MICROTEACHING AT BRIGHAM YOUNG UNIVERSITY CONSISTS OF THE PRESENTATION OF A LESSON BY A STUDENT TEACHER TO A MICROCLASS OF THREE TO FIVE HIGH SCHOOL STUDENTS. WHEN THESE STUDENTS ARE NOT AVAILABLE, THE MICROCLASS IS COMPOSED OF HIS PEERS FROM THE COLLEGE CLASS. THE TRAINEE'S INSTRUCTOR, OTHER MEMBERS OF HIS COLLEGE CLASS, AND THE MICROCLASS MEMBERS EVALUATE HIS TEACHING PERFORMANCE, WHICH IS VIDEOTAPED AND REPLAYED IMMEDIATELY SO HE CAN SEE HIMSELF IN ACTION. THE INSTRUCTOR, WITH THE TRAINEE, DECIDES UPON ONE OR TWO AREAS OF MAJOR DIFFICULTY ON WHICH THE TRAINEE WILL CONCENTRATE IN HIS NEXT PRESENTATION, WHICH MAY BE MADE IMMEDIATELY OR UP TO A WEEK LATER, AND IS ALWAYS DONE WITH A DIFFERENT CLASS. THIS "RETEACH" IS ALSO VIDEOTAPED AND EVALUATED. THE SESSIONS, INVOLVING 490 STUDENT TEACHERS, HAVE ALSO BEEN USED IN INSERVICE TRAINING. TENTATIVE CONCLUSIONS ARE: (1) PROVISION FOR IMMEDIATE FEEDBACK AND SELF-OBSERVATION ARE UNIQUE, (2) MICROTEACHING INTRODUCES THE TRAINEE TO DIFFERENT TYPES OF CLASSROOM SITUATIONS, (3) VIDEOTAPES ENABLE THE TRAINEE TO SEE HIMSELF INTERACTING WITH STUDENTS, (4) COMMENTS AND SUGGESTIONS OF FELLOW STUDENTS ARE VALUABLE, AND (5) PERFORMANCE IS USUALLY IMPROVED FOLLOWING EVALUATION AND PLAYBACK. NINETY-SIX PERCENT OF THE TRAINEES FELT THEY BENEFITED FROM MICROTEACHING. RESEARCH ON MICROTEACHING AS A POSSIBLE SUBSTITUTE FOR PART OF STUDENT TEACHING IS SUGGESTED. THIS PAPER WAS PRESENTED AT THE AMERICAN EDUCATIONAL RESEARCH ASSOCIATION ANNUAL MEETING (NEW YORK, FEBRUARY 1967). (AF)
MICRO TEACHING: OBSERVED AND CRITIQUED
BY A GROUP OF TRAINEES

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Need and Purpose of the Program

Brigham Young University is one of the largest teacher training institutions in the country, but is located in a relatively low population area. There is a constant problem to locate enough student teaching stations for 500 student teachers each semester. In an effort to alleviate this problem, members of the teacher education department have investigated several innovations, adapting some of them to their particular program. One of these is micro-teaching, a recent development in teacher education in which a miniature teaching situation is created under controlled conditions. The uniqueness of micro-teaching consists of two elements: (1) the ease with which the teaching situation can be controlled and manipulated, and (2) the availability of immediate feedback for the student teacher.

In many institutions, micro-teaching is used in a one-to-one relationship—involving only the student teacher, his college supervisor, and the micro-class. However, due to the large number of prospective teachers to be trained at Brigham Young University, micro-teaching has been expanded to include the trainee's classmates. This group assists the college instructor in the evaluation of the micro-teaching done by each member of the class. It is felt that having the class observe and critique fellow trainees has several advantages. Among them are:

1. Observing others teach and discussing their performance broadens the experience of the observer and therefore lessens the number of actual presentations required by each trainee to alter his own teaching behavior.

2. Use of the trainees as observers expands the evaluation process and sensitizes each trainee to assess his own teaching behavior more critically.

3. Having a group observe the lesson presentation usually results in a variety of creative approaches for presenting similar lessons or concepts.

The major purpose of this micro-teaching program is twofold:

1. To more effectively train classroom teachers.

2. To supplement the regular student teaching program so as to efficiently prepare increasing numbers of teachers in spite of the lack of sufficient student teaching stations.

