relationship between being a doctor and being a teacher.

Physicians, whether or not they have an academic role, teach every day through preventive counseling, introducing new diagnoses, and negotiating treatment options. To effectively serve as teachers to patients, trainees must first be introduced to what effective educational approaches are. We cannot expect our colleagues to relate relevant information to their patients about diabetes, an insulin regimen, or lifestyle choices when they are unaware of the principles that govern adult learning.

Teaching, quite simply, is the facilitation of learning. Sensitizing learners to the processes that govern teaching will ensure they relate information more effectively to patients and apply these same principles to their own learning.

To better associate the role between physician and teacher, we cannot merely add a lecture to the curriculum and expect learners to incorporate these skills into practice. Instead, we must develop a longitudinal, spiral curriculum highlighting the need to be an effective educator.[1] This does not necessarily require additional courses or lectures but, rather, a mindfulness about places in the curriculum where trainees already learn how to learn. By better orienting medical learners to the principles of effective teaching and learning, lifelong learning becomes a more central theme to the curriculum.

As medical knowledge becomes rapidly outdated,[2] it is critical for trainees to become effective lifelong learners and educators. But until medical education truly begins to emphasize and embrace the role of the physician as a teacher,[3] we cannot expect the health of our population to improve.

Disclosures: None reported.

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References

1 Bruner JS. The Process of Education. Cambridge, MA: Harvard University Press; 1960.
2 Prasad V, Vandross A, Toomey C, et al. A decade of reversal: An analysis of 146 contradicted medical practices. Mayo Clin Proc. 2013;88(8):790–798.
3 Stull MJ, Duvivier RJ, Wiley E. Lecture halls without lectures. N Engl J Med. 2012;367:677.

Improving Medical Education by Improving Its Instructors

To the Editor: As a medical student, I have heard different approaches to shaping the curriculum, ranging from emphasizing more team-based learning (TBL) to employing competency-based education. Rather than finding out which teaching methods work best for students, we should go back to the foundation of good teaching.

I serve on a course review committee, and I recall two classes that stood out the most: a basic pharmacology course led by all PhD instructors, and a clinical pathology course directed by MDs. The teaching styles for these two classes were very dissimilar: The former was lecture based, and the latter was centered on TBL. Both courses received universal acclaim from students, and the learners scored well on the standardized exams. How could this be?

Most members of the course review committee agreed that the courses' success could be attributed to three common themes: (1) strong leadership from the instructor of record, (2) small number of lecturers, and (3) responsiveness to feedback. When the students have an organized point person they can depend on, the course naturally feels less chaotic. The learners can focus on learning instead of guessing about several lecturers' differing expectations. Furthermore, if the instructors listen to comments and feedback, the course unsurprisingly improves and becomes a good learning environment. I have seen courses that are either TBL based or lecture focused that lack any one of these themes, and they ended up falling short in the course evaluations.

I write not to criticize the curriculum reforms and innovative teaching methods happening across the country. Rather, I invite all leaders to go back to the foundation of good teaching. Recruiting outstanding educators and preparing faculty to be great teachers remain important but underrepresented topics in medical education.[1,2] Hatem and colleagues[3] discuss in depth the important characteristics of a medical educator in their article, some of which I have touched on here. Strong instructors are the backbone of medical education, and we should not settle for anything less than excellence.

Disclosures: None reported.

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References

1 Holmboe ES, Ward DS, Reznick RK, et al. Faculty development in assessment: The missing link in competency-based medical education. Acad Med. 2011;86:460–467.
2 Young T, Esterhuizen TM, Volmink J, Clarke M. Attitude and confidence of undergraduate medical programme educators to practice and teach evidence-based healthcare: A cross-sectional survey. Int J Evid Based Healthc. 2016;14:74–83.
3 Hatem CJ, Searle NS, Gunderman R, et al. The educational attributes and responsibilities of effective medical educators. Acad Med. 2011;86:474–480.

Reflection Fatigue Among Medical Students

To the Editor: Reflective practice in medical education can take several forms, including in-class discussions, written essays, and creative activities, such as painting or drawing.[1] In my first two years at the Vanderbilt University School of Medicine (VUSM), I completed at least 36 reflective assignments. These included essays on leadership, learning, clinical sessions, ethical situations, personal and professional failures, and the social determinants of health. As an undergraduate English major and strong proponent of the role of the humanities in medicine, I recognize the importance of reflection to professional growth. Indeed, I would argue that the skills strengthened by reflection—self-awareness, empathy, and emotional intelligence—are among the most valuable traits for future physicians, and I applaud my school's efforts to promote these values.

