

# Enhancing Comprehension Among Medical Students by Implementing “Teach-Back” in Medical Education

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Dear Editor,

The use of effective teaching-learning methodologies plays a defining role in the delivery of medical education and is crucial to ensure the attainment of competencies and learning objectives (1). Considering the rapid pace with which the health sector is changing, there is an immense need for efforts to not only impart medical knowledge but also encourage critical thinking, clinical reasoning, and foster the delivery of empathetic and compassionate healthcare services (1). Further, as we strive towards cultivating a culture of self-directed and lifelong learning among medical students, there is a definitive need to employ effective teaching-learning methodologies (1).

In medical education, the “teach-back” technique has been employed to assess comprehension and retention of information among medical students (2). In simple words, it means that after students are taught a specific topic, they summarize and present the subject taught in their own words to the teacher or their peers (2, 3). This method helps teachers to measure the depth of understanding and extent of retention of concepts or procedures by medical students, which is exactly opposite to the conventional teaching methods, where students are passive learners (3, 4). The use of teach-back as an assessment method aids in measuring understanding and comprehension, as students have to process and interpret the information (3). This plays a

significant role in the development of critical thinking skills, which are crucial for successful clinical practice (2, 3).

Acknowledging the scope and merits of the teach-back method in facilitating the acquisition of knowledge and skills, there arises the need to take targeted steps to systematically incorporate the same into the existing curriculum (2-4). This implementation can be done using multiple methods, like interactive didactic lectures, small group discussions, case-based discussions, journal club sessions, role-plays, standardized patient encounters, peer teaching, and objective structured clinical examinations (2-6). The best part of teach-back method is that it can also be used as an assessment tool by either asking students to provide a written or a verbal summary of a specific topic, concept, or procedure, and this will provide insights about understanding and retention of the gained knowledge or skills (3-5). Once students provide a summary, teachers can assess the ability of students to synthesize information and the effectiveness of communication (4, 5). As students are given the task of teaching their peers, they can provide feedback on the clarity and quality of the explanation provided (2, 4). If the institution can design well-defined rubrics, the utility of the teach-back method as an assessment tool can be significantly enhanced, as the process becomes objective and structured.

In our vision to successfully implement teach-back methods in medical curriculum, many challenges have been identified, and they must be systematically addressed (Table 1) (2-6). This begins with resistance to change from educators and administrators, and if they are not on our side, we cannot successfully implement it. Thus, there is an immense need to convince administrators about the utility and teachers about how

it can be successfully implemented within the existing curriculum (3, 6). Teachers are reluctant to accept this as they are used to traditional teaching methods, or they are concerned about how they will employ these methods in their class and still not extend their class duration. Administrators can be reluctant as they are worried about the utility of the same (6).

**Table 1.** Identified challenges and potential solutions

Identified challenges	Potential solutions
Untrained faculty members	Train teachers about the scope, need, and do's and don'ts of "teach-back" method Incorporate the principles of active learning in faculty development programs Extend continuous support and resources for teachers and also about the best practices An open platform of communication can be created wherein teachers can ask raise their queries and get prompt support
Resistance to change	Create an open platform for teachers and students to engage in transparent communication about teach-back Foster a shared vision and sense of ownership among faculty, administrators, and students Train teachers about the scope, need, and do's and don'ts of "teach-back" method
Resistance to active learning	Train faculty members regarding the merits and approaches to implement active learning Share evidence of merits of employment of "teach-back" method in promoting student engagement and improvement of learning outcomes Encourage teachers to adopt innovative teaching-learning methodologies, which can facilitate active learning among medical students
Lack of student engagement or cultural differences	Promote creation of an inclusive learning environment wherein all students actively participate in discussion Teachers can employ active learning methods to deal with students with different learning styles Provide opportunities for peer collaboration and interaction to enhance student engagement and motivation Promote cultural sensitivity and awareness among teachers and students
Time constraints	Teach-back activities should be integrated in the existing sessions, as a part of the routine sessions Identify key concepts or topics, wherein teach-back activities can be employed, with specific focus on active engagement of students Explore the possibility of technology (in the form of online platforms and mobile applications) to enable asynchronous participation
Large class size	Teachers can be trained in "teach-back" methodologies to enhance their competence levels in carrying out such sessions with larger group of medical students Large group of students can be divided into smaller groups to enable feasible interaction and active participation Educators can employ polling or audience response systems (clickers) to encourage participation from all learners during large-group sessions
Subjective assessment and grading	Develop clear and transparent assessment criteria and rubrics for evaluating "teach-back" activities Provide timely and constructive feedback to students, highlighting strengths and areas for improvement Incorporate peer / self-assessment into "teach-back" activities, encouraging students to reflect on their own learning process, and thereby ensure continuous improvement
Technological limitations	Explore simplified alternatives (like flipcharts, whiteboards, etc.) to summarize information Use existing technical resources to facilitate "teach-back" activities

Some of the teachers might be worried about the large class size, in the sense of how they can ensure the active engagement of all students in a large class (5, 6). Finally, there is a concern of subjectivity in assessing teach-back methods as an assessment tool. The Medical Education Unit and the Curriculum Committee of the

institution play a defining role in the smooth incorporation and implementation of the teach-back methods in the regular teaching sessions. The use of technology and online platforms can significantly minimize operational constraints. Further, there is a need to adopt a multipronged approach to overcome the

existing challenges and enhance the utility of teach-back methods in facilitating learning and improving the attainment of learning competencies (4-6).

In conclusion, medical education continues to advance and evolve, there is an immense need to employ interactive teaching-learning methods for the benefit of students. The teach-back method is an effective tool to assess comprehension, promote active learning, develop critical thinking, and facilitate meaningful engagement with the learning resources. Thus, it is the need of the hour to introduce such methods in the medical curriculum for the successful attainment of learning outcomes.

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