This paper is an abstract of a longer paper which was read at the American Educational Research Association (AERA) Annual Meeting in 1974. It begins with a brief background discussion on microteaching and goes on to list the teaching skills which microteaching develops. A brief summary of the research on microteaching is then given. The abstract concludes with a history of the Hampton Institute, including an evaluation of its use of microteaching techniques. The evaluation shows that a) video taping gives students the chance to expand subject matter knowledge; b) microteaching allows students to get advice from their peers and college teachers; c) viewing the taped lessons allows students to correct weaknesses prior to their public school experiences; d) the video tape file serves as an enormous resource; e) as a result of breaking the complete teaching process into smaller elements, students are better able to understand the process; f) students view themselves with more critical self appraisal; and g) students can ascertain whether they have created conditions that allow them to accomplish the objectives of their lesson plans. (HMD)
EDUCATIONAL TECHNOLOGY IN MICRO-TEACHING PREPARATION*

Charles D. Walters, Chairman
Department of Secondary Education
Hampton Institute
Hampton, Virginia

1974

The major concern of teachers is the entire learning cycle and it seems that teacher educators must begin to devote more time to the development of the student teachers and their message and the medium. One of the major problems in teacher preparation is to give the teacher education student the opportunity to gain experience in teaching while still an undergraduate just as soon as he has acquired sufficient knowledge to teach. The object of this exposure is to offer the student insight into the problems of instruction and the nature of the teaching profession. Many institutions offer their students an opportunity to observe prior to student teaching and others are offering micro-teaching using close circuit television.

Micro-teaching was introduced into teacher education in 1963 at Stanford University (Allen & Gross 1965) as an attempt to find new and more effective initial methods of training preintern teachers. (Allen and Cooper 1972). Microteaching has been defined as a teaching situation which is scaled down in terms of time and the number of students to a 4 to 20 minute lesson involving from 3 to 10 students. This method involves immediate feedback on the teacher's effectiveness. This feedback comes from video tape, supervisors and pupils or from all of these with a reteaching after the feedback analysis. Micro-teaching has focused on helping students develop a repertoire of teaching skills that have been identified from an analysis of actual teaching in the classroom (Hamacheck, 1969). These skills are listed as follows:

1. Fluency in asking questions
2. Asking probing questions
3. Asking high order questions
4. Divergent questions
5. Reinforcement
6. Recognizing attending behavior
7. Silent and nonverbal cues
8. Cuing
9. Set induction
10. Stimulus variation
11. Closure
12. Lecturing
13. Use of examples
14. Planned repetition
15. Completeness of communication.

Allen, Cooper and Polakoff (1972) have given the summary of micro-teaching research as follows:

1. Using a micro-teaching format, teach-critique-reteach-critique-one can achieve positive changes in teacher behavior which results in a larger repertoire of teaching behavior.
2. Performance in micro-teaching situations can accurately predict subsequent classroom performance.
3. Trainee acceptance of micro-teaching as a relevant procedure is high.
4. The feedback dimension of microteaching is probably the crucial one in terms of changing trainee's behavior.

5. The feedback can come from several sources, but the most powerful combination seems to be one that utilizes supervisory comments, video-tape recordings and pupil comments.

6. Contrary to previous research evidence, the immediacy of feedback (using videotapes and supervisors) is not crucial to the acquisition of some behaviors.

7. A perceptual model that demonstrates positive instances of the desired behavior, rather than a mixture of both positive and negative, is more powerful in enhancing the trainees ability to acquire the skills in a transfer task.

8. For certain skills, a perceptual model is preferred over a written description of the skill, while for other skills the evidence is inconclusive.

Hampton Institute was begun 106 years ago during reconstruction to help students to go out and teach their people by example. One of the major objectives of the institution has always been to train teachers for the public and private schools of the nation. The first conditions for admission were simple: "sound health, good character, age not less than 14 or over 25, ability to read and write intelligibly, knowledge of arithmetic through long division, intention to remain throughout the whole course of three years and to become a teacher." The institution has changed in many ways and offers undergraduate and graduate degrees of high quality and continues to experiment with innovative and experimental programs but the same basic objective of educating teachers has remained the same.

The Department of Secondary Education at Hampton Institute has used microteaching in the teacher education program for the past seven years. (Watson and Walters, 1972). The program of microteaching has several variations in that the students are on a "Block Plan" where they spend the first six weeks of a semester in general and specific methods classes and eight weeks in student teaching in the public schools with one week at the end of the semester for an evaluation of the program. The "Block" is divided into three phases; the pre-practium, the practicum and the post-practium.

The microteaching is done during the pre-practium. The students are introduced into microteaching by previewing selected tapes made by the preceding classes. The first lessons are taught and recorded within the 5 to 7 minute range than they are critiqued by the students, classes and the instructors. Once the taping-viewing critique is completed the second plans are made and the lessons of a 10 to 15 minute range are taped and critiqued. The students are requested to evaluate the program during the post practicum sessions. A summary of the evaluations of the program at Hampton Institute (Still, Watson, Walters, 1971) is presented as follows:

1. The video-taping gives an opportunity to expand subject matter knowledge.
2. Teaching the lesson allows students to get advice from their peers and college teachers.

3. Viewing the taped lessons allows students to correct weaknesses prior to their public school experiences before actual secondary school students.

4. Tapes on file offer not only subject matter reference but show how other students taught a given concept.

5. Students are able to simplify the complete teaching act into smaller elements and as a result are better able to understand the process.

6. Students view themselves with a more critical self-appraisal.

7. Students ascertain whether they have created conditions that allow them to accomplish the objectives of their lesson plans. The research indicates that the procedure offers the students insight into their behavior when under great pressure. The audio portion of the tape gives the student the opportunity to listen to his voice and to see if there are any speech problems. Students with special problems are allowed to retape lessons. Students are required to learn how to operate all the television equipment and our students retape all lessons.

The use of microteaching in teacher education programs continues to develop. Ward, 1969, reported that 125 institutions are using this procedure with many other using combinations of the teach-critique-rewatch. Allen (1965) reported that 79% of his Stanford Experimental Group (1964-65) stated that microteaching was the most important course in their teacher education program. We at Hampton Institute have found that 94% of our students feel that microteaching is a very important part in their program. We feel that from a review of the literature and our research at Hampton that microteaching offers some solution to problems of pre-service education for teachers.
BIBLIOGRAPHY


Hamacheck, Donald, Characteristics of Good Teachers and Implications for Teacher Education, (Phi Delta Kappan, February, 1969).


FOOTNOTES

1Hamacheck, Donal, Characteristics of Good Teachers and Implications for Teacher Education, Phi Delta Kappan, February 1969, p. 343.