

Evolution of Teacher Competencies in Current Medical Education Scenario: A Review

Dr. Sunjith Sudhakar

Associate Professor, Pms College of Dental Science and Research

Abstract:

Medical schools navigate through the complexities of modern healthcare and technological advancements, the competencies expected of the educators are undergoing a significant transformation. This evolution is crucial to ensure that graduates are prepared to meet the diverse and demanding needs of contemporary healthcare consumers.

Introduction:

In the dynamic field of medical education, teachers play a pivotal role in shaping the future of healthcare.¹ Traditionally valued for their clinical expertise, today's educators are navigating a transformative journey to meet the diverse needs of contemporary medical practice.²⁻⁴ In the realm of medical education, the role of teachers has always been pivotal, shaping not only the knowledge base of future medical professionals but also their clinical skills and patient care ethics.⁵⁻⁹

From Expertise to Holistic Teaching

In earlier days medical educators were solely recognized for their clinical proficiency.¹⁰ While this remains essential, modern teaching demands a broader range of competencies. Educators are now expected to:

- **Embrace Diversity:** Understanding the interconnectedness of health with overall well-being, educators collaborate across disciplines to provide comprehensive patient care.¹¹ Educators must understand and teach how medical health impacts the overall health. Collaborating with professionals from various fields is essential to provide comprehensive patient care.
- **Harness Technology:** Advancements in digital tools and simulations are revolutionizing medical education. Educators must integrate these technologies into teaching to prepare students for a tech-driven world.¹² Advances in technology are revolutionizing practice.¹³⁻¹⁵ Teachers need to stay abreast of digital tools, virtual simulations, and telehealth applications to enhance learning experiences and prepare students for modern practice.¹⁶
- **Adapt Teaching Strategies:** Recognizing that every student learns differently, educators employ diverse methods like active learning and problem-solving approaches to cater to individual learning styles¹⁷⁻²⁰. One-size-fits-all teaching methods are giving way to adaptive strategies that cater to diverse learning styles and individualized student needs. Educators must be adept at using active learning techniques, case-based learning, and problem-solving approaches.
- **Promote Ethics and Cultural Sensitivity:** In a globalized world, ethical decision-making and cultural competence are critical. Educators must instill values to ensure students become compassionate and respectful professionals.²¹ With globalization, medical professionals encounter patients from diverse

cultural backgrounds and ethical dilemmas. Teachers must instill cultural sensitivity, ethical decision-making skills, and professionalism in their students.

- **Encourage Evidence-Based Practice:** Teaching the latest research and empowering students to critically evaluate evidence is essential for delivering high-quality care grounded in scientific rigor.²² The emphasis on evidence-based medicine requires educators to not only teach the latest research but also encourage students to critically appraise evidence and apply it to clinical practice.

Challenges in Adopting to Newer Competencies

Despite advancements, challenges persist. Limited resources and resistance to change can hinder the adoption of new teaching methods.²³ Evaluating the effectiveness of innovations also requires robust assessment tools and ongoing support for faculty development.^{24,25}

- **Time and Resources:** Integrating new teaching methods and technologies requires investment in faculty development programs, infrastructure, and continuous training.
- **Resistance to Change:** Some educators may be reluctant to adopt new methods, preferring traditional approaches they are familiar with.
- **Assessment:** Evaluating the effectiveness of new competencies and teaching methods poses a challenge, requiring robust assessment tools and metrics.

Conclusion

To overcome the challenges, institutions must invest in faculty development programs, workshops, mentorship initiatives, and collaborative projects. These methodologies will empower educators to adapt and thrive in a rapidly evolving educational landscape.

As medical education continues to evolve, educators must remain agile and proactive. By embracing interdisciplinary collaboration, leveraging technology, and prioritizing professional growth, they ensure graduates are not just skilled clinicians but compassionate caregivers and lifelong learners.

With the core principles of medical education remaining steadfast, the competencies expected of the educators are evolving to meet the challenges of a rapidly changing world. By embracing interdisciplinary collaboration, leveraging technology, and prioritizing professional development, medical schools can empower educators to prepare future generations of medical professionals for success in the dynamic landscape of healthcare education; by way of effective designing of contemporary faculty development programs.