That said, I have noticed a growing sense of "reflection fatigue" in my classmates. Instead of viewing reflection as key to our

development as humanistic physicians, many of us have come to consider reflective essays as another "box to check" or, worse, as "busywork." The sheer number of assignments, along with the repetition of themes, has caused many to view reflections with cynicism.

Clearly, we should not return to an era in medical education in which students had neither the time nor the institutional support for reflection. But medical schools must also be aware of reflection fatigue. As a member of VUSM's student curriculum committee, I know that our administration is trying to improve the quality of reflective practice in our curriculum. In light of ongoing changes to undergraduate medical education, I would like to offer three suggestions for improved reflection.

First, school administrators should review their longitudinal, clinical, and ethical courses to ensure that reflective assignments are neither duplicative nor excessive. Reducing the quantity of assignments, while increasing their quality, both enhances the student experience and decreases faculty workload. Second, faculty should respond to reflective assignments with feedback that engages and challenges students.[1] Students are naturally more engaged when a mentor responds to their thoughts, particularly if the student's essay concerns sensitive personal issues.[2,3] Third, faculty and administrators should remember that reflection is personalized.[2,3] Written assignments are only one form of processing knowledge about oneself and situations; discussion groups, one-on-one mentoring sessions, and artwork are other forms of reflection.[1,2]

Disclosures: None reported.

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References

1 Sandars J. The use of reflection in medical education: AMEE guide no. 44. Med Teach. 2009;31:685–695.
2 Naidu T, Kumagai AK. Troubling muddy waters: Problematizing reflective practice in global medical education. Acad Med. 2016;91:317–321.
3 Shemtob L. Reflecting on reflection: A medical student's perspective. Acad Med. 2016;91:1190–1191.

A Grassroots Student–Faculty Coalition on Curriculum Change

To the Editor: To address health disparities and provide more inclusive patient care, the Association of American Medical Colleges (AAMC) has charged medical schools with improving training in sexual and gender minority (SGM) health.[1] Medical school curriculum renewal moves slowly for varying reasons, with medical students contributing peripherally through evaluations or focus groups. As student–advocates, we partnered with faculty and successfully orchestrated a novel approach, utilizing popular change management strategies to develop and implement an SGM curriculum in a timely manner.[2]

As students, we harnessed our experience in advocacy and education to form a student–faculty coalition, developing a grassroots approach to activate curricular change. We leveraged our student perspective of engaging with learning throughout the curriculum to create a curricular map for longitudinal incorporation of SGM content. We then formed 42 student–faculty partnerships with lecturers, course directors, and SGM health experts. Students created literature-based course content and evaluations, while faculty provided expertise in curriculum development and instructional methods to meet learning objectives. Through this grassroots approach, we made meaningful changes within the current curriculum, supporting our medical school to answer the AAMC's call.

We achieved many successes, from developing an introductory video on SGM-inclusive sexual history taking to implementing a pediatric clerkship case study supporting an adolescent questioning their sexual orientation. As faculty and students noticed our early successes, the coalition grew stronger. Over 18 months, we implemented six modules designed as a longitudinal strand, reinforcing key content and learning objectives throughout the curriculum. To secure buy-in, we presented our work to our institution's medical education leaders. With each incoming class, the coalition continues to develop new modules and maintain evaluation of current ones in a sustainable manner.

Our student–faculty collaboration has extended our medical school's curriculum development capacity, and increased agility in an otherwise slow-moving process. In the case of SGM health, we have brought about timely curricular change. This experience has empowered us as students to find our voice as advocates for the well-being of our patients, and to gain a skill set as future medical education leaders. We hope all medical schools consider this grassroots approach of curricular change to address the urgent call for medical education to support our marginalized communities and foster student advocates.

Disclosures: None reported.

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References

1 Hollenbach AD, Eckstrand KL, Dreger A. Implementing Curricular and Institutional Climate Changes to Improve Health Care for Individuals Who Are LGBT, Gender Nonconforming, or Born With DSD. Washington, DC: Association of American Medical Colleges; 2014.
2 Kotter JP. Leading Change. Boston, MA: Harvard Business School Press; 1996.

The Illness of Present Histories

To the Editor: Teaching the History and Physical is a sacred tradition in the medical curriculum. Yet, the pedagogy may be outdated and impractical in a world dominated by the electronic health record (EHR). The idyllic scenario of a student handcrafting a thorough history has been replaced by a digital scavenger hunt that reverse-engineers the initial patient encounter.

Our medical institution used paper charts. In many ways, this approach made it easier to synthesize information without the bombardment of data from an electronic record. As we began our internships at a new program, we were suddenly at the mercy of a complex EHR. Smartphrases, automated flowsheets, and copy-forwarded notes