This research investigated student teachers' reactions to microteaching through the Teacher Reaction Questionnaire. The questionnaire contained 26 structured items, one comment and three open-end questions. Responses to the 26 structured questions were statistically analyzed through principal-axes factor analysis and varimax rotation. The resulting six factors were discussed: (a) interactions between students and student teachers; (b) interactions between student teachers and supervisors; (c) student teacher preparation time for the 1st, 3rd, and last microteaching; (d) student teacher anxiety felt for the 1st, 3rd, and last microteaching; (e) student teacher general preparation for laboratory practice in relation to anxiety felt with the 1st microteaching; and (f) student teacher specific preparation for laboratory practice. The discussion concluded that (a) as actual microteaching increased, practice time decreased; (b) as practice time increased, anxiety decreased; and (c) as preparation for laboratory practice increased, anxiety remained unchanged. Student teacher interactions with both students and supervisors did benefit from microteaching. The Teacher Reaction Questionnaire was included in the report, along with two tables of statistical data. (BRR)
Student Teacher Reactions to Microteaching

King Chu Chang

Microteaching was developed at Stanford University in 1963. In microteaching, a student teacher generally teaches and reteaches a short lesson to a small group of students. In the lesson, he is required to teach a particular technique to approximate the model teaching behavior under the observation of a supervisor. The whole process is generally videotaped and the lesson is evaluated by students. At the end of the lesson, there is a critique period in which the videotape, the student evaluations and the supervisor observations are used to compare his approximation of the technique with that of the model.

Much has been written about microteaching since its inception. However, little has been said about its mechanics, such as student teacher expectations of supervision and student teacher reactions to microteaching. Further, a review of literature on microteaching reveals that there has been no complete and thorough study of student teacher reactions to microteaching. To investigate this problem, the author worked out a "Teacher Reaction Questionnaire." The questionnaire, identified by sex, methods teacher and microteaching

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1This paper was presented at Conference on English Education, National Council of Teachers of English, St. Louis, Missouri, April 6, 1972. Also, the material in this paper is taken from Chang, King Chu, "A Study of Student Teacher Reactions to Microteaching," University of Illinois, Urbana, Illinois, 1970.
supervisor, contains twenty-six structured items, three open-ended questions and one comment question. The instrument was administered to student teachers, the majority of whom majored in English and social studies and the rest in agricultural education or vocational and technical education. Responses to the twenty-six items were subjected to a principal-axes factor analysis program, followed by varimax rotation. The analysis yielded six rotated factors. The factors together with the items with loadings greater than .4 are presented and discussed.

TABLE

Summary of Factor Analysis

<table>
<thead>
<tr>
<th>Item</th>
<th>Loading</th>
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<tbody>
<tr>
<td><strong>Factor A (26,56,6): Interactions between Students and Student Teachers</strong></td>
<td></td>
</tr>
<tr>
<td>10. Students participated in microlessons.</td>
<td>.61</td>
</tr>
<tr>
<td>9. Students were found responsive to microteaching.</td>
<td>.76</td>
</tr>
<tr>
<td>15. Rapport was established between students and student teachers.</td>
<td>.77</td>
</tr>
<tr>
<td>11. Students had a feeling of accomplishment concerning microlessons.</td>
<td>.75</td>
</tr>
<tr>
<td>16. Student teachers communicated enthusiasm to students.</td>
<td>.66</td>
</tr>
<tr>
<td>6. Topics were found suitable for students.</td>
<td>.65</td>
</tr>
<tr>
<td>7. Students understood aims of microlessons.</td>
<td>.60</td>
</tr>
<tr>
<td>8. Students understood the organization of microlessons.</td>
<td>.58</td>
</tr>
<tr>
<td>14. Students had the background knowledge for microlessons.</td>
<td>.41</td>
</tr>
</tbody>
</table>

This paper only briefly discusses the factors and presents the results. A detailed discussion of the items, especially for Factors C, D, and E, through the correlation program and the two-way contingency table program, can be found in the author's "A Study of Student Teacher Reactions to Microteaching."
Factor B (22.44): Interactions between Student Teachers and Supervisors

2. Supervisors were found helpful in improving microlessons.  .81
3. Supervisors had the knowledge necessary for overall supervisory work.  .75
1. Rapport was established between student teachers and supervisors.  .73
5. Last microlesson was influenced by the analyses of previous microlessons.  .73
4. Supervisory styles were on the scale of directiveness and non-directiveness.  .66
12. Last microteaching was influenced by previous laboratory teaching experiences.  .60

