D.C., we lived on a dirt road in an unincorporated area of Alexandria, VA, surrounded by woods and fields. I spent as much of my youth outside catching crawdads and chasing fireflies as I could. My parents were both New Yorkers, and my urban father turned all yardwork over to me when I was about 10 years old, [a dedication to which I remain committed today](#). I was surrounded by science, and loved it, at least as it occurred in the natural world.

But science in school was always a struggle for me. All that dynamic interaction and stimulation that I found while playing outdoors was reduced to memorization of scientific terms and facts, with the occasional dissection of a pickled frog or worm our only engagement with life itself. My understanding of science was evaluated on multiple-choice tests or other rote assessment. I hated science lessons and science classes because the coolest stuff about science had nothing to do with how we studied science in school. I therefore did quite poorly for the most part, believing that science was not only boring, but beyond my comprehension or interest.

I would really have benefitted from having a great science teacher. I might have developed an earlier and richer appreciation for science in school if I'd had a teacher like [Mark Weese](#).

Science is among the STEM disciplines—along with technology, engineering, and mathematics—that are considered essential for the US to be competitive in the global economy. Every decade or so, the specter of an uncompetitive populace is presented to us as the inevitable outcome of what follows from “our failing schools,” a characterization I reject as a [manufactured crisis](#) that has become accepted and propagated all the way from the folks who gather at the local barbershop to the U.S. Secretary of Education.

Making STEM fields more rigorous is trumpeted as a national imperative, and lamenting the sad state of their education in schools serves as part of the rhetorical foundation on which yet newer curricula and tests are developed periodically, all designed to propel the US toward global economic dominance. In that we are subject to such awakenings with remarkable frequency, from the [response to Sputnik](#) to the Reagan-era [A Nation at Risk](#) report to No Child Left Behind to Race To The Top, it’s hard to accept the premise that we are always behind. Yet the fear of falling behind, and the belief in another new school curriculum with batteries of assessments as our only salvation, recurs predictably and routinely.

I don’t know if Mark Weese’s science instruction will make the US into a permanent dominant world economic power. But I do know that he makes science an engaging field of study for the kids in Rincon, a small town in south Effingham County that has been on the Georgia map since 1880. It’s the sort of town where they still have a Thanksgiving parade and, at Halloween, a Scarecrow contest. It’s also a town where the kids learn a lot about science in school.

Even though Mark is relatively young at 28 years old, he has been named Ebenezer Middle School and Effingham County Teacher of the Year for the work he does with the school’s 7th graders. Like a lot of teachers, he comes from a family where at least one parent (his mother) is a teacher, and so he comes to the profession with a built-in respect for the institution of school. As he says, “The teachers that surrounded me for most of my life became mentors and presented education in a manner that inspired future learning. One teacher in particular not only encouraged me to be in front of the classroom, but also to become involved in a commitment of inspiring future leaders.”

That teacher was Mark’s biology teacher, cross country coach, and Fellowship of Christian Athletes mentor Matt Johnson at Collins Hill High School in Suwanee, whose “classroom of wonder” is replete with fish tanks hosting a variety of salt and freshwater life forms and includes a small-scale tropical rainforest with a live, three-foot iguana. Through Johnson’s example and encouragement, says Mark, “I realized that I was surrounded by numerous blessings and that I wanted to dedicate my life to share those blessings with others around me, just as Coach Johnson had done for me.”

Mark speaks highly of his teacher education program at Georgia Southern University, from which he graduated after initially enrolling at UGA and being named an SEC scholar-athlete as a cross country competitor. At GSU he graduated *cum laude*, then returned for his master’s degree, which he completed in 2010. Mark is generous in crediting those who’ve helped him learn to teach, from his GSU professors to his EMS colleagues: “I’m just collecting from the best. I feel like my teaching style is just bits and pieces of the best in Effingham, and trying to put it all together.”

I have yet to see terms like “inspiring” or “passion”—another trait ascribed to Mark in letters supporting his Teacher of the Year candidacy—among the Common Core Standards or Race to the Top qualifications. I do, however, view the quality of seeking to inspire kids to learn to be a critical trait for great teachers. His principal, Amie Dickerson, notes that “True educators are those individuals who recognize that teaching involves more than just facts and figures.” Getting young people to become fascinated by science involves more than testing them on the contents of the book or having them go through the paces of the curriculum, no matter how rigorously it satisfies policymakers’ feelings of achievement. Rather, a great science education involves instilling a sense of wonder about how the natural world works, and how we should live in relation to it. It’s no wonder that Mark embraces Carl Sagan’s belief, one he shares with his students, that “Somewhere, something incredible is waiting to be known.”

