Microteaching offers prospective teachers the opportunity to learn teaching skills, to study their own teaching, and to study the teaching of others. Microteaching has been described as a "scaled-down" teaching situation, involving 3 to 10 teacher education students in a 5- to 20-minute lesson, which is often videotaped for future reference. Four main skill areas should be incorporated in a microteaching program: (1) questioning skills, including fluency in asking probing, higher order, and divergent questions; (2) skills aimed at increasing individual student participation; (3) creating student involvement through set induction, stimulus variation, and closure, all of which help to provide a meaningful organization to the lesson; and (4) lesson presentation skills and methodologies. The trainee-supervisor relationship is very important to the microteaching experience. Studies have shown the impact and importance of supervisors' expectations and feedback. Research has also noted the popularity of microteaching in teacher education programs, due to proven effectiveness in imparting teaching skills. (FG)
DEVELOPING TEACHING SKILLS WITH MICROTEACHING

Dr. Harry C. Mayhew

Morehead State University

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ABOUT THE AUTHOR

Dr. Harry Mayhew is currently serving as Director of Microteaching and Associate Professor of Education at Morehead State University, Morehead, Kentucky. He received his Ed. D. degree from Ball State University, Muncie, Indiana in educational administration and curriculum and instruction in 1970. Dr. Mayhew is a member of numerous national organizations, including the Association of Supervision and Curriculum Development, Phi Delta Kappa and Phi Kappa Phi.

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DEVELOPING TEACHING SKILLS WITH MICROTEACHING

The initial effort of Microteaching at Stanford University by Allen and Ryan in 1963 was begun primarily to foster a serious study of teaching.\footnote{1} In the process, they identified technical skills of teaching which should be incorporated in a Microteaching program.

The skills, which can be applied at many levels and for many different subjects, are: Stimulus variation, Set induction, Closure, Silence and nonverbal cues, Reinforcement of student participation, Fluency in asking questions, Probing questions, Higher order questions, Divergent questions, Recognizing attending behavior, Illustrating and use of examples, Lecturing, Planned repetition, and Completeness of communication.\footnote{2} The skills encompass four main areas: Questioning skills, increasing student participation, creating student involvement, and presentation skills.

**Questioning Skills**

The questioning skills include fluency in asking questions, probing questions, higher order questions, and divergent questions. Fluency in asking questions is a skill
practiced to develop an alternate teaching pattern and is particularly helpful to the pre-service teacher who tends to rely too heavily on the lecture method.

Prospective teachers who achieve some fluency in asking questions are ready for the tasks of higher order questions and divergent questions. Higher order questions cannot be answered simply by rote memory. These questions require finding a rule, or principle. With divergent questions there are no singular answers, but require students to think creatively.

With probing, a number of techniques are utilized. Teachers may ask pupils for more information; require a justification for an answer; refocus the answer to another aspect of the question; prompt the pupils; or ask other students to enter the discussion.

Student Participation Skills

Student participation skills are very important to the teaching-learning process. Microteaching skills which tend to increase student participation include: reinforcement, recognizing attending behavior, silence and nonverbal cues, and cueing.

Reinforcement is a skill in which the teacher rewards the pupils for correct answers or desirable behavior. When Microteaching students practice recognizing attending behavior, they are monitoring the interest level of the class by observing facial expressions and numerous other indicators
to determine the desirable direction of the lesson. Depending upon the attending behavior exhibited by the pupils, the trainees may elect to continue or alter the presentation.

Nonverbal communication and silence may be used effectively to direct discussions without talking. Cueing is a skill which enables the teacher to have greater control over the success a student has in answering a question or participating in a discussion.

Creating Student Involvement

There are a number of skills which are helpful in creating student involvement. Among these are set induction, stimulus variation, and closure. Set induction is a skill which is concerned primarily with "setting the stage" for a lesson. This includes an interesting or novel introduction to the lesson. Establishing communication is also an important consideration in set induction.

Stimulus variation is primarily concerned with variations in the teacher's behavior in order to maintain the highest level of student attention possible. Closure is a skill concerned with the effective ending of a lesson. Quite often it consists of summarizations of the major points of a lesson. Its purpose is to help students perceive the major organization and main ideas presented.
Presentation Skills

Skills which are essential to presenting a lesson include lecturing, use of examples, planned repetition, and completeness of communication. An important aspect of teaching lecture skills is determining when lecturing is desirable and what techniques should be used. The appropriate use of audio-visuals is important. An effectively delivered presentation is enhanced by a well-planned lesson.

The use of examples is a basic teaching skill. Not only should teachers use examples to clarify their teaching, but students should be asked to give examples of the concepts being taught. The latter use of examples enables teachers to determine if the objectives of the lesson are being achieved.

Planned repetition is a skill which is often used to clarify and reinforce the main ideas of a lesson. This skill may consist of simple repetition or key ideas may be repeatedly spaced throughout the lesson. Communications skills are central to any presentation. Clarity should be the guiding principles for effective communications.

