

MICROTEACHING SKILLS FOR HEALTH PROFESSIONALS

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ABSTRACT

Microteaching, a teacher training technique, provides teachers an opportunity to develop their teaching skills by self-practice and self-criticism. It is not at all a teaching method rather than it is a device for skill practice. All health professionals should have proper teaching skills for transfer of their knowledge which can be acquired by microteaching sessions. This article focusses on the need for microteaching, the process and its advantages.

INTRODUCTION: The art of teaching not only means a simple transfer of knowledge from one to other, instead, it is a complex process which facilitates and influences the process of learning. Medical professionals always feel that their education does not prepare them for teaching. Quality of a teacher is evaluated on how much the students can understand from his/her teaching. The classrooms cannot be used as a learning platform for acquiring primary teaching skills. Training of medical teachers in specific teaching skills is a major challenge in medical education programs. However, society's increasingly high expectations on health professionals demand that they be taught and trained effectively. The traditional medical teaching emphasizes on the transmission of factual knowledge and hence, the teachers are the main source of information. But, the conventional methods of medical teacher training are not adequate. So, the teaching objectives have now shifted to the student centered, measurable, achievable, relevant, and timely concept.

KEYWORDS: Micro Teaching; Medical Education

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Microteaching, a method for improvement of skills preferably by self-practice and self-criticism, is a technique that is used in teacher education where a teacher candidate teaches a small portion of a lesson to a small group of his classmates and teaching competencies are carried out under strict supervision.¹ It is a training technique where the student teacher involves in a scaled down teaching for the improvement of specific teaching skills. It is scaled down in many aspects:

- i) to teach a single concept of content,
- ii) using specified teaching skills (Imparted at micro level i.e. one skill at one time),
- iii) for a short time (5- 10 minutes), and
- iv) to a very small members (4-5).

Micro teaching is a method used in teacher education and in other teaching-learning environments which affects teacher's behaviours in learning environment. It was first developed by D.W Allen and his group in Stanford University in 1960s.

Remember that it is not at all a teaching method rather than it is a device for skill practice. This technique is now extensively used in India, England and USA (Stanford University). Some other countries now there exist "micro teaching clinics" in the private sector where sportsmen, surgeons and teachers visit, pay the fees and practice the skills they feel themselves deficient. These clinics are gaining more and more popularity even more than the medical clinics.

How is microteaching done?

Microteaching can be practiced with a very small lesson or a single concept and a less number of students. It cut downs the complexities of real teaching, as immediate feedback can be sought after each practice session.^{2,3,4}

Knowledge acquisition, skill acquisition, and transfer are the three different phases of microteaching

The Micro-teaching programme involves the following steps (Fig.1)⁵:

Step I: Particular skill to be practiced is explained to the teacher trainees in terms of the purpose and components of the skill with suitable examples.

Step II: The teacher trainer may give the demonstration of the skill in microteaching in simulated conditions to the teacher trainees.

Step III: The teacher trainee plans a short lesson plan on the basis of the demonstrated skill for his/her practice.

Planning of presentation/skill/teaching/unit

- Planning should be of only 7 to 10 minutes presentation.
- It may revolve around a single concepts to be taught
- It should achieve the objectives stated or latent.
- Planning should be well thought sequentially in written form.
- It should concentrate upon methodology rather than contents.

Step IV: The teacher trainee teaches the lesson to a small group of pupils. His lesson is supervised by the supervisor/peers and being video-taped.⁶

Presentation while being video tapped

The teacher trainee should emphasize the following skills:

- Do not be camera conscious
- Introduce the topic
- Focus on communication and liveliness in class
- Encourage Class participation
- Build up rapport and motivation (learning, readiness)
- One should have clarity of concepts.
- Interact with students
- Focus on pronunciation
- Encourage the students
- Answer the students questions
- Pitch and speed of your voice
- Use of appropriate teaching aids
- Summing up the presentation
- Evaluation of your students about the teaching you have given

Step V: On the basis of the observation of a lesson, the supervisor gives feedback to the teacher trainee.

Viewing the video tapped presentation and discussing:

- All the participants along with presenter will view the presentation and note down the plus and minus points. First the presenter and then the participants will comment on plus/negative points. First plus points and then the negative points will be discussed where improvements are needed.
- Negative points will in no way be considered as criticism but a step towards improvement.
- Any shortcomings or negative point already pointed out by presenter himself/herself will not be re narrated by anybody else.

