VIEWPOINT

Deeper Teaching: from Theory and Practice to Learner-Centered Medical Education

William B. Ventres, MD, MA

Department of Family and Preventive Medicine, University of Arkansas for Medical Sciences, Little Rock, AR, USA.

J Gen Intern Med 38(1):213–5
DOI: 10.1007/s11606-022-07815-8

Following residency training, I practiced for two decades as a community-based physician. Five years ago, I became a clinician-educator at an academic health center. I have subsequently learned to evaluate learners in core competencies, milestones, and entrustable professional activities. I have also acquired the ability, using such words as adaptive expertise, clinical courage, and emotional intelligence, to characterize other less easily evaluated attributes of medical practice. While attending to these matters of both pedagogical and practical importance, I have worked to school myself in instructional methods beyond the basics of giving lectures, leading small groups, and bedside instruction.[1]

DEEPER LEARNING THEORY

One approach I have found extremely helpful in my transition from full-time practitioner to clinician-educator is the pedagogical theory of deeper learning.[2,3] This theory promotes three "new" R's—*r*igor, *r*elevance, and *r*elationships—as foci for student development in secondary schools. It encourages students to learn beyond the limits of defined curricular outcomes (typified by the "traditional" R's of *r*eading, w*r*iting, and a*r*ithmetic) by placing emphasis on three process-oriented characteristics of meaningful educational development:[2,3]

- *Mastery*. Having a firm grasp of consequential information and knowing how to apply it effectively.
- *Identity*. Developing character traits that support the health and well-being of self and others.
- *Creativity*. Combining mastery and identity to make worthy contributions at home, in work situations, and in the greater society.

Prior Presentations: *None*

Received April 1, 2022
Accepted September 14, 2022
Published online September 26, 2022

Deeper learning theory adds these new dimensions to the many progressive pedagogies that preceded it.[4] Based on observations of exceptional high schools across the USA rather than on abstract academic concepts, it elucidates core differences between traditional and transformational teaching approaches in regard to instructional goals, perspectives on knowledge, educational role relationships, and the ethos of teaching practice.[2] Deeper learning theory suggests that teachers promote in students qualities such as "thinking critically, grappling with nuance and complexity, reconsidering inherited assumptions, questioning authority, and embracing intellectual questions."[2, p. 38] It charges them to become deeper teachers who, as part of a commitment to nurture and express their own signature teaching styles in service of student success, work to inspire in their students habits of inquiry borne of rigor and joy rather than compliance.

To incorporate similar aspirational goals in medical education, I encourage clinician-educators to integrate deeper learning theory and deeper teaching practices with patient-centered concepts to create learner-centered approaches to educating students. In this article, I first highlight five patient-centered tasks I have learned while attending to patients. These tasks exemplify the relationally based habits of engagement I use to help patients understand their diseases and manage their illnesses. Second, I translate deeper learning theory and these patient-centered tasks into five deeper teaching practices specific to medical education, practices I hope both novice and veteran clinician-educators will integrate into their educational efforts. Third, I invite clinician-educators to create their own signature teaching styles aimed at helping learners mature into competent and capable healing professionals.

PATIENT-CENTERED PRACTICE

Over the course of my years in practice, I have worked to invite a shared presence with patients in service of therapeutic goals.[5] I have encouraged such shared presence by linking purposeful (cognitive) and emergent (affective) tasks in clinical encounters:

- Checking In/Personalizing Patient Encounters
  Prior to addressing presenting problems, I have tried to see the person before me and thus humanize the illness experience. My patients have not been just a collection of

disorders to be corrected or biomedical conditions to be managed, but people on life journeys, just like me.

- Assessing Understanding/Connecting Professionally
  Symbolically, I have worked "with" patients rather than just "for" them. Operationally, I have strived to find the right communicative strategy for the right person at the right time. Sometimes, I have used situational encouragement and positive guidance; other times, I have relied on critical reflection and thoughtful redirection. I have sought to promote joint participation in treatment planning, adherence to medication regimens, and creative problem solving regarding barriers to care.
- Framing Progress/Engaging Patients
  I have addressed the intellectual and affective aspects of the illness experience with my patients. I have educated them about the physiological basis of disease while acknowledging the fears and anxieties that might inhibit their healing. I have discussed with them the importance of balancing reality and hope in the face of adverse life circumstances.
- Consolidating Therapeutic Recommendations/Exploring Intentions
  I have collaborated with my patients to set goals for care and devise plans to achieve those goals. I have advocated for healthy habits of mind and body as well as nourishing interpersonal relationships.
- Checking Out/Building Trust
  I have made sure to attend to three tasks with my patients. First, I have expressed my belief that all people have the capacity to grow through life. Second, I have nurtured a culture of responsibility; I have outlined my supportive role simultaneously as I noted patients' accountability for contributing to their own health. Last, I have tried to cultivate in my patients resilience in the face of adversity, creativity when feeling stuck, and a willingness to learn in all circumstances.

