they receive and to reconcile differences between the formal, hidden, and external curricula. Rather than teaching evidence-based medicine through siloed lectures and journal clubs, evidence-based medicine should be integrated throughout the formal curriculum and include discussion of the appraisal and application of knowledge from external resources. Despite coming changes to the United States Medical Licensing Examination examinations, the external curriculum and its implications for medical education are here to stay. Medical educators must reimagine their roles to integrate these external resources and evidence-based appraisal into their teaching, equipping students with the ability to contextualize all they learn.

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Online Medical Education: It Is Time to Listen to the Silence

To the Editor: Recently, I have seen greater recognition of the role of silence in medical education, helping reverse the negative connotations traditionally associated with silence. While silence has been interpreted to indicate a lack of knowledge, interest, or competence, it has been increasingly encouraged as an effective pedagogical tool in the classroom and the clinical setting[1]: faculty make pauses during their presentations to add dramatic effect, attract students' attention, and allow students to learn at their own pace. Clinical educators may also incorporate silence into their bedside teaching to help trainees reflect, process, interact, and ask questions.

Silence is a complex, multidimensional phenomenon influenced by personality factors and sociocultural ones. For instance, introverted learners might be silent, as they save up their questions for the appropriate time, and nonverbal students tend to concentrate without feeling the urge to express their opinions. Also, there are cultural differences regarding how silence is employed and acknowledged. While silence is avoided in some cultures, it is positively viewed in others, implying respect and openness. Hence, besides the educational benefits, diversity and equality could be promoted if silence was appropriately addressed.

Although silence has been discussed in face-to-face teaching, little is known about "online silence." During the pandemic, everyone has experienced those awkward moments of silence in an online meeting. When there is no answer or comment, particularly in the absence of visible body language, it is difficult to guess whether silence is a sign of agreement, lack of interest, or a way to avoid expressing opinions. Also, whereas taking turns in speaking comes naturally in the spontaneity of free-flowing classroom conversations, taking turns online is sometimes more difficult because speakers have trouble sensing when to give up control of the conversation.

Strategies enabling silence as a teaching asset in online education include listening without interrupting, offering purposeful silence, and providing active silent time.[2] Because of the discomfort around silence, teachers may evade situations with a risk of silence. Yet they could help students overcome that discomfort and contribute authentically to discussions by being explicit about silence, clarifying expectations, and maintaining a safe environment.[2]

Current scholarship around silence is scarce. I therefore expect a call for further investigation to develop a deeper understanding of the notion of silence in online medical education. In-depth interviews, real-time observations, and analyses of video recordings could afford insight into how silence is perceived and addressed in online medical education and how silence is integrated into such education. Research on the role and influence of silence could equip teachers with more subtle teaching skills and help students be more engaged in learning. The findings of such research could offer practical implications to all who will probably continue teaching and learning via online platforms, even on the far side of the COVID-19 outbreak.

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The Need for Horizontal Mentorship Networks to Facilitate Medical Students' Engagement in Research

To the Editor: Opportunities for medical students to carry out research are largely unstructured and inconsistent between institutions.[1] While 72% of medical students report interest in research, less than one-third of students actually participate in research projects outside of mandatory theses or research blocks.[1] Research fosters students' intellectual curiosity and teaches them to think critically, and medical school provides a prime opportunity for developing investigational skills and carrying projects to completion. Additionally, with the switch to pass/fail scoring by the United States Medical Licensing Examination Step 1 exam, research may assume greater importance in the residency selection process.[2] Thus, it will be even more important to develop frameworks allowing improved, sustained research productivity among medical students.

Horizontal mentorship remains an underused model for facilitating medical students' engagement in research. With horizontal mentorship, individuals at the same level of training mentor one another, as opposed to traditional mentor–mentee relationships of senior faculty with students.[3] Receiving advice from fellow students provides certain advantages. Fledgling researchers may

feel more comfortable asking peers basic questions (e.g., how to format a manuscript) compared with asking residents or faculty members, whom they might perceive as less accessible or unapproachable.[1] Peer mentors are less removed from the specific challenges faced by medical student researchers (e.g., balancing research with coursework) than are faculty, and therefore may provide more targeted advice. While it is certainly important for medical students to build relationships with faculty, supplementing traditional mentor–mentee relationships with horizontal mentorship will provide benefits. Pathways for implementing horizontal mentorship networks include creating student-led research electives for teaching fundamentals of biostatistics/ experimental design, connecting students with peer mentors through specialty interest groups, and engaging in interdisciplinary collaborations with fellow medical students at the home institution or other institutions.

Although a large proportion of medical students are interested in research, practical difficulties (e.g., lack of opportunities, absence of well-structured research governance) often impede students from making meaningful progress.[1] Medical schools and their students alike should engage in the creation of horizontal mentorship networks to allow aspiring medical student researchers to achieve their full potential.

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The Need to Expand Peer-to-Peer Tutoring Programs and Promote Them Online to Every Medical Student

To the Editor: Peer-to-peer tutoring benefits all involved parties in medical education. Learners attain study skills and medical knowledge, while tutors refamiliarize themselves with study material and improve their pedagogic skills.[1] As a result, peer-to-peer tutoring decreases student failure rates[2] and fosters a sense of community.[1] Given these benefits, we believe a peer-to-peer tutoring program is an integral part of medical education that should be explicitly promoted online to every student.

In 2020, we conducted an online search for peer tutoring programs at the 151 U.S.-based medical schools that were then members of the Association of American Medical Colleges. For each school, we examined the first page of a Google search for the terms "tutor" or "tutoring" or "peer tutor" or "peer tutoring." We were able to identity 97 (64.2%) schools with programs that explicitly mentioned a medical student peer-to-peer tutoring service on the first Google page. Of these institutions, 75 (82.4%) provided clear instructions on how to access those services by asking for a contact name and/or email address and an office address and offered a tutor request form or a referral to the school's Canvas page. Seven programs promoted their peer-to-peer tutor programs solely through their online student handbooks. In our search, we often found for-profit tutoring agencies listed above the medical institution's website.

The results of our research suggest that many schools either do not adequately communicate their peer tutor services online or lack a peer-to-peer tutoring service entirely. We hope that these findings will encourage schools that lack a peer-to-peer tutoring service to establish one and will encourage schools that now offer such a service to improve how they promote it online. Because the school website or academic handbook may be the first point of contact for students, we believe it is essential to provide detailed online instructions on how to obtain the school's peer-to-peer tutoring services.

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COVID-19 Educational Support Team: Librarians, Physicians, and Medical Students Collaborate to Synthesize COVID-19 Research for Clinicians

To the Editor: We read with great interest the article by Zhou and colleagues describing the Stanford Frontline COVID-19 Consult Service as a way of implementing value-added medical education (VAME) during the COVID-19 pandemic.[1] We would like to describe our experience and highlight additional opportunities for similar services to provide VAME in academic settings and clinical systems beyond individual patient management.

The UChicago COVID-19 Educational Support Team was developed when our clinical librarians began providing resources and answers to clinical queries for clinicians in our COVID-19 unit. Four fourth-year medical students and an intern were recruited to assist, along with a fellow and faculty sponsor. From the initial teams' work, an elective was formed, and 10 more students were recruited to handle the increasing demand. The team created 80 syntheses and summarized 325 significant articles. Survey results of clinicians showed 78% reported a change in thinking due to the syntheses, and 100% requested continuation of the