This study investigated the observable changes, if any, of 58 elementary education student teachers following completion of field experience programs. Behavior rating forms were completed by the prospective kindergarten to sixth grade teachers, the public school cooperating teachers, the university supervisors, and a control group of 35 non-field experienced students. It was hypothesized that a) field experienced students would rate themselves higher than non-field experienced students and b) cooperating teachers and university supervisors would rate the field experienced students higher than the non-field experienced students. The responses to the rating form were classified according to the emphasis placed upon the particular field experience program: Project Interaction Methods Experience, or both Interaction and Methods Experience. Analysis revealed statistical acceptance of both general hypotheses. Data also revealed that significant differences in mean rating scores for the individual items appeared a) most frequently between Methods Experience student teachers and the control group and b) most frequently between the public school cooperating teachers and the control group. (A sample questionnaire is included.)
It would appear that teacher preparation institutions are discovering anew that education majors need field based experiences to accompany the more theoretically oriented college campus experiences as an unusually large number of articles expressing this view have appeared in teacher education journals in the past several years. One writer (1) stated that: "A teacher-training program can be truly effective only if a substantial portion of the educational sequence is devoted to the training of the prospective teacher in the public school classroom." Articles written by DeLong, (2) Horton, (3) and Hazard, Chandler, & Stiles (4) generally concur with this view. However, not all educators nor all writers agree with the field based program concept although relatively fewer critical articles seem to appear in print. Of those few critical articles appearing in print, Munsen's article (5) is perhaps the most directly opposed to the concept as indicated by the following statements: "Madness is upon us once again. The latest craze is the suggestion that we establish teaching centers in the public schools, conduct methods and student teaching simultaneously and extend student teaching to a full semester or even a full year." And, further, "We need methods courses entirely divorced from the public school student-teaching experience..."

Regretably, very little research evidence has appeared to support or refute the field based concept despite the rather ponderous supply of articles lauding the value of this concept in teacher preparation. It was the general purpose of these writers to gather some information of this
nature, and more specifically, to determine whether or not an observable difference exists between the teaching behaviors of students who had participated in field oriented programs as compared to those students who had not.

PROCEDURES

For the past three years a portion of the elementary education majors at Bowling Green State University has participated in one or two field experience quarters in the public schools in addition to meeting the normal student teaching field requirement. One program, The Methods Experience Project, is offered in conjunction with the elementary methods courses and provides three days per week of working in public classrooms during the ten week quarter. The second program, Project Interaction, is offered in conjunction with the senior education block of courses and provides alternate full weeks of public school experience during the quarter.

SAMPLE: As a part of a larger follow-up and evaluation of the elementary teacher preparation program during Spring quarter of 1971, a group consisting of all elementary education majors completing their student teaching in a student teaching center and preparing to teach in grades K-6 was identified. This particular group of student teachers was selected as the centers allow greater opportunities to the university supervisors to make more lengthy and more extensive observation of student teacher behavior. University student teacher supervisors at the centers are able to spend full days in a single center school rather than spending large amounts of time traveling from school to school.

Ratings of this group of 99 student teachers were completed by the students themselves, the public school cooperating teachers, and the
University supervising teachers during the last week of the quarter. Useable, complete sets of ratings were acquired for 94% of this sample, N=93.

**INSTRUMENT:** The rating form unique to this particular phase of the evaluation consisted of a twelve-item check list form developed by the University's Office of Student Teaching. Each item consisted of a statement of student teacher behavior followed by a five-point scale or continuum with descriptive words placed at the extremes of the continuum. As an example, item number one on the scale appeared as:

the student teacher makes careful plans systematic __ /__ /__ /__ /__ disorganized

**HYPOTHESES:** The procedures were designed to test the following hypotheses through ratings gathered at the end of the student teaching quarter:

1. Student teachers having one or more quarters of field experience prior to student teaching will rate themselves higher as compared to those students not having a field experience.

2. Student teachers having one or more quarters of field experience prior to student teaching will be rated higher by their university supervisors as compared to those students not having a field experience.

3. Student teachers having one or more quarters of field experience prior to student teaching will be rated higher by their public school cooperating teachers as compared to those students not having a field experience.

**FINDINGS**

The responses to the student teacher rating form were classified on the basis of the past field experiences of the student teachers: Project Interaction (N=28), Methods Experience (N=18), both Project Interaction and
Methods Experience (N=12), the total field experience group consisting of all students who had participated in one or both projects (N=58), and the control group of students who had not participated in either field experience project (N=35). In addition the responses were analyzed by the individual completing the rating scale: student teacher self-rating, university supervisor, or public school cooperating teacher; by total rater score (sum of all 12 items using a 1-5 scale weight with lower scores indicating more desirable behavior); and by rater score on each of the 12 items on the rating form.

