

NEW PERSPECTIVES

Dear Dean: Why Am I Failing?

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Dear Dean:

I am failing yet another rotation and am frustrated with both the school and myself. I have demonstrated improvement but am still behind. This has to do with my own failings; but by the only measure available (test grades), I was doing well until I fell off a cliff in third year. I didn't get what I needed out of the pre-clinical years and did not understand what the clinical years were for until the end. This is why I am behind. Have others had similar troubles and can the school respond?

I didn't study as efficiently in basic sciences courses as I studied for basic science exams and assumed I would be taught the clinical side in the "clinical years." This did not occur because of minimal teaching from busy house staff and no time to read. I got minimal exposure during the pre-clinical Foundations of Doctoring course (FDC). Now I keep a spreadsheet of differentials, symptoms, diagnostic tests, and treatment and another for medications and their properties. During the basic science courses, I didn't know that it was important to learn how to apply this knowledge. I was halfway through my second clinical rotation before anyone taught me what a differential diagnosis was, how to use it, and how to find it. I'm still struggling to re-organize my medical knowledge base from a bottom-up to a top-down structure and from a collection of facts to a practical approach to real-world problems.

Taking a month off to read the book *Essentials of Medicine* and do the medical-knowledge self-assessment program questions (MKSAP) is helping a lot. I wish that I had used these in the pre-clinical years and that I had a person to teach me this material in an interactive fashion instead of plodding through an inanimate book that can't answer questions. A lot more needs to be done to put the basic science curriculum in a clinical context and to teach medical students how to think clinically. Problem-based learning is supposed to do that, but it lacked context, and I did not understand its purpose. I think test questions should be the same style as MKSAP, and if students struggle with them, the faculty should take a look at their teaching and the curriculum. Orientation to third year was too little too late.

For a school so focused on evidence-based medicine, I am surprised by the absence of evidence-based teaching.

All decent teachers know that students learn differently, and to be effective they must teach for multiple learning styles. The second law of teaching is: Lectures are the least effective teaching tool, while hands-on experience is much better. The pre-clinical courses were an empty wasteland of lectures with vague and vast learning objectives. I asked the course directors repeatedly to provide resources for practice problems with clinical application to no avail. In retrospect, I should have contacted the learning specialist through student affairs.

Why have I only been offered one mock code at the simulation center? Why couldn't the block directors recommend reading the *Essentials of Medicine* and MKSAP before medical school orientation? Why didn't we get recommended reading/problem set lists before each block started?

Many people have lamented the changes to work hours that will decrease continuity of care, yet our education is terribly discontinuous. Pre-clinically, we generally had different lecturers every couple of hours; in the clinical years, the attendings and residents changed monthly or weekly. With so many hand-offs, how could they effectively shape us into clinicians? Most of all, I have felt alone in this process and in school. Don't get me wrong, I have had some great meetings with several faculty. No one person has followed or guided my development or lack thereof over the last four years. I have demonstrated that passing basic science doesn't translate to passing clinical rotations. Why don't we have advisors evaluating and guiding us longitudinally, and why isn't anyone involved until we fail?

All these questions bring me back to one question in particular: Where did my \$200,000 go? Why didn't I just buy a bunch of books on Amazon and hire a doctor to let me shadow his/her work and teach me an hour or two a day? While the question is rhetorical, I think that would have been a more effective and less expensive way to learn medicine.

I know my failures are largely my own. I just hope the school might learn from my experience. I would appreciate your help to finish medical school and move on successfully to residency.

—Name omitted per student's request
MS IV

Faculty Reflections

We believe that there is much to learn from receiving a letter such as this from one of our students. We think that the letter contains honest criticisms of the medical student curriculum within our institution and in medical education in general. Initially, the feedback in the letter was difficult to appreciate because we found ourselves reacting to the tone of the letter and not necessarily to the message being delivered. For example, is buying books and hiring a doctor to shadow equivalent to the value of the educational experience we have painstakingly developed? Also, we noted conflicting statements in the letter such as “during the basic science courses, I didn’t know that it was important to learn how to apply this knowledge” yet the student later states that he asked “the (pre-clinical) course directors repeatedly to provide resources for practice problems with clinical application to no avail.” The student’s feedback asserts that either the expectations were not clear during his preclinical courses or that the expectations were clear but that we were unable to give him the proper resources to succeed. The statements illustrate a struggling learner’s desire to understand his own internal motivation, where he got off-track, and where the responsibility lies for his current situation. The student did not mention that he was routinely late during his clinical rotations, he was often unprepared for rounds, and he admittedly left his required equipment at home. We could easily assign blame to the student for his poor performance on clinical rotations, but we would miss what our role has been in the process and what we can take away from the experience. Several key concepts are addressed below.