In his teaching, Mark encourages students to draw on their familiarity with the Georgia coast and farming culture as the basis for understanding key scientific concepts. They investigate, for example, how fertilizer runoff affects marine ecosystems, putting their everyday knowledge in dialogue with scientific articles to inform discussions about how the scientific research relates to what they have learned in class. With this potent mix of experiential and formal knowledge, his middle school students then design their own experiments to investigate the impact of fertilizer on marine ecosystems. Acting as scientists, they report their findings in letters addressed to the Environmental Protection Agency, which in turn has honored their work with a response that enables students to think of themselves as members of the scientific community with important findings to share with the world.

Like other great teachers, Mark does not confine his efforts to the classroom. He has coached track, basketball, and football, and was among the architects of instituting a running club that serves both students and teachers at Ebenezer MS. This group meets after school 2-3 times a week for jaunts through the parks and trails that contribute to Rincon’s natural beauty. Mark abides by [running champion Steve Prefontaine’s](#) maxim that “To give anything less than your best is to sacrifice the gift.” Principal Dickerson asserts that “Through this program Mr. Weese has modeled life skills such as goal setting, which can positively impact students throughout their lives. This program has allowed many students the opportunity to experience success through his guidance and support. Mr. Weese is the teacher students love, parents want, and peers admire.”

Mark has also begun to attract wider notice through his excellence in the classroom. He was one of the three life science teachers picked to write lessons for the new Common Core Georgia Performance Standards. He has presented at the conference of the Georgia Association of Curriculum and Instructional Supervisors (GACIS) on “Literacy Design Collaborative in Georgia Classrooms” in which he and his colleagues—including Deb Winans of EMS and Dr. Mary Lynn Huie of the Georgia DOE—described how Georgia teachers in almost 60 school districts are embedding Common Core Literacy Standards into their content-area instruction. Weese and Huie, with Weese as primary author, have also written a paper on [The Effect Algal Blooms have on Marine Ecosystems](#), published by the Literacy Design Collaborative, in which they present a teaching module for other teachers to adopt.

As part of his work in the LDC, Mark worked with other science teachers to design and field test literacy-rich, project-based units that both embed the literacy standards and push students to think more critically and engage in rigorous research projects. When the LDC instructional module did not include aspects of instruction that Mark felt were necessary for high-quality science instruction, he added skills essential to scientific thinking, Making Inferences and Scientific Inquiry, to enrich students' engagement with their projects.

His unit on Algal Bloom is now showcased on the LDC national website as a model of how the implementation of the literacy standards can promote scientific inquiry. It is also being studied by other teachers to think about how best to adapt the LDC templates to specific disciplines. By writing for publication, Mark helps other teachers reach kids and solidifies Ebenezer MS's reputation for academic excellence.

Dr. Huie writes of Mark, "Passion is a necessary component of a great teacher, but it is a component that can take many forms. Some teachers love the children, some love their content, and others love the transformative process of educating young people. Mark came to teaching because of his love for science, but like many master teachers, the source of his passion for teaching has deepened with experience. His love of science has led him to find ways to transform his students by creating classroom activities that take his students beyond scientific content and toward scientific thinking. As his students engage in scientific thinking—examining problems, proposing solutions, and testing their proposals—they go beyond merely learning science by actually experiencing science. Watching Mark's middle school students engage in scientific inquiry—posing questions, designing experiments, and arguing about the meaning of findings—gives me faith in the future of education in Georgia. Mark's dedication to showing his students that they can make a difference in the world by engaging in rigorous scientific thinking is a model for how great teaching can change students' lives by leading students to perceive themselves as great thinkers with important work to do. He understands that the secret to college and career readiness begins with students taking themselves seriously as thinkers who can solve problems."

I, too, become more confident in the future of education in Georgia when I learn of great teachers like Mark Weese, and hope that the climate surrounding our profession can shift to the point where we appreciate those who take on this important work and do so with passion, commitment, inspiration, and a love of helping kids learn how to understand and engage constructively with the world around them. Mark says that "I love it here. I never want to leave Ebenezer. I never want to leave (teaching) seventh grade. I just want to be right here." Good for you, Mark; and even better for kids in south Effingham County.

