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Winning by Impression

Robin Blankenship

The class was algebraic topology and I found the material to be fascinating and fun. I had a strong group of study buddies with whom I worked regularly on the homework. We also had several in-class tests. To my great surprise, my male peers would receive A's on their assignments and tests, while my scores were about 30% every time.

In the beginning, I compared my work with my peers to try to figure out why we had such wildly different scores. I found no major deviations from process, notation, and deductive reasoning. I approached the professor as politely as I could, telling him that I must have a major



gap in my understanding, because I was not able to find a flaw in my reasoning or proof structure. The professor told me that in fact my proofs were correct; however, “On the one hand, I grade what you write down. On the other hand, I grade by impression, and I just have the impression that you do not know what you are doing.” I left immediately with consternation. How can that argument be countered?

Next, I took my work to other topologists in the department to ask them to give me advice for improvement. I just wanted to make sure I was learning the material. They confirmed each set of solutions were essentially correct

and had no idea why he was failing me. I then took all of this to the department chair hoping for intervention. I don't remember exactly what the department chair told me, but absolutely nothing changed following that meeting.

I was on my own for this particular challenge; I devised a plan. I utilized the library to access a handful of papers my professor had published in the last few years. I secretly devoted myself to the articles, learning as much as I could about each one. I sped through our textbook to develop a sequence of questions about our future material, phrased in such a way that one of his papers specifically addressed the answer.

I began to implement my plan immediately. I came to his office to ask the questions twice per week. Each visit was carefully planned so that I knew I had a class to attend within 10–12 minutes of my arrival. “Hi there, do you have a couple of minutes? I was looking at the next section that we are going to cover, and I think I'm pretty good on some of it, but there's this one thing on page 157 that has me thinking. Does this mean ... (insert question that his research answers here).”

Oh my goodness, he would become so excited. His eyes would light up. He began to passionately talk about the material. Coincidentally, he had written something about this just a few years ago! Then, right as he was getting fully into the explanation, I'd sadly tap my watch on my wrist and apologize profusely. “I'm so sorry, but I have to go to class now. Thanks so much for getting me started; maybe we can talk more about it later. Thanks again for your time! This is really interesting!”

The end of the semester came, and we had a final presentation to give to the class on a topic of our own choosing. This time I visited his office to ask him for advice on a potential topic. He was anticipating my visit, and thought I might like to read some articles he had written. I smiled and thanked him as he handed me the same set of papers that I had been studying for a month. “Oh my goodness, look at the time. I'll check them out later!”

I brought the papers back to him the next week. Apologetically, I explained that they were just a little too advanced for me, kind of boring and with so much notation everywhere. I wanted to give a really interesting presentation that I thought the class would enjoy. I pulled a genus-three coffee cup out of my bag, a recent gift from a different professor, and thumped it on his desk. “I'm going to do my presentation on this coffee cup instead!” The look on my professor's face was astonishment. His mouth opened, but no words came out. I tried my best to look sad and slightly ashamed, like I had disappointed an important father figure. “Whoops, look at the time. Got to go. So sorry.”

Presentation day came at the end of the week. Each of us had exactly five minutes. One by one my classmates went up to give their talks, only to be interrupted two-thirds of the way through and sat down because the five minutes were up. Then came my turn. I delivered three different proofs that the coffee cup was genus three, one of which was almost directly ripped from a proof technique my professor developed in one of his articles; I knew he would recognize it immediately. I finished my talk with finesse having ten seconds to spare, took a bow, and sat back down grinning from ear to ear. I was the only student in the entire class to finish my presentation in the five allotted minutes.

Grades came in the next week, and I received an A for the class. My peers were astounded. He had given me a failing grade on nearly every assignment and test for the entire semester. Sure, I did a stellar performance on my final presentation, but there is no way that the numbers would average like that. I told them the moment I realized he was so unprofessional as to be grading by impression as opposed to by rubric, that I knew he was also probably unprofessional enough to be susceptible to things like flattery. I just had to give him the IMPRESSION that I DID know what I was doing. And I won. THE END!



Robin Blankenship is an associate professor of mathematics at Morehead State University in Kentucky. Born and raised in the Appalachian Mountains, she obtained a BS in math at East Tennessee State University. There a professor changed her life forever by making her promise that she would take graph theory at her earliest opportunity. Next she obtained an MA in math at the University of North Carolina-Wilmington, which changed from a focus in number theory to a thesis in chaos theory after a professor caught her throwing her papers down the stairwell from the third floor late at night. The promise was fulfilled with a PhD in topological graph theory at Louisiana State University-Baton Rouge. Post-doctoral work in math education occurred at Appalachian State University, where she traveled as the Math Mobile delivering hands-on activities to grades two through five in addition to creating a variety of camps. Since then she has written a play called Last Fraction Hero that toured to perform for over 32,000 students and she also loves to work with undergraduate research students. When not doing math, she sets out with her camping tent, cast iron for cooking, preparations for swimming, kayaking, and caving, and prefers no agenda so every day is improvisational. If she visits a city, then finding excellent restaurants is a must, because she loves food and she loves trying new things.