1. Identifying Struggling

Learners: *“I was doing well until I fell off a cliff in third year.”* As medical educators, we know that there are many required competencies in the clinical years that are not adequately assessed in the pre-clinical years, such as clinical reasoning, interpersonal skills, communication, and professionalism. With heavy reliance on medical knowledge testing, early performance does not predict global performance in the clinical years. Many of these concerns are well addressed in Cooke, Irby and O’Brien’s book *Educating Physicians*.¹ The authors explain the fundamental need to restructure medical school education to address this, among other key concerns.

2. Educational Objectives and Expectations:

“I didn’t get what I needed out of the pre-clinical years and did not understand what the clinical years were for until the end.” A critical look at our pre-clinical curriculum reveals that clearer expectations could help our learners. While students do get course goals and objectives, providing expectations that go beyond their immediate courses would be useful in this regard. Medical schools could also spend more time teaching students both what to learn and how to learn, which would enhance their pre-clinical educational experience beyond fact memorization. With the proper guidance, students should be able to develop the understanding that even the basic sciences have clinical application. If this was in place, busy faculty and residents could teach students how to maximize their clinical experience and

productively spend their downtime. Since students cannot see what lies ahead, it is the responsibility of the faculty to provide the context and outline the trajectory for their education.

3. Clinical Reasoning Skills:

“I am struggling to re-organize my medical knowledge base...from a collection of facts to a practical approach to real world problems.” For decades, students have struggled to reorganize their knowledge and have complained that medical education is taught based on diagnoses and that clinicians are expected to recall the information based on symptoms. Students struggle to develop frameworks to manage large amounts of data that appear to be random and sporadic. Pedagogies such as problem-based learning, team-based learning, and early clinical exposures are designed to help students develop clinical reasoning skills. At our institution, students learn case-based differentials through the PBL curriculum and the Foundations of Doctoring course. Students are encouraged to use this time to practice presenting patient symptoms, developing differential diagnoses, and exploring treatment options.

4. Learning Styles:

“I wish that I had used these (Essentials of Medicine and MKSAP) in the pre-clinical years and that I had a person to teach me this material in an interactive fashion... lectures are the least effective teaching tool.” A current trend in health care in the 21st century is moving toward a more patient-centered approach in clinical care. In a parallel fashion, the Carnegie
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report¹ has recommended creating an educational approach that considers the student's individual learning needs. At present, our medical student curriculum is 60% lectures and 40% learning in small groups. Small groups allow for the sharing of questions, misconceptions, and understanding among students and facilitators. In small groups, students can articulate their own learning needs and receive timely feedback. The difficulty inherent in tailoring large lectures to individuals lends credence to the emerging concept of smaller learning communities, where common learning objectives can be taught while respecting individual learning styles.

- 5. Mentorship:** *"Our education is terribly discontinuous.... No one person has followed or guided my development or lack thereof over the last four years."* With the introduction of duty hours in graduate medical education, our attention has focused on the continuity of patient care. Parallel attention within medical education, specifically to mentorship, will improve our ability to meet our learners' longitudinal needs. The practice of medicine and research

science has become so specialized that innumerable faculty members participate in each individual's education. Each member is available as a mentor for only brief isolated periods of time, unable to gain a longitudinal picture to meet the needs of our students. Since no one faculty member can be a universal mentor, ideally there would be learning communities to follow each student, consisting of clinicians, researchers, and peers from other classes to provide customized clinical, research, and career mentorship. These mentors can also teach our students how to seek the additional mentorship they need so that they begin feeling part of the medical profession from the beginning of medical school.

As educators, we must ask ourselves what can be changed in both the short and long term. Since this student's admission to medical school, the primary author has created and instituted a remediation and individualized learning program, which captures and assists struggling learners each year. In order to benefit all students, components of the program can be made accessible to more students. This includes

clarifying expectations, reiterating the current and future learning goals and objectives, and adapting assessment methods to ensure that learners are obtaining the intended skills at each stage of their training. For example, instead of just assessing medical knowledge in the pre-clinical years, courses such as the Foundations of Doctoring course and PBL can be used to assess clinical reasoning, interpersonal skills, communication, and professionalism. Lastly, expanding the mentorship program could also help solve many of the aforementioned key concerns.

Upon receiving this letter, permission was received from the student to share the contents widely with institutional administration and key educators. As a rare brave sole to speak honestly of his perspective, he reminded us of the value in all of us listening. In a profession that values competency, are we doing enough to mentor and teach our learners?

References

1. Cooke M, Irby DM, O'Brien BC. Carnegie Foundation for the Advancement of Teaching. Educating physicians: a call for reform of medical school and residency. First ed. San Francisco, CA: Jossey-Bass, 2010.