Bridging the Gap Between Educator and Learner: The Role of Psychological Safety in Medical Education

Adelaide H. McClintock, MD,[a] Sara Kim, PhD,[b] Esther K. Chung, MD, MPH[c]

Physicians involved in medical student education must juggle the tasks of providing patient care, leading clinical teams, delivering feedback, and making assessments to support learner growth. Similarly, medical students must shift among providing patient care, obtaining evaluations, and demonstrating competency in their progress toward residency. The intersection of teaching and learning makes it difficult for clinician educators and students to separate feedback from evaluation. Students consider it risky to reveal a deficit, ask for help, or give a wrong answer to educators' questions. Although these issues pose challenges to the clinical learning environment, educators can minimize such threats and maximize learning opportunities by promoting an environment of psychological safety. In this article, next in the series from the Council on Medical Student Education in Pediatrics, we provide suggestions and examples related to how clinician-educators can create a psychologically safe learning environment by using 3 core leadership tasks to balance educator and student goals and optimize student learning.

WHAT IS PSYCHOLOGICAL SAFETY?

Psychological safety is the perception that a working environment is safe for team members to express a concern, ask a question, or acknowledge a mistake without fear of humiliation, retaliation, blame, or being ignored.[1] The concept of psychological safety was largely developed in the organizational and patient safety fields, with demonstrated benefits of improved learning, creativity in problem solving, and productivity.[1] Establishing psychological safety in medical education has been shown to (1) free learners from being constantly self-conscious about image and competence, (2) enable them to be present in the learning moment and concentrate on the task at hand, and (3) reduce fear of asking questions.[2,3] Without psychological safety in clinical learning environments, students focus on evaluation and grading at the expense of growth and developing new skills[3–6] (Fig 1).

BARRIERS TO PSYCHOLOGICAL SAFETY IN MEDICAL EDUCATION

The team structures and cultural traditions inherent in medical education present many barriers to building an environment of

[a]*Department of Medicine, University of Washington School of Medicine, Seattle, Washington;* [b]*Academic and Regional Affairs and the Department of Surgery, University of Washington School of Medicine, Seattle, Washington; and* [c]*Department of Pediatrics, University of Washington School of Medicine and Seattle Children's Hospital, Seattle, Washington*

Drs McClintock, Kim, and Chung conceptualized, designed, drafted the initial manuscript, and reviewed and revised the manuscript, and all authors approved the final manuscript as submitted and agree to be accountable for all aspects of the work.

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Address correspondence to Adelaide H. McClintock, MD, Department of Medicine, Women's Health Care Center at UW Medical Center, 4245 Roosevelt Way NE, Seattle, WA 98115. E-mail: ahearst@uw.edu

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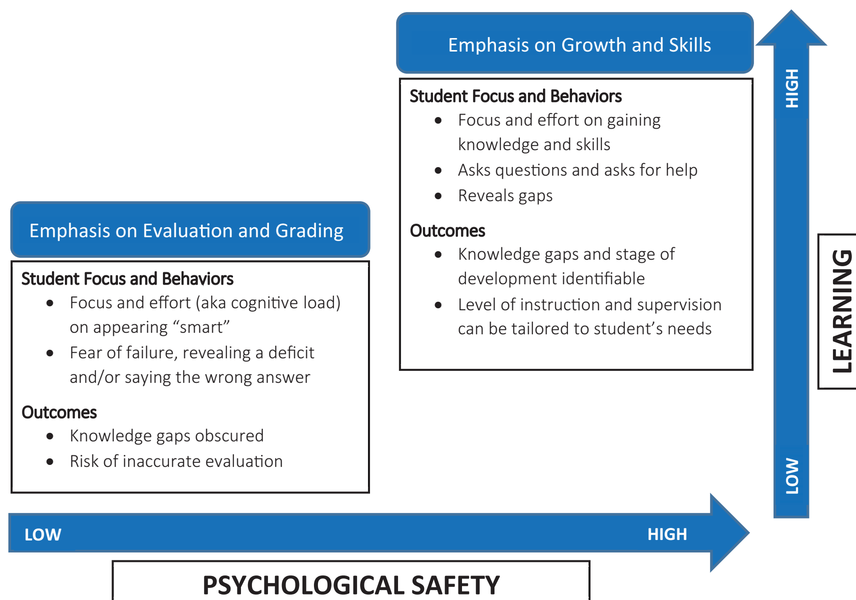

