

Improving Teaching Through Microteaching

Dear Editor,

Health professionals acknowledge that their education does not prepare them for teaching. However, society's increasingly high expectations on health professionals demand that they be taught and trained effectively.¹

Health professionals who want to improve their teaching competency can take up microteaching at the National Teacher Training Center for the Health Professions (NTTCHP) at the University of the Philippines. This paper describes the experience of 3 batches of students with regard to how the course affected their delivery skills.

This is an action research programme that documented how the teaching competency of students improved after experiencing microteaching. Study samples included classes in the first semester of 2005-2006 (Batch 1 = 9), the second semester of 2002-2003 (Batch 2 = 11) and the second semester of 2000-2001 (Batch 3 = 12). Written and oral (anecdotal) reports and evaluations of students' performance were used. All data were originally collected as part of the course requirements but were later collated and reviewed for the Third Asia-Pacific Medical Education Conference. All data were analysed qualitatively for patterns, trends and descriptions.

Microteaching refers to a "scaled-down teaching encounter designed to develop new skills and refine old ones".² It involves a simulated teaching session where students practice-teach in a laboratory that involves a faculty supervisor, the demonstrating teacher, peers, a video supervisor, video recorder and player, and a television monitor.

This is consistent with the teach-reteach cycle described by Trott.³ It consists of (1) the briefing phase, (2) the preparation phase,⁴ (3) the teaching stage, (4) the review by the class and the supervisor and, (5) either preparation for the next session or a reteach of the same skill.

The gains in microteaching depend on how the teacher demonstrators reflect and improve on their skills after formal evaluation and personal introspection.

Results and Discussion

In the degree programme of the Master in Health Professions Education, offered by the NTTCHP, HP 241: Practicum or Microteaching is a compulsory, 2-unit laboratory course of 4 hours per week for 16 weeks.

The 3 batches of 32 students included in this paper were faculty members, whose teaching experience ranged from 1 semester to 25 years. By profession, 56% of the students

were physicians, 25% were dentists, 12.5% were physical therapists while nurses and radiological technologists made up 3.12% each.

Briefing stage

Initially, each class underwent an orientation and desensitisation stage. These involved exercises in overcoming their fear of standing in front of a camera, encouraging them to depend on and build each other's confidence and developing themselves as a functional learning group.

Preparation stage

The students formulated their own instructional designs and the teaching-learning scenarios they would present in class using an identified basic skill which they would demonstrate. The delivery skills that were identified include: (1) arousing and sustaining motivation, (2) explaining clearly, (3) questioning effectively, and (4) managing difficult students.

The class constructed an evaluation instrument that listed competency in each skill according to the minimum pass level and the relevant principles in teaching and learning.

Teach/Reteach stage

At this stage, the students delivered their lessons in a scaled-down teaching session which took between 5 and 25 minutes.

The first teaching sessions were the most stressful to students because of the fear of criticism. They felt that having their classmates as their simulated students was superficial to the setting as these "students" would later assume the role of peer reviewers.

Of the 32 students in this study, 2 demonstrated motivational skills only once. They did not have to reteach again and proceeded to the next skill. On the other hand, all had 2 demonstration sessions to explain, question, facilitate, and establish closure. Those who underwent the second session markedly improved their presentations. None of the students demonstrated the same skill thrice.

Viewing and Analysis of sessions

Viewing and evaluation began with self-appraisal on the good and bad points observed, improvements to be made, and whether the presentation met the minimum standard. The other students and faculty supervisors then offered their own observations. Mean ratings from the 3 raters were obtained and summarised as follows:

| Batches | Introduction† | | Explaining‡ | |
|-------------|---------------|--------|-------------|--------|
| | Take 1 | Take 2 | Take 1 | Take 2 |
| Batch 1* | 30.46 | 36.63 | 3.68 | 4.10 |
| Batches 2-3 | 3.09 | 3.66 | 3.25 | 3.61 |

* Instrument used for the Introduction consisted of 9 basic competencies given 5 points each for a total of 45 points.

† Rating scale: 1 - Poor, 2 - Fair, 3 - Good, 4 - Very satisfactory, and 5 - Excellent

‡ Rating scale: 1 - Poor, 2 - Fair, 3 - Good, 4 - Very satisfactory, and 5 - Excellent

The classes appreciated the value of scaled-down teaching encounters. They analysed the physical, psychological, and emotional aspects of the teaching act.

For motivation, students considered the use of interesting and innovative cases, problems or pictures, maintaining a warm and challenging environment, dressing up for the part and variation in intonation and gestures.

All classes recognised the fact that explaining was basic to teaching. Presentations were critiqued based on organisation and discussion of concepts, citation of appropriate examples and the ability to ask questions. The use of signposts, foci and links were monitored to establish integration.

The students also improved their explanation techniques by (1) transforming difficult topics into learnable units, (2) using advanced organisers, (3) integrating the lecture with applications on topics that span the cognitive and psychomotor learning domains, and (4) using of questions and pauses. Voice modulation, enthusiasm, use of modern instructional media and maintenance of rapport were considered during the review. Students appreciated how they changed their behaviour on and off the camera.

Debriefing stage

This final stage in the teach-reteach cycle took place after each student completed a skill. The students summarised the skills completed. The final debriefing session was almost always held on the last day of class on the 16th week and a final commendation was made of each student. A comment made by one of the earlier students was often quoted in this debriefing session: “*Microteaching made them better teachers because the experience afforded them time to look at themselves in a non-threatening setting*”.

Conclusions

Microteaching, a laborious and intensive practice teaching experience at the NTTCHP improved the teaching competence of the course participants.

REFERENCES

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Erlyn Aclan Sana,¹*BSE, MAT, PhD*

¹ National Teacher Training Center for the Health Professions
University of the Philippines Manila, Manila, Philippines

Address for Correspondence: Dr Erlyn Aclan Sana, 3/F Joaquin Gonzales Memorial Building, University of the Philippines Manila, Padre Faura Street Corner Ma. Orosa Street, Ermita, Manila, Philippines 1000.
Email: erlynsana@yahoo.com.ph