These purposes will be reached through the following specific objectives:

1. To provide the trainee contact with the referents—teaching, role development, and behavior analysis.

2. To provide the trainee with teaching practice in a controlled situation.

3. To provide the trainee with immediate feedback on his performance.

4. To provide the trainee with an opportunity to observe himself in action in a teaching situation and to discuss his observations with a supervisor and with the pupils he has taught.

5. To provide the trainee with an opportunity to plan for correction of specific weaknesses and to carry out these plans in practice and reteaching sessions in the miniature classroom.

Description of the Program at Brigham Young University

Micro-teaching at Brigham Young University consists of the presentation of a lesson by a student teacher to a "class" of students from the local public schools. When these students are not available, the micro-class is composed of his peers from the college class. The trainee's college instructor, the other members of his college class, and the micro-class themselves evaluate his teaching performance. The entire presentation is video taped and replayed immediately so the trainee can see himself in action. (See Appendix A.)
A typical micro-teaching session in a secondary methods class for example, would proceed as follows:

The student teacher, having been scheduled beforehand, would be prepared to present a four to eight minute lesson to a "class" composed of three to five local high school students. This brief presentation would have as its aim the teaching of a single, specific concept. It would be intended as a self-contained lesson and not simply the first few minutes of a longer segment. With the student teacher and the volunteer "class" are the other members of the trainee's teacher education class and the course instructor. Occasionally, a second instructor is present to assist in the evaluation.

As the student teacher presents his lesson, his performance is recorded on video tape. A television monitor operates during the taping, allowing the cameraman to adjust his shooting angle or focus. The instructor-evaluator observes the trainee's teaching effort critically and jots down suggestions for improvement and commendations. At the conclusion of the lesson, the "class" members and the college class complete forms evaluating the trainee's performance. (See Appendix B.)

To begin the evaluation, the instructor and the trainee discuss, in a general, usually positive way, the performance. The instructor may make suggestions about what to look for during the video tape playback. As the video tape is replayed a particular segment may be replayed or a "stop action" process may be used if desired. The trainee, the instructor, and college class observe it and comment freely. Occasionally the high school students are invited to participate in the oral evaluation. (Interestingly enough, it is often the comments of these latter students which are seen by the trainees as being most beneficial.) Specific suggestions for improvement are sought by the instructor. Such suggestions often are made first by the trainee himself. Practice at this point varies depending on the needs of the trainee as perceived by the instructor-evaluator. Some trainees benefit more from constructive criticism--others from positive reinforcement.

One of the aims of the evaluation session is to prepare the trainee to reteach his lesson. At the conclusion of the discussion and critique, the course instructor, together with the student teacher, decide upon one or two areas of major difficulty on which the student will concentrate in his next presentation. Sometimes this presentation is made immediately after the evaluation, other times it is from one day to a week later. The reteaching always is done with volunteer students other than those who participated in the original "class." This "reteach" segment is video taped and all other conditions are as they were for the initial presentation. Again, evaluation forms are filled out by the
micro-class and by the trainee's fellow students. The evaluation of the "re-teach" portion of micro-teaching is briefer than the initial evaluation—concentrating mainly on the particular improvements which the trainee was attempting.

Evaluation

Micro-teaching sessions following the pattern described above have been used at Brigham Young University for one year on an experimental basis. Approximately 140 students in six teacher education classes were involved in micro-teaching during the 1966 spring semester, 50 students in three classes during the 1966 summer session, and nearly 300 students in eight classes during the 1966 fall semester. The technique has also been used as an in-service activity in some public schools.

It is possible to draw several tentative conclusions about the effectiveness of micro-teaching as it is currently utilized at BYU:

1. Micro-teaching, with its provisions for immediate feedback and for self-observation by students offers a unique opportunity for individualized instruction of teacher trainees.

2. Micro-teaching is valuable in introducing the trainee to different types of classroom situations or problems. Segments of classroom interaction can be taped elsewhere or difficulties can be "staged" by the pupils of the miniature class. As his areas of weakness are identified and opportunities given him to react to similar situations and problems several times, the trainee gains confidence and skill in handling these situations effectively.