FIGURE 1
Psychological safety and its impact on learning: shifting the emphasis from evaluation and grading toward an emphasis on growth and skills building.

psychological safety. Psychological safety is facilitated by the following factors: (1) high-quality relationships among team members at all levels of training, (2) an emphasis on interdependence and teamwork, and (3) leaders who invite, listen to, and respond respectfully to perspectives and input from traditionally lower-ranking team members.[1] The strong tradition of hierarchy and power differentials in medicine can interfere with building a team mentality and discourage less-experienced and less-knowledgeable members from speaking up.[2–5] Medical teams also manage high workloads, are limited on time, and rarely have ongoing continuity among students, residents, and educators, making it difficult to build high-quality relationships. Despite these barriers, clinician-educators who practice the leadership tasks described below can help to shift the learning environment for medical students toward psychological safety.

BUILDING PSYCHOLOGICAL SAFETY USING CORE LEADERSHIP TASKS

To support a psychologically safe learning environment, clinician-educators can use the following 3 core leadership tasks: (1) setting the stage, (2) inviting participation, and (3) responding productively.[1] These 3 tasks build an environment that emphasizes learning and reduces anxiety about failure and performance.[1,7,8] Actions in line with these leadership tasks can help to narrow the power distance between educators and students through the sharing of roles traditionally held exclusively by higher-ranking team members, such as defining the learning agenda, guiding patient care, and developing plans for change. Table 1 describes the 3 leadership tasks with case examples, guiding principles, and suggested language to facilitate their application in practice.

Task 1: Setting the Stage

The task of setting the stage commences when a new student first arrives at the learning environment. Clinician-educators can "frame the work" by setting expectations about student roles and responsibilities within the health care team. Educators who set clear expectations reduce student anxiety about performance and feedback and help learners to focus their time and effort.[7,9] To help students understand the teaching intent behind future interactions, educators can provide a framework that states overall goals, stresses the importance of teamwork, and describes one's teaching style. This framework may be of particular importance because some teaching styles may inadvertently reinforce power structures and widen gaps between educators and learners.[10] Additionally, educators should consider the goals of the learners themselves, as this demonstrates investment in students' professional development, provides purpose and a scaffolding for teaching and feedback, and allows students to contribute to the learning agenda and modify their own learning goals.[11] Setting the stage lays the foundation for restructuring rigid educational hierarchies by stating directly to students that clinician-educators are focused on their learning and invested in their success.

Task 2: Inviting Participation

The task of inviting participation can help students to speak up, inquire, and engage with the team. Inviting participation in medical education allows students to become an active part of the team through their unique contributions to patient care rather than through relying solely on the decision-making of more-senior team members. By modeling humility and demonstrating a mindset of lifelong learning, educators can signal to students that knowledge gaps are part of the growth process rather than personal failings. Educators can help students

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TABLE 1 Creating Psychological Safety in Medicine: Guiding Principles and Suggested Language Using Case Examples