Once we have decided on the importance of teaching skills, such as the ones discussed above, how can Micro-teaching help students acquire the skills in their own teaching?
Definition of Microteaching

To answer the question, it is helpful to consider a good definition of Microteaching. Sadker and Cooper (1972) notes that Microteaching is a teaching situation scaled down in terms of both time and number of students which has usually meant a five to twenty minute lesson involving three to ten students.  "The reason for this reduction is to eliminate some of the complexities of the teaching act, thereby allowing the teacher to focus on a selected teaching skill."

While the use of a videotape recorder is not essential for a Microteaching situation, it generally is an important element which is incorporated into most Microteaching programs.

The Method of Microteaching

Prior to a Microteaching experience, a trainee must study the skill, or skills, which will be utilized in teaching the lesson. This usually consists of reading material explaining the skill. It will also likely consist of the student viewing a videotape of the skills to be demonstrated.

The Microteaching experience then consists of the trainee teaching a lesson utilizing these skills for five to twenty minutes to a small number of students. After teaching the lesson, the prospective teacher views the playback of the videotaped lesson on television. In addition, feedback is given the student by a supervising
teacher. Often, fellow students are asked to provide constructive feedback. The final step in the Microteaching experience is for the trainee to reteach the lesson after a lapse of time incorporating the feedback received.

**Supervising Microteaching Experiences**

The trainee-supervisor relationship is very important to the Microteaching experience. Students' role expectations for supervisors of Microteaching have been recorded at the Illinois Teaching Techniques Laboratory. An instrument was administered to intact classroom groups with instructions to express their perceptions of the role of the Microteaching supervisor.

The findings identified some strong expectations for Microteaching supervisors which include the following: Teach me various teaching techniques; Give me specific instructions on how to use various teaching techniques; Show me how to plan a lesson; Give me specific ideas on how to teach; Provide a manual that gives examples of various techniques and procedures for teaching; and Prepare my first lesson with me and tell me how to teach it.

Other strong expectations were: Help me achieve a sense of security in teaching by telling me what techniques to use; Tell me what is wrong with my teaching; Have video tapes of good teaching available so that I may learn proper techniques; Offer instruction in preparing evaluation materials; and Demonstrate evaluation techniques.
This listing indicates that trainees expect the supervisor to "teach me". However, the students also indicated strong desires to have "elbow room to learn at my own pace" and to have the opportunity to "develop my own style of teaching."  

Advantages of Microteaching

There are numerous advantages of Microteaching in preparing teachers. One advantage is that there are many fewer variables to deal with in Microteaching than there are in a regular classroom. Another advantage is that the trainee has immediate feedback after teaching a lesson and has the opportunity to discuss and critique the lesson.

Hamed (1979) has listed a number of advantages of Microteaching. He notes that Microteaching permits students the opportunity to analyze and assimilate different teaching approaches and styles and that it gives students needed classroom teaching experience.

Evaluation of Microteaching Experiences

Following the playback of a Microteaching experience, the trainee conducts a self-evaluation with a checklist provided by the supervisor. Most checklists follow certain basic criteria, including objectives, methods, techniques, learning experiences, and the overall plan of each presentation.

Supervisors also utilize a checklist and conduct conferences with trainees after watching the playback of
the lesson. Quite often peers are invited to critique the lesson, also.

Effectiveness of Microteaching

Microteaching began 20 years ago as an educational innovation. Today, most teacher preparation programs utilize Microteaching. As early as 1968, a national survey by James A. Johnson at the University of Illinois indicated that Microteaching was utilized in 53 per cent of all Teacher Education Programs in the U.S. 9

Hargie (1977) has concentrated on research evidence related specifically to the effectiveness or otherwise of Microteaching. He uses four main criteria of effectiveness: Actual teaching performance; Pupil attitudes to their teacher; Trainee teachers attitudes to their course of training, and Increases in pupil learning. His overall assessment is that "Microteaching is indeed an effective technique and also still an evolving one."10

Conclusion

After examining the recent studies which have assessed the success of Microteaching, Hargie stated his belief that a program of Microteaching should be an important element in teacher education programs.11 The increasing use of Microteaching has been noted.

What accounts for the popularity of Microteaching in Teacher Education Programs? One answer is that Microteaching
has been helpful in teaching prospective teachers how to teach. For example, Blankenburg and Thompson (1971) conducted a survey at Marquette University with their Microteaching students. The results indicated that all the students believed Microteaching was helpful in learning teaching skills.¹²

Numerous advantages have been noted for Microteaching in the training of prospective teachers. There is considerable evidence regarding the effectiveness of Microteaching. The medium is one what lends itself well to experimentation and will likely continue to evolve in the future as a result of this experimentation. For prospective teachers, Microteaching offers the opportunity to learn teaching skills, to study their own teaching, and to study the teaching of others.
FOOTNOTES


2 Ibid., p. 15.

3 Myra Sadker and James M. Cooper, "What Do We Know About Microteaching?" Educational Leadership, March, 1972, p. 547.

4 Ibid.


6 Ibid., p. 399.

7 Ibid.


11 Ibid., p. 94.

REFERENCES


Sadker, Myra and James M. Cooper. "What Do We Know About Microteaching?" Educational Leadership, March, 1972.