



# Redefining the role of a learner in the competency-based medical curriculum

Ilavenil Karunakaran<sup>1\*</sup>, Gugapriya Thiagarajan Sukhumar<sup>2</sup> and Guru Thangiah Arun<sup>3</sup>

<sup>1</sup>Department of Anatomy, Sri Ramakrishna Dental College and Hospital, Tamilnadu Dr. MGR Medical University, Coimbatore, <sup>2</sup>Department of Anatomy, All India Institute of Medical Sciences, Nagpur, India, and <sup>3</sup>Clinical Imaging Department, Hamad Medical Corporation, Qatar University, Doha, Qatar

Competency-based medical education (CBME) was adopted by the Medical Council of India in 2019 [1]. It was developed and implemented with the purpose of fashioning a competent Indian Medical Graduate (IMG) through the attainment of desired predetermined attributes during the undergraduate curriculum [2]. Scaffolding and support for medical institutions and personnel are provided to implement CBME. This is coordinated through the Medical Education Units of nodal and regional centers and in respective individual institutions. Reports of the implementation are also generated for evaluation of goal attainment [2].

## 1. What is the gap in the CBME implementation process?

The achievement of the goals of CBME is dependent on effective implementation strategies. The challenges often highlighted in the implementation of CBME are the need for sensitization and participation of all stakeholders, coordination among implementing authorities, and the

need for trained faculty [3]. Among the above often cited factors, it can be observed that the implementation cycle of CBME lacks active student participation. Efforts to make CBME succeed are lacking in discrete, explicit measures to educate the learners in adapting to the newer roles and responsibilities that are expected of them. Our current efforts in implementing CBME are singularly inequitable, with the largest share of decision-making and sensitization aimed at faculty and institutions. However, it is seen that despite the traditional roles assigned to learners, attempts to include them as partners in the teaching learning process elicit better engagement and open avenues of growth in teaching learning [4].

## 2. Are our learners actively engaged?

Pedagogical strategies in CBME are aimed at adult learners, with the intention of active engagement with the course content and syllabus. In reality, the learner remains a least-engaged and least-informed passive consumer of educational strategies that faculty determine best suited

Received: August 2, 2022 • Revised: September 20, 2022 • Accepted: October 13, 2022

Corresponding Author: Ilavenil Karunakaran (<https://orcid.org/0000-0002-7649-2203>)

Department of Anatomy, Sri Ramakrishna Dental College and Hospital, SNR college road, Nava India, Coimbatore-641006, Tamilnadu, India

Tel: +91.7598482759, +91.9944048733 email: ilavenil.k@gmail.com

\*Current affiliation: The author is now with the Department of Anatomy, Karpagam Faculty of Medical Sciences and Research, Tamilnadu Dr. MGR Medical University, Coimbatore, India.

Korean J Med Educ 2022 Dec; 34(4): 337-340

<https://doi.org/10.3946/kjme.2022.242>

eISSN: 2005-7288

© The Korean Society of Medical Education. All rights reserved. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/3.0/>), which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

for achieving the intended learning outcomes. This trend might be due to a commonly held belief that our learners are not accustomed to learning in an environment that fosters higher-order thinking skills and instead are used to rote learning [5]. Learners are made to attend the class passively for attendance and are often forced to absorb cognitive load disguised as active pedagogical methods. While this indicates a failure in faculty training, the inclusion of students' responsibility in CBME implementation might prove a vital factor in creating an ethos of active learning. The inclusion of students in the design and implementation of the teaching and learning activities and co-creation in learning will create an ethos of growth. A vital requisite for the success of such a collaborative venture is good communication [4].

### **3. How well have we communicated our teaching learning expectations to the learner?**

Learners have reported that the foundation course prior to entry into regular academics was beneficial. However, there was a lack of satisfaction with aspects of training, regarding the medical course, including few of the proposed pedagogical methods involved [3]. Resource materials designed to support the learner's transition to active learner-centric methods are not available. Under the CBME, learners are considered as being capable of a degree of autonomy and this makes them accountable for their academic development. This intention of the new curriculum must be clarified and explicitly stated in order to help the transition of all learners from passive to more active participants in their learning process. This will enable effective implementation of the curriculum with better chances of achieving course outcomes. Within an aspirational move such as CBME, a lack of understanding and engagement of learners is a weak link that will deter and eventually derail the vision of producing competent

IMGs.

### **4. How to strengthen the weak link in implementation?**

Studies show that student participation in medical education must be increased to allow active involvement in the design of educational experiences [4]. This must begin by creating clear guidelines and material that showcase what is expected of a learner in the CBME. This will serve a dual purpose. It clarifies the level of competence that he/she is expected to achieve and inspires the teacher to move towards active learning strategies. This will improve learner engagement and enable students to participate as informed evaluators of curriculum and partners in curriculum design.

