

First in his class



Of the three traditional roles for the academic physician, I like teaching the least. I fantasise that I will be summoned by my superiors and told “It’s OK, Jim. No more teaching for you. Research, patient care, and an occasional essay will more than suffice”. But fantasies are fantasies; so every fall I spend a month teaching house officers and medical students on the hospital service.

On the third day of the rotation a new student showed up. He had initially been on another service but was transferred to mine for obscure reasons. “Oh, that’s Martin”, said one of the other students, “He’s number one in the class”.

Never having been number one in anything, I took a mild dislike to Martin. As we made rounds on the dozen or so patients, I peppered him with questions. What is the differential diagnosis of leg swelling? Why does cirrhosis cause ascites? How would you treat diabetic ketoacidosis? I also had him perform pulmonary, cardiac and abdominal examinations, and report his findings. By the end of rounds I was astounded. He had answered nearly every question incorrectly.

“What did you hear examining Mr. Smith’s chest?” “Rales half way up on the left and clear on the right, with dullness to percussion at the left base.” “Wrong.” “What laboratory tests would you order to screen for hypothyroidism?” “A T3 and T4.” “Wrong.” By the time rounds were over I was in love with this guy, and I knew very well why he was number one in his class.

Martin possessed a rare attribute. He was not afraid to answer. He did not answer a question with a question. He did not bob and weave, stall for time, change the subject, or give an answer so general that it was impossible to classify as to content. No, he answered all the questions, answered them thoughtfully and specifically, and, in many instances, incorrectly. But what happened next was truly unusual—it

was education. By giving a specific answer, he allowed me to either ratify or correct him, and he learned something. Over the month, he began to answer more questions correctly, but he still gave more wrong answers than all the other students combined. The other students, pleasant as they were, spent 90% of their intellectual activity avoiding being pinned down. Until I encountered Martin, I hadn’t realised how much creative energy most medical students waste on avoiding being put into a position where they can be called wrong.

What Martin was demonstrating was not intelligence. Rather it was a combination of courage and trust. Courage allowed him to risk failing in front of others. His trust that my questions were meant to help him learn allowed him to answer without equivocation.

You cannot learn without making mistakes. Even computers know that. In artificial intelligence systems, the way computers are “taught” is by programming them to make every possible error, so that it will be recognised as such in the future. No wonder computers are becoming smarter than human beings. They aren’t afraid to make mistakes. Pity our poor error-averse students. They will rarely be wrong and rarely be correct.

I would imagine that some readers have concluded that this is all my doing, that I am incapable of creating the soft and fuzzy environment in which students feel safe asking questions. Let me pre-emptively reply: students are not supposed to feel safe; it’s a scary world out there. They will soon be physicians, responsible for patients who have not been schooled in nurturing fragile egos.

No, we have gone about as far as we can with the soft and fuzzy. What we need are more students like Martin. I taught him some geriatrics. He taught me to keep plugging away at teaching.

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