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PERSONAL VIEW

If medical education was a discipline, she would have five core competencies

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ABSTRACT

To date, many medical schools define medical educators by who they teach rather than the quality of their engagement with learners. In addition, evidence suggests that a traditional terminal degree may not satisfy the developmental needs of educators engaged in competency based medical education. Perhaps, medical educators require additional competencies. This personal view introduces five competencies that enliven the way in which medical educators engage in career paths, recruitment, performance assessment, compensation, and professional development.

How do you know a medical educator is ready to teach? Is an MD or PhD enough? How do you evaluate a medical educator's teaching knowledge, skills, and abilities in the classroom or in the clinic? We assume that the completion of a terminal degree is readiness for teaching. Yet, in the age of competency based medical education, perhaps, the field of medical education should behave like an emerging discipline. Cristancho and Varpio (2016) describe a discipline as being guided by shared assumptions, paradigms and methods, while a field brings together multiple paradigms, assumptions, and methods. They ultimately argue that medical education is a field, not a discipline. This assumption while true in the past is ever evolving and predictions that medical education could be a discipline are not unreasonable. If medical education were a discipline, we might define what it means to be a medical educator and develop disciplinary best practices which would include shared assumption, unique theoretical approaches, and a body of literature that reflects both research and practice. If medical education were a discipline, perhaps, then it would be necessary for medical educators to achieve a core set of competencies. These core medical educator competencies could provide numerous suggestions about how faculty and faculty developers might assess themselves, design curriculum and programming, and assess and evaluate the discipline of medical education.

To date, medical educators have developed proposed teaching competencies after Accreditation Council for Graduate Medical Education (ACGME) competencies for residents, their specialty, and unique teaching environments (i.e., simulation). However, as medical educators, receive formal training (i.e., certifications and diplomas), what should one be able to do in order to demonstrate competencies necessary to educate future physicians. As argued in Srinivasan et al. (2011), ACGME competencies continue to support the competencies of M.D. faculty, but these core competencies should be extended to meet the needs of all medical education faculty, including non-MD faculty who teach trainees. As Rosenbaum (2012) described, medical

teachers in any setting need content knowledge, learner-centeredness, professionalism, communication, practice-based reflection, and systems-based practice. A pharmacology faculty member should be able to not only demonstrate content knowledge through their lectures on pharmacotherapeutics, but should be able to demonstrate practice-based reflection and systems-based practice, by connecting the pharmacotherapeutics to a recent publication which talks about the costs of these drugs to patients. Engaging in both vertical and horizontal integration will require more than medical educator content knowledge. Engaging in integration as a medical educator includes the ability to write quality objectives, effectively engage learners in the classroom, accurately assess learning according to one's objectives.

Research to date, while limited in quantity, suggests a need for medical educator competencies, yet, none of these articles, propose a competency model. Competency models include competency names and definitions, activities, and behaviors associated with each competency as well as a graphic representation of the model. Within competency models are numerous milestones in which behaviors can be assessed. I call for a competency model with measurable milestones for our field. Medical educator milestones would be the developmental outcomes (knowledge, skills, abilities, and performance) that demonstrate faculty teaching ability throughout their tenure.

As a medical educator, I have spent a significant amount of time having conversations and delivering workshops nationally with numerous clinical and basic science faculty. It is from these conversations that I propose five competencies that all medical educators should aspire to obtain. The five competencies include facilitating learning, curriculum design and instruction, assessing learning, scholarship of teaching and learning, and educational leadership and administration.

The competency of facilitating learning describes the ability to use one's knowledge, skills, and abilities to promote engaged active development of knowledge in the learning environment. This may include knowledge and

skills ranging from the development of goals and objectives as well as the use of questioning to facilitate dialog with diverse student populations. A medical educator who is competent should demonstrate a shift from faculty centered teaching to student centered learning.

Curriculum design describes the need for faculty to be able to apply educational theory to the design and evaluation of learning activities. Curriculum design as defined by Thomas et al. (2016) is a six-step approach including (1) problem identification and general needs assessment, (2) targeted needs assessment, (3) goals and objectives, (4) educational strategies, (5) implementation, and (6) evaluation and feedback. Milestones that support the assessment of curriculum design and instructional strategies may include numerous stages including the basic awareness of educational theory and models to the more refined ability to apply educational theory to curriculum design, and the demonstrated expertise in educational theoretical perspective that inform one's teaching practice and philosophy.

The third competence, assessing learning, is the commitment to engage in continuous monitoring and improvement both in the clinic and the classroom. Milestones driving the assessment of learning competency include the basic awareness of theoretical perspectives on assessment and evaluation in medical education, to the competent development of assessments aligned with activity learning objectives and goals, to the expert design and development of reliable and valid assessments.

The scholarship of teaching and learning, the fourth competency, promotes the participation of medical educators in developing their innovative practice into scholarship. Scholarship according to Boyer's theoretical model (1990) describes a process of documentation, peer review, and dissemination in four domains: (1) scholarship of teaching, (2) scholarship of integration, (3) scholarship of application, and (4) the scholarship of discovery. Milestones supporting the scholarship of teaching and learning may describe at the basic level the appreciation of faculty to search for innovative approaches and best practices to develop skills and disseminate knowledge. At higher levels of expertise, faculty may contribute to the scholarship of discovery by publishing their innovative practice in a peer-reviewed journal.

Finally, educational leadership and administration describes knowledge, skills, and abilities that medical educators should do to foster collaboration, manage projects, and exhibit integrity (Harden & Crosby 2000; Hesketh et al. 2001). Milestones supporting educational leadership might range from the effective use of institutional resources and time to the more advanced skills of developing quality assurance processes with regulatory bodies.

Once we accept common core medical educator competencies, how do we use them to inform our practice? It is the hope that these competencies will influence not only the individual's awareness of their own professional development needs, but the curriculum in which we teach, the training we receive, and the nature of our field or emerging discipline.

A medical educator competency model can support the ability of medical educators to engage in strategic selection, career paths, succession planning, recruitment,

performance assessment, compensation policies, and training and development. In the ideal scenario, faculty who are aware of the core competencies for medical educators will assess themselves along these competencies and milestones. Once they self-assess, they are able to identify areas in which they desire to improve or develop additional expertise. It is from this desire that self-directed faculty are able to participate in performance feedback, educational programing, certificate and professional medical education courses, and other continuing medical education activities that support the development of their desired competency. Through training and development, medical educator competencies can engage in individualized faculty development plans that promote consistent standards for all medical educators (McLean et al. 2008). While a medical educator competency model is not yet reality, and may never be, let's begin to explore what it means to be an applied field and maybe even an emerging discipline. What do you and I need in order to improve our teaching practice? As the field of medical education evolves so must I.

Note on contributor

Constance R. Tucker, PhD, is the Assistant Dean for Faculty Development at Virginia Commonwealth University School of Medicine in Richmond, VA. Constance provides leadership and supports the instructional and professional development of educators in pre-clinical, clinical, and graduate medical education. Her research interests explore medical educator competencies, motivation, educational persistence, and cognition of health professions students.

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