### **5. How to foster student participation in CBME?**

The steps that have been reported to include students in the medical education process vary from obtaining feedback to being co-creators of the curriculum. Student-led feedback is essential to identify the curricular areas that need improvement and to design an improved curriculum. Focus group interviews with students and electing student representatives to voice overall students' opinions are better than traditional end-of-course course evaluation surveys. When the curriculum was restructured at the Vanderbilt University School of Medicine (VUSM), a Student Curriculum Committee was formed. The inclusion of students from the early stages of implementation through feedback from the VUSM's Student Curriculum Committee facilitated the transition by identifying areas of concern for the learner [6]. We are of the opinion that student engagement, not only in giving their opinion but also in designing and implementing curriculum is required in a structured and formal manner. Active student participation in curriculum design has been described based on Arnstein's Ladder model [7]. Here the

authors suggest levels of student participation in course design, with the lowest rung being a “dictated curriculum” and the highest rung being “students in control.” The intervening six levels denote variable levels of participation that may be based on multiple factors related to the institution, faculty, or learner. Reports from other institutions that report active student participation in course design talk about students being module co-directors, co-creators of curriculum, and partners in pedagogic planning and processes [8–10].

## 6. What is the right way forward?

A culture to involve students in decision-making, curriculum development, and evaluation after requisite training and sensitizing the teaching faculty towards acceptance of such collaboration must be consciously fostered. Integrated learning and early clinical exposure of CBME curriculum which emphasizes reflection and communication skills will make learner engagement in teaching-learning achievable. Practices such as self-directed learning can enable individual learners to contextualize the process of learning and thereby empower them to give meaningful feedback and to actively participate in course curriculum development.

We opine that institutions that are implementing CBME must make an effort to include the learners through feedback for curriculum evaluation and in the design of curriculum implementation to any degree possible. This includes empowering students through the implementation of active learning strategies that improve engagement and foster higher-order thinking skills. The formation of student bodies that are dedicated to curriculum improvement and feedback will also consolidate the process of student participation. These methods can be applied to most medical schools in India since they are often affiliated with a statutory council/university that designs the curriculum. Continuous collaboration between faculty

and students is a must for the successful implementation of CBME. It is imperative that the crucial stakeholder in CBME, the learner, be included in its implementation for it to reach its intended goal.

---

### ORCID:

Ilavenil Karunakaran: <https://orcid.org/0000-0002-7649-2203>;

Gugapriya Thiagarajan Sukumar: <https://orcid.org/0000-0002-6309-947X>;

Guru Thangiah Arun: <https://orcid.org/0000-0003-0346-0195>

**Acknowledgements:** None.

**Funding:** No financial support was received for this study.

**Conflicts of interest:** No potential conflict of interest relevant to this article was reported.

**Author contributions:** All three authors were equally involved in conception, drafting, critical revision of the article, and final approval of the version to be published.

---

## References

1. Medical Council of India. Competency based undergraduate curriculum for the Indian Medical Graduate. <https://www.nmc.org.in/wp-content/uploads/2020/01/UG-Curriculum-Vol-I.pdf>. Published 2018. Accessed January 24, 2022.
2. Bansal P, Supe A, Sahoo S, Vyas R. Faculty development for competency based medical education: global, national and regional perspectives. *Natl J Integr Res Med.* 2017; 8(5):89-95.
3. Sethi S, Verma P, Srivastava V, Mittal R. Perceptions of 1st-year MBBS students about the Medical Council of India Mandated Foundation Course. *CHRISMED J Health Res.* 2021;8(1):10-14.
4. Bovill C, Cook-Sather A, Felten P, Millard L, Moore-Cherry N. Addressing potential challenges in co-creating learning and teaching: overcoming resistance, navigating institu-

- tional norms and ensuring inclusivity in student-staff partnerships. *Hig Educ.* 2016;71(2):195-208.
5. Tavakol M, Dennick R. Are Asian international medical students just rote learners? *Adv Health Sci Educ Theory Pract.* 2010;15(3):369-377.
  6. Yengo-Kahn AM, Baker CE, Lomis AK. Medical students' perspectives on implementing curriculum change at one institution. *Acad Med.* 2017;92(4):455-461.
  7. Bovill C, Bulley CJ. A model of active student participation in curriculum design: exploring desirability and possibility. In: Rust C, ed. *Oxford Centre for Staff and Learning Development.* Oxford, UK: Oxford Brookes University; 2011:176-188.
  8. Milles LS, Hitzblech T, Drees S, Wurl W, Arends P, Peters H. Student engagement in medical education: a mixed-method study on medical students as module co-directors in curriculum development. *Med Teach.* 2019;41(10):1143-1150.
  9. Khan H, Smith EE, Reusch RT. Shifting medical student involvement in curriculum design: from liaisons to co-creators. *Acad Med.* 2022;97(5):623-624.
  10. Bovill C, Cook-Sather A, Felten P. Students as co-creators of teaching approaches, course design, and curricula: implications for academic developers. *Int J Acad Dev.* 2011;16(2):133-145.