Step VI: In the light of the feed-back given by the supervisor, the teacher trainee replans the lesson plan in order to use the skill in more effective manner in the second trial.

Step VII: The revised lesson is taught to another comparable group of pupils.

Step VIII: The supervisor observes the re-teach lesson and gives re-feed back to the teacher trainee with convincing arguments and reasons.

Step IX: The 'teach re-teach' cycle may be repeated several times till adequate mastery level is achieved

A research on microteaching has shown improvement of skills up to 87% in three cycles and up to 61% in two cycles.

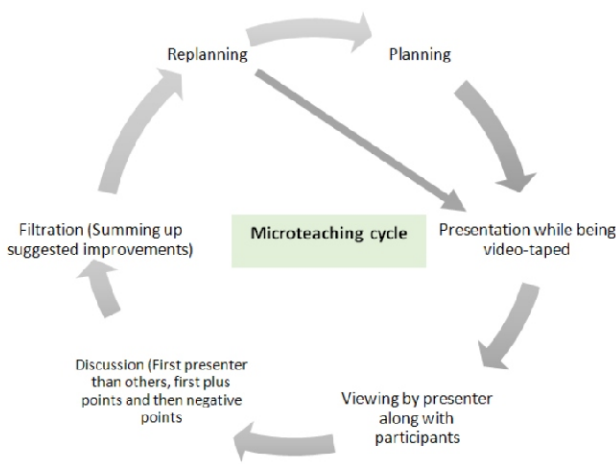


Figure 1. Microteaching cycle

Time duration for the microteaching is (approximately);

- Teaching: 6 minutes
- Feedback: 6 minutes
- Re-Plan: 12 minutes
- Re-Teach: 6 minutes
- Re-Feedback: 6 minutes

Microteaching observation sheet:

Microteaching sessions can be monitored easily by using the microteaching observation sheet by observers/peers where feedback both positive and negative can be provided.

Table 1: Microlesson Observation Sheet (adapted from St. John Medical College Hospital)

Microlesson: Peers/Peer Student Observation Sheet				
Directions: Please Check (v) the statement which most closely corresponds to your observation				
Name of teacher.....		Skills practiced.....		
Skills	Teacher's action	Yes	To some extent	No
1. Self-induction	1.1 Aroused interest in the beginning by relation to previous learning, throwing a new idea, questioning, etc.			
	1.2 Specified the objectives of presentation			
2. Planning	2.1 Organized material in a logical sequence			
	2.2 Used relevant content material			
3. Presentation	3.1 Changed the pace of presentation by shifting emphasis, jokes, etc.			
	3.2 Used specific example to illustrate main ideas			
	3.3 Used nonverbal cues, eye contact, etc.			
4. Pupil Participation	4.1 Allowed questions from audience			
	4.2 Asked questions			
	4.3 Solicited/raised questions			
	4.4 Rewarded pupil effort			
5. Use of AV aids	5.1 Used proper AV aids			
	5.2 Used aids effectively			
6. Closure	6.1 Summarized most important points at the end of the session			
7. Lesson on the whole was effective				

How is microteaching different from traditional classroom teaching?

Microteaching is not a teaching technique; it is a training technique to acquire teaching skills. Medical professionals have little training in teaching techniques- we learn by trial & error in the classroom. Microteaching makes us better prepared for the classroom. The salient features are given in table 2.

Table 2: Microteaching versus classroom teaching

Microteaching	Classroom teaching
Teaching is relatively simple	Teaching is complex activity
Carried out in controlled situation	Carried out in uncontrolled situation
Small class of 5-7 students	35 to 40 students
Takes up one/few skills at a time	Practices several skills at a time
Teaching time is 5-10 minutes	Teaching time is 40-60 minutes
Provides immediate feedback	No immediate feedback
Provision for re-teaching	No provision for re-teaching
Easy to organize – inexpensive	Large number involved- more difficult

Skills developed in micro teaching

More than 20 teaching skills can be developed by micro teaching sessions.⁷

- a) **Lesson planning:** It involves the preparation of a micro-lesson, should be concise, appropriate, relevant, and could cover the specified duration.
- b) **Presentation and explanation:** It involves the skills required to explain with clarity and proper understanding of the concepts.