LEARNER-CENTERED MEDICAL EDUCATION

Influenced by these learnings and cognizant of how working with patients can parallel teaching learners in the health professions,[6] I recommend the following specific deeper teaching practices for use in encounters with learners (Fig. 1):

- Check In/Personalize Student Encounters
  Inquire as to learners' progress in life. Recognize their place in the life cycle of personal and professional growth; most medical students are simultaneously finding ways to fit in and testing their independence, all the while building the foundations of their future careers.
- Assess Understanding/Invite Shared Presence

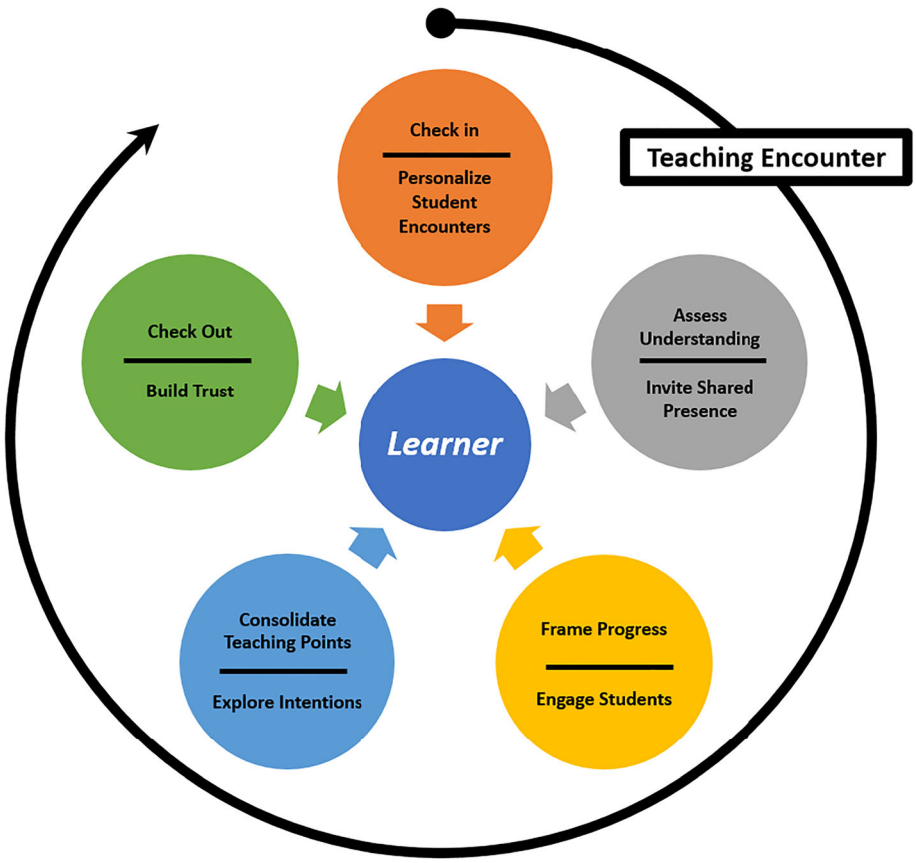

Figure 1 ***Deeper teaching*** **practices for use in medical education.**

Investigate learners' current level of knowledge and skill development as well as their attitude toward learning. Assume that each comes to the present circumstance with different measures of cognitive preparation, technical ability, and life experience. Ask about barriers that might get in the way of learning. Normalize challenges.

- Frame Progress/Engage Students
  Share educational expectations as part of the movement toward becoming a healthy, thoughtful, and compassionate professional. Connect these expectations with the role responsibilities regarding knowledge base, procedural skill, or professional identity.
- Consolidate Teaching Points/Explore Intentions
  Use teach back/talk back methods to assess learners' understanding and comprehension of teaching points; jointly consider future practice applications. Proactively co-create remediation plans if emotional readiness or cognitive preparation is lacking.
- Check Out/Build Trust
  Encourage self-reflection and feedback from others. Extend the learning moment into the future, focusing on student interest and inquisitiveness. Summarize and make specific plans about clinical progress and long-range goals. Recommend close follow-up whenever warranted.

Others in medical education have suggested that clinician-educators incorporate learners' self-motivations, existing levels of knowledge, and problem-solving abilities as pedagogical cornerstones.[7] How we approach these tasks, however—*how* we teach—is also of crucial importance. Deeper learning theory and deeper teaching practices offer insights that can enhance learner-centered medical education, the highly individualized process of stimulating students to become clinically mature and wise physicians.

I invite my fellow clinician-educators to apply deeper learning theory and deeper teaching practices in ways that are personalized, inviting, engaging, intentional, and building of trust. Doing so, may we help budding clinicians on their paths of personal and professional growth, encouraging them along the way to become confident physicians offering compassionate service to those who seek their care.

Acknowledgements: *The author thanks Michael Anders, PhD, and Richard Frankel, PhD, for their constructive comments regarding this manuscript.*

Corresponding Author: *William B. Ventres, MD, MA; Department of Family and Preventive Medicine, University of Arkansas for Medical Sciences, Little Rock, AR, USA (e-mail: wventres@uams.edu).*

Declarations:

Conflict of Interest: *The authors declare that they do not have a conflict of interest.*

REFERENCES

1. **Ross M.** Conceptions of teaching: an illustrated review. Clin Teach. 2017;14:8-14.
2. **Mehta J, Fine S.** In Search of Deeper Learning: The Quest to Remake the American High School. Cambridge, MA: Harvard University Press; 2019.
3. **Mehta J, Fine S.** The why, what, where, and how of deeper learning in American secondary schools. Students at the Center: Deeper Learning Research Series. Boston: Jobs for the Future. 2015. Available at: https://www.jff.org/resources/why-what-where-and-how-deeper-learning-american-secondary-schools/. Accessed 8 Aug 2022.
4. **Slavich GM, Zimbardo PG.** Transformational teaching: theoretical underpinnings, basic principles, and core methods. Educ Psychol Rev. 2012;24(4):569-608.
5. **Ventres WB, Frankel RM.** *Shared presence* in physician-patient communication: a graphic representation. Fam Syst Health. 2015;33:270-9.
6. **Shapiro J.** Parallel process in the family medicine system: issues and challenges for resident training. Fam Med. 1990;22:312-9.
7. **Van Schalkwyk SC, HaflerJ, Brewer TF, et al.** Bellagio Global Health Education Initiative. 2019. Transformative learning as pedagogy for the health professions: a scoping review. Med Educ. 2019;53:547-58.