Psychological Safety Leadership Task #1: Setting the Stage	
Case Example 1: New student joins the clinical team for a month-long rotation	
Guiding Principles and Conveyed Messages	Suggested Language
Frame the Work: • Frame the student's role and specific tasks within the team. • Review the learning objectives specific to the clinical learning environment. • Encourage students to identify related, individual learning goals.	I think this setting is a good place for students to learn the skills of A, B, and C. Your role on the team will be X, Y, and Z, and my goal for you at the end of the rotation is [expected level of understanding or competency]. What specific goals do you have for the rotation, and how can I help you achieve these?
Emphasize the Purpose: • Share the teaching intent behind your actions as an educator. • Explain that it is important to identify and recognize knowledge gaps to learn. • Explicitly state the importance of learning for all team members.	I ask a lot of questions and give a lot of feedback to everyone on the team. This is so I know what I can teach you while you are here. It's always OK if you don't know an answer. Everyone is here to learn, including me. The feedback I give is to support growth towards independence for learners at every level. My main goal is for everyone to learn as much as possible and to enjoy their time here, even if you aren't going into pediatrics.
Psychological Safety Leadership Task #2: Inviting Participation	
Case Example 2: A student asks you a question to which you don't know the answer	
Guiding Principles and Conveyed Messages	Suggested Language
Model Humility and a Growth Mindset: • Acknowledge gaps in one's own learning and highlight the role of practice for building competency. • Actively seek input from group members.	I don't know the answer to that question. Do any of you have ideas? Let's look it up together. What has been the experience of other team members? Learning X took me a long time, and after 10 years as a pediatrician, I'm still working on it.
Provide Autonomy: • Make intentional choices about patient care opportunities so that students can demonstrate skills and autonomy. • Allow opportunities for varying degrees of autonomy that are in line with their stage of development.	Patient A's exam has several common findings associated with illness B. Let's have you see that patient today. Do what you can based on what you know, and I will help to finalize the plan. Now that you have seen the patient, what are your recommendations? If you don't know, that's okay. Let's start with concerns that you have identified. You go first, and I can add some tips based on other cases that I have seen.
Use Inquiry to Build Knowledge, Not Highlight Gaps: • Show curiosity and ask "why" questions to promote critical thinking. • Refrain from asking questions based on knowledge recall. • To avoid placing a student in a position where they may feel humiliated for not knowing an answer, consider directing questions to the group.	Can anybody tell us why we see these exam findings in a patient with disease C? [rather than asking an individual student: What are the 3 classic exam findings in patients with disease C?] Tell me why you think medication Y may be useful in treating this patient's symptoms?
Psychological Safety Leadership Task #3: Responding Productively	
Case Example 3: A student proposes a treatment plan you think is not clinically indicated	
Guiding Principles and Conveyed Messages	Suggested Language
Express Appreciation: • Acknowledge what is "right" about the answer. • Work towards understanding where the suggested plan diverged from a more appropriate plan by asking questions. • Provide a decision-making framework and clinical rationale for the preferred plan.	Nice presentation and good work committing to a plan. I know it can be hard when there are so many issues going on. I think you are right; we need to treat X with Y intervention. Can you tell me more about how you chose Y intervention?
Destigmatize Failure: • Offer feedback and recommendations that are based on direct observation and oriented toward next steps.	I can see how you chose Y intervention. I would usually choose Z intervention here because [provide your own clinical reasoning and decisionmaking framework]. One resource I find helpful for X is [point towards specific reading or skill practice opportunity].

to gain confidence and a sense of autonomy by inviting students to offer input into patient care. Asking questions such as, "What would you do here?" helps students to contribute and gives them a sense of belonging. Using open-ended questions rather than questions with a single correct answer can

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help students to demonstrate what they know and allow educators to build on the students' existing knowledge rather than highlight gaps. Educators who invite participation reduce the power distance between themselves and students by making the learning process toward competency more transparent and accessible, demonstrating that all team members are valued and make unique contributions, and providing students meaningful roles in patient care.

Task 3: Responding Productively

The leadership task of responding productively when students make mistakes is where educators can reinforce the early message to students about a learning-centered environment. Educators can do this by expressing appreciation for students, destigmatizing "failure," and offering future-oriented feedback. Acknowledging and thanking students for tasks done well, offering specific and personalized coaching toward defined learning goals, and providing feedback that is oriented toward learning and actionable changes can help highlight student accomplishments and contributions and reward growth over performance. In so doing, educators highlight team learning and limit the extent to which students experience embarrassment for their mistakes. This leadership task acknowledges the work and value of team members at all levels, reinforces student attributes, and provides reassurance that gaps in knowledge or mistakes are viewed as learning opportunities.

CONCLUSIONS

Clinician-educators can create environments that promote learning by prioritizing psychological safety. By applying the 3 psychological safety leadership tasks, educators can set clear standards for learners to optimize their success, invite their participation in patient care, allow students to direct their own progress, and emphasize the values of learning and growth. In so doing, educators can reduce the tension between learning and evaluation often experienced by students and diminish the vulnerability associated with learning. As more medical educators practice these leadership tasks, we may make significant positive change in medical education culture to emphasize learning and growth over performance.

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