- c) **Illustrating with examples:** The teacher should be able to explain the concepts by simple, relevant, and interesting examples to increase learners' understanding.
- d) **Reinforcement:** It includes the participation of the students in the development of teaching process.
- e) **Stimulus variation:** The effective components of the skill are gestures, change in speech pattern, and change in interaction style to draw the attention of the learner.
- f) **Probing questions:** It is important to allow and encourage the fellow trainees to ask structured questions and clarify doubts. Redirection, refocusing, and increasing critical awareness are significant components of this skill.
- g) **Classroom management:** Providing proper instructions, restricting inappropriate behaviour, and calling the learners by name are essentials of this skill.
- h) **Using audio-visual aids:** Proper use of audio-visual aids is necessary. Adequate spacing, distinct size, proper spacing between words and lines, and use of relevant words or phrases are the key components for this skill.

ADVANTAGES OF MICRO TEACHING

During microteaching sessions, teacher candidates develop skills in drawing learners' attention, asking questions, using and managing time effectively and bringing the lesson to a conclusion. The teachers' class management skills improve. They acquire the skills to choose appropriate learner activities, use teaching goals, and even overcome difficulties encountered during the process. On the other hand, by observing the presentation, teacher candidates improve their skills in giving feedback evaluation and learn different teaching strategies.⁸

Microteaching helps develop skills to prepare lesson plans, choose teaching goals, speak in front of a group, ask questions and use evaluation techniques. Teachers' self-confidence grows in a comfortable environment.^{9,10}

It helps in providing an opportunity to learn multiple skills that are important for teaching in a short time. It is a useful experience to learn how to realize teaching goals through planning a model lesson. It shows how preparation, organization, and presentation are important in learners' learning. Receiving immediate feedback is a means to determine productivity and using teaching strategies. By

asking appropriate questions a strong learning environment can be established. Also, it allows for asking questions at various difficulty levels. Also, it makes it possible to create an environment that involves thinking differently and interaction.¹¹

Many countries have included microteaching for medical students in medical schools for proper and efficient teaching-learning. In our neighbouring country, the medical council of India has also recommended training for medical teachers for their continued and efficient performance in that capacity at any age.^{12,13}

Microteaching has some limitations, like, no emphasis on contents, requires skill dependency, and administrative/logistic problems when the class size is large

CONCLUSION

Microteaching is an "efficient learning technique for effective teaching". The quality and competency of medical teachers can be improved by effective medical education training programs. The Government of Nepal, Nepal Medical Council (NMC) and Ministry of Education (MoE) with the support of various medical institutions should introduce micro teaching for students, so that knowledge can be communicated properly and efficiently to students.

REFERENCES

1. Ananthkrishnan N. *Microteaching as a vehicle of teacher training Its advantages and disadvantages. J Postgrad Med. 1993; 39:1423.*
2. Bell A, Mladenovic R. *The benefits of peer observation of teaching for tutor development. High Educ. 2008; 55:73552.*
3. Paintal I. *New Delhi: Oxford University Press; 1980. Micro-teaching-A Hand Book for Teachers.*
4. I'Anson J, Rodrigues S, Wilson G. *Mirrors, reflections and refractions: The contribution of microteaching to reflective practice. Eur J Teach Educ. 2003; 26:18999.*
5. Kilib, Abdurrahman. *"Learner-centered micro teaching in teacher education." International Journal of Instruction 3.1 (2010).*
6. Brown, G. *Microteaching a Program of Teaching Skills. Methaun: London (1975).*

7. *Applebee AN. Microteaching, Component skills and the training of teachers, an evaluation of a research and development project. Br J Educ Technol. 1976; 7:3543.*
8. *Higgins, Agnes, and Honor Nicholl. "The experiences of lecturers and students in the use of microteaching as a teaching strategy." Nurse Education in Practice 3.4 (2003): 220-227.*
9. *Elsenrath, Dennis E, Coker David L, Martinson William D. Microteaching interviewing skills. J CounsPsychol. 1972; 19:1505.*
10. *Deniz S. Implications of training student teachers of pre-schooling through micro-teaching activities for a classroom with mentally-disabled students. Educ Res Rev. 2011; 6:5609.*
11. *Gee, Jerry Brooksher. "Innovation in Instructional Strategies Used with Graduate Students Enrolled in an Advanced Heterogeneous Methods Class." (1992).*
12. *Anshu D, Singh R, Narang P. Introducing microteaching sessions in an Indian medical school. Med Educ. 2009; 43:10878.*
13. *Passi BK. Ahmadabad: Micro Teaching Approach SahityaMudranalya; 1976. Becoming Better Teacher.*

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