Letters to the Editor

Reducing Subjectivity in Determining a Student’s Overall Clerkship Grade

To the Editor: The February 2021 article by Ingram and colleagues1 about measuring important influences on a student’s clinical grade in the surgery, internal medicine, and pediatric clerkships at the University of Alabama at Birmingham School of Medicine was very well done and contributed to the paucity of literature in this area. A colleague and I attempted a similar retrospective study2 25 years ago, trying to determine the impactors on a student’s final grade and were unable to identify 1 specific area of student performance that contributed most heavily to the overall grade. What remains unclear in Ingram et al’s article is what percentage of the clinical grade contributed to the overall final grade. Whereas clinical performance would seem to be the sine qua non for determining excellence and should be weighted most heavily, there have always been concerns about the role of subjectivity in determining the final grade.

With that issue in mind, clerkships at our institution have depended on scores from the shelf exams of the National Board of Medical Examiners as another factor in determining the final grade. The question is, how much weight should the shelf scores be given in the final grade because those scores may not at all correlate with the student’s clinical performance? Heavily weighted scores from the shelf exams send a message to the student about what is valued the most by the clerkship. Is it getting the highest score on a standardized exam or is it how one functions in the clinical setting?

I maintain that if faculty were trained to conduct more efficient and effective direct observation of students, their clinical evaluations would certainly be more reflective of the students’ clinical performances and how well they exhibited the competency goals of the clerkship, which would reduce some concerns about the influence of subjectivity.

Funding/Support: None reported.
Other disclosures: None reported.
Ethical approval: Reported as not applicable.

Larrie Greenberg, MD
Professor emeritus of pediatrics, The George Washington University School of Medicine and Health Sciences, Washington, DC; Larie_greenberg@hotmail.com.

References

In Reply to Greenberg: We thank Greenberg for the thoughtful comments on our article and agree with the sentiment that clinical performance should be “the sine qua non for determining excellence” among clinical trainees. For the clerkship sample discussed in our article, clinical performance was weighted as 70% of the clerkship grade, with the remaining 30% determined by scores on the subject examinations of the National Board of Medical Examiners. Despite the potential for subjectivity in clinical performance assessment, we believe that the assessment of medical knowledge and clinical competency using multiple-choice questions should not be the chief determinant of clinical grades at our institution. Additionally, in a prior Academic Medicine article,1 clinical faculty reported placing value on factors other than medical knowledge when determining clerkship grades.

As the Step 1 exam of the United States Medical Licensing Examination becomes pass/fail and the Step 2 Clinical Skills examination is discontinued, there is a terrific opportunity for schools to collaborate and reconsider their approaches to clinical grading, particularly given the extreme variation between and even within schools.2 Rather than decreasing the weight of clinical performance in grading, however, we view this as a chance to enhance performance assessment through improved tools for measuring performance in the clinical setting, as well as through novel ways of weighting comprehensive modes of assessment. These include input from patients, peers, and other health professions personnel, as well as from standardized patients and faculty in an objective structured clinical exam setting.

Finally, we agree with Greenberg that faculty training is essential, as well as input, cooperation, and buy-in from clinical educators and administrators within both undergraduate and graduate medical education. Only by pursuing shared models of essential clinical skills across the continuum of medical education can we develop and assess trainees’ performances in ways that will best prepare them to provide excellent patient care as medical graduates.

Funding/Support: None reported.
Other disclosures: None reported.
Ethical approval: Reported as not applicable.

Disclaimers: The opinions expressed in this article are those of the authors alone and do not necessarily reflect the views of the Department of Veterans Affairs or the University of Alabama School of Medicine.

Winter Williams, MD
Internal medicine clerkship codirector and associate professor, Department of Medicine, University of Alabama School of Medicine at Birmingham, Birmingham, Alabama; wwilliams@uabmc.edu.

Carlos A. Estrada, MD, MS
Staff physician, Birmingham Veterans Affairs Medical Center, and professor of medicine, Department of Medicine, University of Alabama at Birmingham School of Medicine, Birmingham, Alabama.

Anne Zinski, PhD
Associate professor, Department of Medical Education, University of Alabama at Birmingham School of Medicine, Birmingham, Alabama.

References

Medical Education Should Say Goodbye to Lectures

To the Editor: Prober and Norden1 present another compelling argument for transforming the medical school classroom into a place where real learning can occur. Surprisingly, medical education has been slow to adopt evidence-based...
practices for instruction that do not include lectures as a teaching and learning strategy, especially because other fields such as business and science, technology, engineering, and mathematics (STEM) have adopted more effective approaches.\textsuperscript{2,3} We are convinced that classroom-based, learner-centered collaborative learning strategies in medical education will lead to better academic and communication skills outcomes than those achieved using lecture-based pedagogy.

Since 2017, our medical school has had a lecture-free curriculum, with no more than 3 hours/day in the classroom, allowing ample time for self-directed learning. The first cohort, the Class of 2021, has done well on all the traditional metrics, including performance on Steps 1 and 2 Clinical Knowledge of the United States Medical Licensing Examination. We fully embrace the power of in-class, peer–peer learning with faculty content experts facilitating every session, and we vigorously encourage reading, as opposed to watching video lectures, as preparation for class. We do not mandate attendance because each learning activity revolves around a daily assessment that is very low stakes, accounting for less than 1% of a student's grade, which assures attendance rates of 95% or more, as our experience has been that medical students are highly motivated by grades, no matter how little they count in a final course grade. Additionally, students are learning through the sessions—so they simply do not want to miss them! Such daily assessments provide students and faculty with robust, continuous feedback on learning.