3. Much emphasis is currently being given to the teacher's self-concept and his resulting ability to be an effective person in the classroom. The use of video tapes in micro-teaching enables the trainee to see himself as he interacts with a group of students and to arrive at some conclusions in regard to his effectiveness in the teaching situation.

4. Judging from the responses obtained on questionnaires administered at the conclusion of the micro-teaching sessions, 96 per cent of the trainees indicate that they are benefited by the experience. (See Appendix C.)

5. Trainees agree that comments and suggestions made by their fellow student teachers are definitely valuable.
Performance of students, as judged by supervisors, classmates, and the pupils they teach, is usually improved--sometimes to a great extent--following the evaluation session and video tape playback.

**Proposed Research**

Permission has been requested from the Utah State Department of Public Instruction to conduct controlled research involving the substitution of micro-teaching sessions for 50 per cent of the student teaching time now required by Brigham Young University. Pilot studies will be initiated spring semester, 1967. Full scale research will continue for four or five successive semesters.

In this study, it is hypothesized that:

1. There will be no difference in performance ability of the teaching act between two groups of preparing teachers, one of which has completed student teaching for a full day for eight weeks, and the other of which has done student teaching one-half day for eight weeks and in addition has taught in five micro-teaching sessions and has observed other micro-teaching sessions 30-50 times.

2. There will be no difference in attitude toward (a) the profession of teaching, (b) themselves as teachers, and (c) pupils, between two groups of preparing teachers, one of which has completed student teaching for a full day for eight weeks, and the other of which has done student teaching one-half day for eight weeks and in addition has taught in five micro-teaching sessions and has observed other micro-teaching sessions 30-50 times.

Video tape recordings of the student teacher's performance before a class will be made of each experimental and control group member at the beginning of the student teaching block. At the end of student teaching, video tapes will again be made. In both the pre and post sessions, three taped segments will be obtained, providing a total of six video tapes per student teacher. These recorded acts of teaching will be mixed randomly--as to pre and post condition and as to control and experimental group--and evaluated by (1) a public school teacher, (2) a college student teacher supervisor, and (3) a public school supervisor. Such evaluation will examine teaching performance in four areas:

1. Involving class members in the lesson

2. Asking questions
3. Classroom management

4. Providing for contact with the referent or appropriate vicarious experience

Several scales designed to measure attitude in the appropriate area will be administered as pre and post instruments to each member of experimental and control groups. Changes over time and between groups will be evaluated.
APPENDIX A

Typical Micro-Teaching Classroom Arrangement
APPENDIX B

Micro-Teaching evaluation of _________________________

What about student involvement?

Suggestions for improvement:

What about the referent and visual aids used?

Suggestions for improvement:

Observations and suggestions about:
  poise mannerisms
  eye contact voice

What about re-enforcement of student responses?

Suggestions:

What was the objective?

Was the objective achieved? Yes____ No____ Explain:

Additional comments on the other side:
APPENDIX C

VIDEO TAPING EVALUATION

Please complete the following questions carefully and candidly, to help evaluate video taping at BYU. Well considered, frank answers will be most helpful.

I have been video taped _____ (no. of times) times.

The use of video tapes to evaluate my teaching performance:

1. changed my self-image as a teacher
   This change has been in a pos._neg._ direction.
   [Very true Somewhat true Slightly true Not true]
2. has helped my instructor to know and understand me better as a potential teacher
3. has given me a feeling of competence as a teacher
4. has helped me mature as a teacher; regard teaching more seriously
5. raised doubts within me that I can become a successful teacher
6. indicated to me areas where I can make improvement
7. is not much more than a novel experience
8. could be easily replaced by other, more ordinary experiences
9. is time well spent
10. aids in self-evaluation
11. is embarrassing and discomforting
12. I would like more opportunities to be taped
13. has helped me somewhat less than other training experiences (e.g., writing lesson plans, objectives, etc., but exclusive of student teaching)
14. makes me more nervous than I would be in the classroom thus reducing my effectiveness
15. is helpful initially, but its beneficial effects diminish with continued use
16. has little application to actual teaching on the job
17. would be more beneficial earlier in the teacher training program
18. has given me an increased appreciation for the necessity of adequate preparation for teaching
19. is a nuisance considering how busy I am with my course work
20. has provided me with personal contact with my instructor which I otherwise would not have had

Additional comments on back.