Student Vignette

Madison Brown
University of Maine

When reviewing our General Physics II midterms, one question had stumped everyone. Dr. Sirvon shared that no one scored full points. He proceeded to perform the "correct" solution on the whiteboard, but before moving on, he paused to share the "success" of one respondent. Given certain items (a wire and nail), the question asked the student to construct a magnetic field. It was a short answer test question, no calculations required.

Dr. Sivron always said he wanted to see our sweat on the test, wanted us to *figuratively* beat our heads against our desks a little at first, and always, always, always draw a free body diagram. He encouraged us to think both critically and creatively. I felt a sense of belonging in my major when my professor opted for a process-oriented versus product-oriented grading approach. It wasn't about whether I was right, how good my maths were, or if I could substitute variables and follow instructions; it was a measure of my understanding and comprehension of the theory and principles of electricity and magnetism.

The student with such an inventive response, one that lacked practicality but oozed with ingenuity, was mine. I was being anonymously honored in front of my whole class of all-male peers, lauded for my creativity, and given half points on a question I didn't answer as expected. In that midterm review, I was no longer the only girl in the class, but I was the only student to earn points on a test question that had stumped everyone, even me. I was able to bask in my "incorrect" but inventive response because only Dr. Sivron and I knew who submitted that answer. I had used a science-driven process to arrive at the objectively wrong answer. Everything my formal education suggested up to this point equated incorrect responses with no credit, zero points.

Dr. Sivron challenged my conceptions of education and learning. I thought I had to be "right" to learn. I thought 100 percent meant faultless effort, and the only way for me to have pride in my work was perfection. He taught me I was wrong because my short answer had, in fact, produced a magnetic field, albeit a weak one. Seven years later, I still remember the precious gift Dr. Sivron gave me on that small liberal arts campus during our midterm review. He gave me a chance to believe in myself, to call myself a physicist, and to belong.

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