Just before the launch of our new curriculum in 2017,\textsuperscript{4} our school was emboldened by the Freeman et al publication\textsuperscript{5} on the active learning classroom for STEM fields and the comments by Nobel Laureate Carl Wieman,\textsuperscript{6} who considered persistence of lectures as “the pedagogical equivalent of bloodletting.” It is not an easy transformation for faculty, students, or medical school leadership—but it is so worthwhile, as the majority of our faculty and students do not want lectures because the richness of learning is so evident with the other learning modules. Prober and Norden's prodging of medical educators, based on their experience at Stanford and the evidence, is so appreciated.

In Reply to Roman et al: We appreciate Roman and colleagues’ letter in response to our commentary. We congratulate them on the successful implementation of their school’s new curriculum that minimizes lectures and classroom time; emphasizes peer-to-peer engagement, facilitated by faculty; and incorporates frequent assessments and feedback. We note their preference for assigned readings rather than videos as preparatory work for interactive sessions. In addition, we believe that the learners might benefit from choosing their own favored ways for foundational knowledge acquisition, approaches that support their individual learning styles.

We believe that teaching sessions that do not support interaction with faculty and peers should not require attendance. However, if sessions are organized to foster discussion with experts, encourage debate among peers, and incorporate a diversity of opinions, students should have an obligation to participate. Otherwise, the richness of the experience is compromised and open exchange of different points of view and team development are not fostered. The development of critical thinking, problem solving, and communications skills depend upon struggling with the content through thoughtful discussions and debates, respectful consideration of multiple perspectives, and clear communication. These are not skills that can be developed by reading, watching videos, listening to lectures, and working in isolation.

We also agree with Roman and colleagues that the pathway to curricular reform is not easy. There are many stakeholders, some of whom have long-standing and deeply engrained biases about what we should be teaching and how we should be teaching it. In general, faculty priorities around particular topics usually determine what receives the most attention in a specific medical school's curriculum—thus, each school's priorities are different. In contrast, the highest priorities for most students are to excel in their studies, perform well on national assessments, and graduate with a medical degree and the opportunity to pursue their postgraduate training of choice. We have seen that many students convert this tension between priorities into stress, contributing to the unacceptable rates of burnout and depression experienced by medical students across the country. Medical school reform must prioritize the mental health of the learners and focus on engaging every student. Bringing students back to the classroom should emphasize fostering critical thinking, communication, and interpersonal dynamics while building a more tight-knit and supportive community that will benefit learners throughout their entire careers.

Funding/Support: None reported.

Other disclosures: None reported.

Ethical approval: Reported as not applicable.

References


In Reply to Roman et al: We appreciate Roman and colleagues' letter in response to our commentary. We congratulate them on the successful implementation of their school's new curriculum that minimizes lectures and classroom time; emphasizes peer-to-peer engagement, facilitated by faculty; and incorporates frequent assessments and feedback. We note their preference for assigned readings rather than videos as preparatory work for interactive sessions. In addition, we believe that the learners might benefit from choosing their own favored ways for foundational knowledge acquisition, approaches that support their individual learning styles.

We believe that teaching sessions that do not support interaction with faculty and peers should not require attendance. However, if sessions are organized to foster discussion with experts, encourage debate among peers, and incorporate a diversity of opinions, students should have an obligation to participate. Otherwise, the richness of the experience is compromised and open exchange of different points of view and team development are not fostered. The development of critical thinking, problem solving, and communications skills depend upon struggling with the content through thoughtful discussions and debates, respectful consideration of multiple perspectives, and clear communication. These are not skills that can be developed by reading, watching videos, listening to lectures, and working in isolation.

We also agree with Roman and colleagues that the pathway to curricular reform is not easy. There are many stakeholders, some of whom have long-standing and deeply engrained biases about what we should be teaching and how we should be teaching it. In general, faculty priorities around particular topics usually determine what receives the most attention in a specific medical school's curriculum—thus, each school's priorities are different. In contrast, the highest priorities for most students are to excel in their studies, perform well on national assessments, and graduate with a medical degree and the opportunity to pursue their postgraduate training of choice. We have seen that many students convert this tension between priorities into stress, contributing to the unacceptable rates of burnout and depression experienced by medical students across the country. Medical school reform must prioritize the mental health of the learners and focus on engaging every student. Bringing students back to the classroom should emphasize fostering critical thinking, communication, and interpersonal dynamics while building a more tight-knit and supportive community that will benefit learners throughout their entire careers.

Funding/Support: None reported.

Other disclosures: None reported.

Ethical approval: Reported as not applicable.

Charles G. Prober, MD
Executive director, Stanford Center for Health Education, Stanford University, Stanford, California; cprober@stanford.edu.

Justin Norden, MD, MBA, MPHil
Partner, GSR Ventures, Palo Alto, California.