Factor C (15.45): Student Teacher Preparation for the First, Third and Last Microteaching

22. How much time was spent preparing for the third microteaching.  .67
21. How much time was spent preparing for the first microteaching.  .75
23. How much time was spent preparing for the last microteaching.  .73

Factor D (11.80): Student Teacher Anxiety Felt with the First, Third and Last Microteaching

25. How much anxiety was felt with the third microteaching experience.  .79
24. How much anxiety was felt with the first microteaching experience.  .71
26. How much anxiety was felt with the last microteaching experience.  .65

Factor E (11.17): Student Teacher General Preparation for Laboratory Practice in Relation to Anxiety Felt with the First Microteaching

19. The viewing of the model tape on each microlesson was found useful.  .71
18. Methodology courses were found helpful in preparing for microteaching.  .49
24. How much anxiety was felt with the first microteaching experience.  .46

Factor F (10.57): Student Teacher Specific Preparation for Laboratory Practice

20. Instructional materials were found helpful.  .64
17. Orientation to the laboratory procedures was found helpful in preparing for microteaching.  .63
The first factor appears to be very strong, accounting for 29% of the total variance. It reflects interactions between students and student teachers. To establish interactions with students, student teachers should acquire these suitable teaching practices: good lesson aims, good lesson organization, suitable topics, sufficient enthusiasm, proper teaching techniques, good student participation, good student responsiveness, good rapport with students, necessary student background knowledge and general student feeling of accomplishment. Once interactions with students are established, student teachers can improve teaching in the context of microteaching.

Factor B, representing 22% of the variance, shows interactions between student teachers and supervisors. Possessing the knowledge necessary for supervisory work and employing cooperative supervisory style (i.e., supervisors and student teachers analyze and criticize microlessons together), supervisors should establish interactions with student teachers so that the latter can benefit from microteaching.

Factor C, accounting for 15% of the variance, describes student teacher preparation time for the first, third and last microteaching. A majority of student teachers reported that they spent less time preparing for the last microteaching than for the first and third microteaching. The more they taught, the less they spent preparing for microteaching.

Factor D, representing 12% of the variance, shows student teacher anxiety felt with the first, third and last microteaching. Most of student teachers observed that they felt more anxiety with
the first microteaching than with the third and last microteaching. The more they practiced, the less they felt anxious.

Factor 2 indicates student teacher general preparation for laboratory practice in relation to anxiety student teachers felt with the first microteaching. General preparation composed the viewing of miniature tapes and methods instruction. A majority of student teachers found general preparation successful, but this preparation did not reduce their anxiety felt with the first microteaching.

The last factor, accounting for 11.5% of the variance, pinpoints student teacher specific preparation for laboratory practice. Instructional materials and orientation programs specifically oriented student teachers to laboratory practice. Most of student teachers appraised specific preparation as helpful.

In conclusion, student teachers should acquire suitable teaching practices to establish interactions with students. Supervisors should establish interactions with student teachers so that the latter can benefit from microteaching. The more student teachers taught, the less they spent preparing for microteaching. The more student teachers practiced, the less they felt anxious. Student teachers found general preparation for laboratory practice successful, but this preparation did not reduce their anxiety felt with the first microteaching. Student teacher specific preparation for laboratory practice was appraised helpful.
TEACHER REACTION QUESTIONNAIRE

Sex

Method Teacher

Microteaching Supervisor

We are asking you to help us improve the effectiveness and the supervision of microteaching by answering the following questions. Answers to Questions 28 and 29 are especially important.

1. Which of the following best describes the rapport between you and your microteaching supervisor?
   1. poor
   2. fair
   3. good
   4. very good
   5. excellent

2. To what extent did you find your microteaching supervisor helpful in improving your microlessons?
   1. not helpful at all
   2. somewhat helpful
   3. helpful
   4. very helpful
   5. essential

3. To what degree were you confident that your microteaching supervisor had the knowledge necessary for overall supervisory work?
   1. impossible to determine
   2. no confidence
   3. unsure
   4. confident
   5. fully confident

4. Which of the following best describes the behavior with your microteaching supervisor?
   1. He analyzed my lesson presentation for me.
   2. He and I analyzed my lesson presentation.
   3. I analyzed my lesson presentation under his supervision.
   4. I analyzed my lesson presentation alone.
5. What extent was your last microlesson influenced by the analyses of your previous microlessons?

