

## *Virtual Mentor*

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### **CASE AND COMMENTARY**

#### **Is There More to Medical School than Grades? Commentary 2**

Commentary by Melvin G. Rosenfeld, PhD

#### **Case**

Throughout college, Joshua got A's in classes by cramming for his exams. Now in his first semester of medical school, he finds this study strategy is still working reasonably well for him. In fact, he has scored close to the class average on all of his exams so far—anatomy, physiology, genetics, and cell biology. He makes it a point to attend every lecture so he can take notes on what he believes to be the "core concepts" the lecturer is trying to convey. He then studies from his notes in marathon, all-night study sessions starting 3 days before the exam. Consequently, his study strategy involves ignoring most of the smaller details since they'd be impossible to cram before the exam. He is a little concerned about skipping these details but figures "it's med school and I need to do whatever is necessary to survive." After all, his grades so far have proven to him that knowing the core concepts is enough to get by.

Despite his avid interest in lectures, Joshua does not like attending small group conferences where 10 to 12 students discuss case studies or basic science vignettes in an interactive, problem-solving format. He thinks the conferences are a waste of time since they don't focus on the "core concepts," and he usually forgets all of the minutiae discussed there by the week of the test anyway. He particularly dislikes the cell bio conferences, which he considers useless and impractical. He regularly complains to other students that "the bio conference is stupid. Why does a medical doctor need to know anything about signaling molecules or G-proteins? This won't ever help me care for my patients."

Joshua knows that the cell bio conference material constitutes only a small part of the final exam. If he skipped the conference, he thinks he could still pass the course without a problem. Still, he shows up for conferences since attendance is taken. He refuses to prepare for the case vignette discussion questions because it requires "a lot of work for little return." In conference, he constantly pretends to search through his notes to avoid eye contact and dodge being called on. The few times he was asked to contribute to the discussion, he joked his way out of having to provide an answer. And when the group discussion heads off on a tangent, he shows his disapproval and lack of interest by placing his head on the table. Other students avoid including him in the discussion since they know he never has anything to contribute and likes to make cynical comments under his breath about their interest in "boring details." Joshua's only pleasure comes from knowing that at the end of

the semester he will have an opportunity to critique the cell bio conference thoroughly so future students won't have to suffer through it like he did.

## **Commentary 2**

As a faculty member and frequent facilitator of small group conferences across the curriculum, reading this case puts me in the moment: I have just finished 17 grueling weeks of lab, lecture, conference, and small groups, in anatomy, and it is finally over. The faculty is really beat. I know students think it's easy for us. But, trust me, we are just as exhausted as they are, and we're older with a longer refractory period. I remember what it was like being a student taking anatomy, biochemistry, etc, and teaching is so much harder.

In any event, it's January and I move from the anatomy lab to my role as a small group leader for the cell biology course. Even though I am a member of the Cell Biology Department, today's case study is "outside" my area of research expertise. In an effort to prepare, I review a large loose-leaf binder filled with review articles, clinical information, and basic science data. After mastering the core material, our faculty meets for a few hours to discuss the case in detail and decide on the key concepts that we want our students to understand. It takes a few days for me to prepare for this small group encounter, but I make sure that I am ready before facing the students.

I look forward to these small group conferences because they allow me to engage very intelligent students in a way that is impossible in a large lecture hall or on a multiple-choice exam. I can actually get my students to "think" about a problem instead of just regurgitating information they have memorized from a textbook or lecture notes. Critical thinking is, after all, what medical school is about, integrating what appears to be disparate information into a testable hypothesis. One of my medical school professors once told me that half of the information I was learning would be wrong in 10 years. While not exactly correct, the point was well taken. We can't teach our students everything they will have to know in order to practice medicine. But what defines us as successful educators is teaching our students how to become lifelong learners. So, with donuts in hand (food never hurts) I eagerly head off to my small group conference room anticipating an intellectually exciting experience.

Every conference starts with a review of a clinical case written to highlight the role of basic science in day-to-day medical practice. I encourage participation from all group members, and when I ask Joshua a question, it is clear that he has not bothered to prepare for this conference. While the rest of the group has worked hard to prepare for our encounter, Joshua blew it off. With his head down to avoid eye contact, he tries to evade being called upon. And when he is questioned, he tries to "escape" with a joke. Coming unprepared to conference upsets me because of all the time and effort I put in to "learn" the material.

Joshua feels he does not need to know anything about signaling molecules or G proteins. He is correct—if he is going to practice 19th century medicine. Now he is in the 21st century, and the molecular biology revolution is about to pass him by. While it would be very easy for me to embarrass Joshua, what would that really accomplish? Joshua has let the "team" down!

The whole concept behind small group exercises is to have the students work together, just as they will in their clinical clerkships. They are part of a team whether in a basic science course or on the wards. Ideally, after the conference, Joshua's classmates will have a chat with him, which will have greater effect and will be taken more seriously than my berating him in front of his peers.

I think it appropriate for his classmates to emphasize how disappointed they are in him, how they had worked hard to prepare for the case presentation, that this is medical school, and here we all work together to help and support each other, whether in an academic exercise, such as this, or to comfort each other when our first patient passes away.

Students like Joshua have some growing up to do. Contrary to what Joshua may think, he is not in the best position to "know" what will or will not be important for him to learn in order to practice medicine. The faculty spends hundreds of hours revamping the curriculum so that it will prepare him both to practice medicine in the 21st century and to become a lifelong learner.

Despite Joshua's behavior, I thoroughly enjoyed my small group experience. I made my students excited about basic science and how relevant it is to the disease process. They made me think; I made them think. What more could a teacher ask of his students?

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*The people and events in this case are fictional. Resemblance to real events or to names of people, living or dead, is entirely coincidental. The viewpoints expressed on this site are those of the authors and do not necessarily reflect the views and policies of the AMA.*

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