References:

1. Hesketh EA, Bagnall G, Buckley EG, et al. A framework for developing excellence as a clinical educator. *Med Educ.* 2001;35(6):555-564.
2. Sutkin G, Wagner E, Harris I, Schiffer R. What makes a good clinical teacher in medicine? A review of the literature. *Acad Med.* 2008;83(5):452-466.
3. Irby DM, Wilkerson L. Educational innovations in academic medicine and environmental trends. *J Gen Intern Med.* 2003;18(5):370-376.
4. Dornan T, Boshuizen H, King N, Scherpbier A. Experience-based learning: a model linking the processes and outcomes of medical students' workplace learning. *Med Educ.* 2007;41(1):84-91.

5. Stalmeijer RE, Dolmans DHJM, Wolfhagen IHAP, Muijtjens AMM, Scherpbier AJJA. Cognitive apprenticeship in clinical practice: can it stimulate learning in the opinion of students? *Adv Health Sci Educ Theory Pract.* 2009;14(4):535-546.
6. Chou CL, Masters DE, Chang A, Kruidering M, Hauer KE. Effects of longitudinal small-group learning on delivery and receipt of communication skills feedback. *Med Educ.* 2013;47(11):1073-1079.
7. Remmen R, Denekens J, Scherpbier A, Hermann I, van der Vleuten C, Royen PV, et al. An evaluation study of the didactic quality of clerkships. *Med Educ.* 2000;34(6):460-464.
8. Boud D, Feletti G. *The challenge of problem-based learning.* 2nd ed. London: Kogan Page; 1997.
9. Durning SJ, Cation LJ, Markert RJ, Pangaro LN. Assessing the reliability and validity of the mini-CEX. *Adv Health Sci Educ Theory Pract.* 2003;8(3):181-194.
10. O'Sullivan PS, Irby DM. Reframing research on faculty development. *Acad Med.* 2011;86(4):421-428.
11. Steinert Y, Mann K, Centeno A, Dolmans D, Spencer J, Gelula M, et al. A systematic review of faculty development initiatives designed to improve teaching effectiveness in medical education: BEME Guide No. 8. *Med Teach.* 2006;28(6):497-526.
12. Srinivasan M, Wilkes M, Stevenson F, Nguyen T, Slavin S. Comparing problem-based learning with case-based learning: effects of a major curricular shift at two institutions. *Acad Med.* 2007;82(1):74-82.
13. Harden RM. Ten questions to ask when planning a course or curriculum. *Med Educ.* 1986;20(4):356-365.
14. Frenk J, Chen L, Bhutta ZA, et al. Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. *Lancet.* 2010;376(9756):1923-1958.
15. Chenot JF, Himmel W, Kochen MM. Gesundheitsförderung in der hausarztpraxis. *Gesundheitswesen.* 2003;65(9):553-560.
16. Cruess RL, Cruess SR, Boudreau JD, Snell L, Steinert Y. A schematic representation of the professional identity formation and socialization of medical students and residents: a guide for medical educators. *Acad Med.* 2015;90(6):718-725.
17. Wilkinson TJ, Wade WB, Knock LD. A blueprint to assess professionalism: results of a systematic review. *Acad Med.* 2009;84(5):551-558.
18. General Medical Council. *Tomorrow's doctors: outcomes and standards for undergraduate medical education.* London: GMC; 2009.
19. Sklar DP. Commentary: issues in defining professionalism for medical educators. *Acad Med.* 2010;85(5):810-812.
20. Steinert Y, Cruess R, Cruess S, Snell L. Faculty development for teaching and evaluating professionalism: from programme design to curriculum change. *Med Educ.* 2005;39(2):127-136.
21. Sullivan PB, Buckle A. Evaluating the quality of medical multiple-choice items written by faculty in one medical school. *Acad Med.* 2001;76(1):85-88.
22. Smith SR, Dollase R, Boss JA. Microskills of clinical teaching: creating a richer vocabulary for faculty development. *Acad Med.* 2014;89(8):1103-1109.
23. Swick HM, Szenas P, Danoff D, Whitcomb ME. Teaching professionalism in undergraduate medical education. *JAMA.* 1999;282(9):830-832.

24. Cruess RL, Cruess SR, Steinert Y. Amending Miller's pyramid to include professional identity formation. *Acad Med.* 2016;91(2):180-185.
25. Papadakis MA, Hodgson CS, Teherani A, Kohatsu ND. Unprofessional behavior in medical school is associated with subsequent disciplinary action by a state medical board. *Acad Med.* 2004;79(3):244-249.