

Microteaching in Medical Education

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Abstract

Medical teachers need training in pedagogic techniques in order to become better teachers. Despite the fact that our teaching techniques improve gradually over the years as we gain experience and also owing to continuous practice undertaken for different kinds of teaching learning situations; nevertheless educational technology has evolved ways and means for better development of teaching skills even at earlier stages by undertaking some methodical exercises, one of which is Microteaching. Microteaching, an innovative technique of teacher training, helps teachers to improve their teaching skills. It aims at development of competence in teaching skills through the practice of microteaching sessions¹. In other words, it teaches teachers how to teach. This is especially important in cases of new faculty implying the budding teachers. Even an experienced teacher can benefit by this technique, particularly for learning some new skills¹. The individual may be very sound in his/ her own subject but may not necessarily be a good teacher.

Keywords: Medical Education, Microteaching

1. Introduction

Microteaching is a “scaled-down teaching encounter designed to develop new skills and refine old ones”². It is an educational methodology and is akin to putting the instructors “under the microscope” of a small group audience. The technique attaches importance to a small fraction or a particular aspect of the teaching skill and needs a small time to demonstrate the same. It implies that while teaching, all the faults in teaching methodology are brought into perspective for the observers to impart a constructive feedback. Microteaching trains teaching behaviours and skills in small group settings aided by video-recordings and aims at building up of skills and confidence of the teachers. In a congenial environment of friends and colleagues, teachers can teach the way they usually do with their students, and receive a well-intended

and constructive feedback. A microteaching session is a chance to adopt new teaching and learning strategies and, through assuming the student role, to get an insight into students’ needs and expectations. It provides an opportunity to try newer teaching modalities in a simulated teaching session instead of trying it with a real class.

2. Phases of Microteaching

There are three different phases of microteaching namely knowledge acquisition, skill acquisition and transfer³. The first phase i.e. the knowledge acquisition phase is the preparatory phase in which the teacher gets trained via lectures, discussion, illustration, and demonstration of the skill by the experts. In the second phase i.e. the interactive, skill acquisition phase, a micro-lesson is planned by the teacher for practising the demonstrated

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skills. This is evaluated by the colleagues and peers. By getting a well-intended feedback, the teaching practices can be modified⁴. This ultimately leads to better teaching-learning practices. Henceforth, the learned skills are transferred from simulated teaching situation to real class room teaching⁵. A short lesson is taught by the teacher to an audience of four to six peers or pupils for a period of 5-10 minutes who evaluate teaching at the end of the session. It can be practised with even a single concept or a short lesson. The main emphasis is on how to teach rather than what to teach. The session can be organised for the proper implementation of any visual aid such as chalk-board, specimens, models, projection instruments such as overhead projector, slide projector, audio aids or audio-visual aids¹. Video recording can be done if facilities for the same are available. The teacher re-plans the lesson keeping in view the comments of feedback and again re-teaches the lesson. Repeated cycles of teaching, feedback and re-teaching help the teacher to perk his/her teaching skills.

The core skills/ techniques applicable in microteaching are based on the fact that teaching can be analysed and estimated using simple teaching tasks or skills. These teaching skills are a set of behaviour or act that directly or indirectly facilitate learning⁶. The activity of teaching as a whole being broken down for learning purposes to its individual component skills is called as component skills approach⁷.

The following are the few important teaching skills⁸.

Lesson Planning: Microteaching is a cycle which is started with lesson planning (Figure 1). A microteaching session should begin with the statement of clear-cut objectives of the session by the trainee teacher followed by the presentation of the matter in an appropriate sequence. The content should be concise, appropriate, relevant and within the specified time duration.

Set Induction: It is the process in which pupil attention is gained at the beginning of the class.

Presentation and explanation: The teacher should have the skills needed to explain concepts with clarity so that they are easily understandable by the students. This can be done by giving appropriate illustrations & examples. Planned repetition where necessary must be done.

Stimulus Variation: The attention span of students is around 20 minutes. Therefore, every 20 minutes, there should be stimulus variation. Stimulus variation implies avoidance of boredom amongst students by change of style. This helps to secure and sustain the learner's

attention e.g. by gestures, change in speech pattern, style of interaction and confusion technique.

Media: Proper use of Audio-visual Aids.

Reinforcement: Stress is laid upon recognising difficulties of pupils, listening and encouraging their participation and response.

Questioning: Asking, passing and adapting questions should be done fluently

Teacher's liveliness: Silence & Non-verbal cues

Classroom management: This implies proper instructions being provided to the learners. Care is also taken to restrict inappropriate behaviour or misconduct.

Closure Method: Concluding a teaching session so as to bring the relevance of what has been learnt, its connection with past learning and its application to future learning.

3. Microteaching Cycle

A proforma for microteaching presentations can be given to the faculty members for rating the core competencies of a microteaching presentation. This can be rated on the basis of Likert scale. Core competencies like stating of the specific learning objectives, effective introduction, establishing rapport, emphasis on key points, subject knowledge, summarising the main points and effective sequential presentation can be evaluated. Verbal skills like audibility and voice modulation are taken into account. Non-verbal cues such as posture, gestures, facial

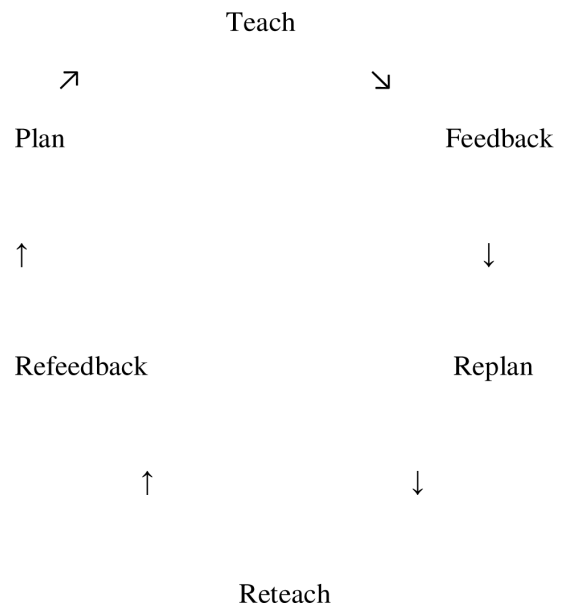


Figure 1. Microteaching Cycle.

expressions, eye contact, use of audio-visual aids and attitude along with overall performance is evaluated.

3.1 Advantages of Microteaching

Microteaching is a highly individualized training device and ensures a safe and controlled practice of teaching. The immediate feedback helps in improving, fixing and motivating learning. It builds up confidence of the novice teachers. Anshu et al have evaluated the results and impact of microteaching as a useful study for honing the teaching skills of the health professionals. All the participants in their study valued the interactive friendly nature of the sessions and also appreciated the non-condescending nature of the feedback imparted. The positive critique technique was encouraging to the first-timers. They also found the constructive feedback more acceptable and less offensive than criticism⁹. Microteaching is a proven method to attain gross improvement in the instructional experiences¹⁰.

3.2 Limitations of Microteaching

Time constraint is the major limitation for microteaching sessions. This hurdle results in neither all the skills being practiced nor re-planning and re-teaching activity can be done⁶. It may meet with resistance from teachers. There may also be fear of ridicule of teaching skills. Apart from this, it may be difficult to integrate several skills in a class.

To summarise, in a microteaching session, not only do the teachers learn from their own experience, they also imbibe helpful ideas from observing fellow teachers.

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