1. Not influenced at all
2. Somewhat influenced
3. Significantly influenced
4. Greatly influenced
5. Completely changed

6. To what extent did you find the topics of your microlessons suitable for your students?

1. Not suitable at all
2. Somewhat suitable
3. Generally suitable
4. Suitable
5. Very suitable

7. To what degree did the students understand the learning aims of your microlessons?

1. No understanding
2. Some understanding
3. Generally understood
4. Good understanding
5. Clearly understood

8. To what extent did the students understand the organization of your microlessons?

1. No understanding
2. Some understanding
3. Generally understood
4. Good understanding
5. Clearly understood

9. To what degree did you find the students responsive to your microteaching?

1. Not responsive at all
2. Somewhat responsive
3. Responsive
4. Very responsive
5. Extremely responsive

10. To what extent did the students participate in your microlessons?

1. No participation
2. Some participation
3. Generally participating
4. Participating
5. Clearly participating
11. To what degree did you find the students had a feeling of accomplishment concerning your microlessons?

1. nothing accomplished
2. some accomplishment
3. general feeling of accomplishment
4. lesson accomplished
5. clearly accomplished

12. To what extent was your last microteaching influenced by your previous laboratory teaching experiences?

1. not influenced at all
2. somewhat influenced
3. significantly influenced
4. greatly influenced
5. completely changed

13. To what degree do you feel the teaching techniques practised will help you in student teaching?

1. not helpful at all
2. somewhat helpful
3. helpful
4. very helpful
5. most helpful to date

14. To what degree were you confident that the students had the background knowledge necessary for your microlessons?

1. impossible to determine
2. no confidence
3. unsure
4. confident
5. fully confident

15. Which of the following best describes the rapport between you and your students?

1. poor
2. fair
3. good
4. very good
5. excellent
To what extent were you able to communicate your enthusiasm for your microlessons to the students?

1. no enthusiasm at all
2. some enthusiasm
3. generally enthusiastic
4. enthusiastic
5. very enthusiastic

17. To what degree was your orientation to the laboratory procedures helpful in preparing for your microteaching experiences?

1. not helpful at all
2. somewhat helpful
3. helpful
4. very helpful
5. essential

18. To what degree did your methodology courses help you in preparing for your microteaching?

1. not helpful at all
2. somewhat helpful
3. helpful
4. very helpful
5. essential

19. To what extent did you find the viewing of the model tape on each microlesson useful?

1. not useful at all
2. somewhat useful
3. useful
4. very useful
5. essential

20. To what degree did you find the instructional materials passed on to you by the Teaching Techniques Laboratory helpful?

1. not helpful at all
2. somewhat helpful
3. helpful
4. very helpful
5. essential

21. How much time did you spend preparing for your first microteaching?

1. less than 30 minutes
2. 30-60 minutes
3. 60-120 minutes
4. 120-180 minutes
5. more than 180 minutes
22. How much time did you spend preparing for your third microteaching?
   1. less than 30 minutes
   2. 30-60 minutes
   3. 60-120 minutes
   4. 120-180 minutes
   5. more than 180 minutes

23. How much time did you spend preparing for your last microteaching?
   1. less than 30 minutes
   2. 30-60 minutes
   3. 60-120 minutes
   4. 120-180 minutes
   5. more than 180 minutes

24. How much anxiety did you feel with your first microteaching experience?
   1. none at all
   2. very little
   3. some
   4. much
   5. very much

25. How much anxiety did you feel with your third microteaching experience?
   1. none at all
   2. very little
   3. some
   4. much
   5. very much

26. How much anxiety did you feel with your last microteaching experience?
   1. none at all
   2. very little
   3. some
   4. much
   5. very much
7. If you felt anxiety what could be done by your methods professor or by us to reduce your discomfort?


28. What other problems did you as a student teacher encounter in the Teaching Techniques Laboratory? Please list major and minor problems in order of importance.

Major problems


Minor problems
29. Please list in order of importance your suggestions or recommendations for coping with the problems stated in 28.

Most important

__________________________

__________________________

__________________________

__________________________

Least important

__________________________

__________________________

__________________________

__________________________

30. Other comments

__________________________

__________________________

__________________________

__________________________
EXECUTING VARIMAX FACTOR ROTATION PROGRAM

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<td>4</td>
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The sum of communalities is 15.8575
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**Orthogonally Rotated Factor Matrix**

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**Note:** The table represents the factor loadings and variances for rotated factors.