H1: This hypothesis was supported by the total rater score on the twelve item instrument. The student teachers having experienced field based programs rated themselves significantly higher on the twelve item instrument than did those student teachers not having experienced a field based program. The mean rating score for the field based group was 16.8 while the mean for the control group was 20.5. This difference in favor of the field based group is statistically significant at the .05 level of confidence (t=2.54). This finding would seem to suggest that the field experienced students felt more confident about their teaching behavior at the completion of student teaching as compared to the control group student teacher.

H2: This hypothesis was supported by the total rater score on the twelve item instrument. The student teachers with field experiences were rated higher by their university supervisors as compared to those student teachers not having experienced the field programs. The mean for the field experienced group was 17.3 while the mean for the control group was 21.2. This difference in favor of the field experienced group is statistically significant at the .05 level of confidence (t=2.25). This difference would
suggest that the field experienced student teacher exhibited more desirable teaching behaviors as perceived by the university supervisors.

H3: The hypothesis that public school cooperating teachers will rate higher those student teachers who have participated in field experience programs was supported by the total rater score on the twelve item instrument. The mean for the field experience groups was 17.7 while the mean for the control group was 22.3. This difference also in favor of the field experience group is significant at the .10 level of confidence (t=2.01). This difference would suggest that the cooperating public school teachers also observed more desirable teaching behaviors in the field experienced student teachers as compared to the control group.

An analysis of the responses of the raters on each of the evaluation form items indicates that the general trend was for the field experience groups to be rated higher by all raters. Significant differences in mean rating scores for the individual items appeared most frequently between the Methods Experience group and the control group and when the public school cooperating teachers were the raters.

Both of these latter findings would appear to be predictable on a logical basis. The cooperating teachers because of their opportunities for more lengthy and extensive observations would most likely be able to identify observable differences in performance. And secondly, the relatively higher ratings of the Methods Experience group appears understandable in terms of the emphasis on teaching methods and teaching behavior in that Project; whereas, the Interaction Project places emphasis upon working and functioning in the school system rather than upon classroom teaching behavior.

Levels of confidence of .20 or less resulting from mean comparisons between the subsamples and the control group for each rater on each item
are reported on Table 1. All differences approaching statistical significance or attaining significance are in favor of the field experience groups with one exception. This difference appearing on item number seven with the university supervisors as the raters of the both projects group revealed more desirable scores for the control group at the .20 level of confidence.

As can be observed from Table 1, only the first item on the evaluation form did not result in statistically significant differences between the control group and one or more of the field experience groups although the differences on item number twelve only reached the .20 level of confidence. The mean ratings for the field experiences groups actually tended to be less desirable than the mean ratings for the control group on item number one. This might suggest that less effort or time is spent on developing formal lesson plans after the student becomes more experienced as a teacher.

The data also indicates that fewer differences approaching or attaining statistical significance appeared between the both field experiences group and the control group relative to the other field experience subsamples. The lack of statistical power as a consequence of a subsample size of 12 may well be the best explanation for this discrepancy. This would appear particularly so since the same trend generally favoring the field group was present and was consistent with the trends associated with the other two field experience subsamples as described in the preceding paragraphs.

SUMMARY AND DISCUSSION

Teacher behavior ratings completed by student teachers themselves, public school cooperating teachers, and university supervisors were obtained for a sample of elementary education majors (grades K-6) upon
the completion of their student teaching experience. The ratings of
student teachers who had experienced field based programs prior to student
teaching were compared with those who had not.

The findings generally supported the hypotheses that observable
differences exist between the teaching behaviors of field experienced
student teachers and of those with no field experiences and generally
supported the current movement in teacher preparation institutions toward
broadening field based experiences for elementary education majors. These
findings, although providing this movement with some support on at least
a local basis, must be viewed only as an initial investigation of the
value of field experiences in teacher preparation and only as tentative
at best. The sample for this study was relatively small and non-random,
and the data gathering procedure was limited to the use of rating scales.

Obviously, more research and more researchers are needed in probing
the questions such as the following associated with the field experience
issue: What experiences are best gained on the college campus and in the
public school? How much field experience is sufficient, and when should
this experience occur in the preparation process? How permanent are gains
acquired through field experience programs? And, what is the most effective
pattern of interactions between university and public school staffs in a
field experience program?
REFERENCES


### TABLE 1

LEVEL OF CONFIDENCE OF DIFFERENCE BETWEEN CONTROL AND SUBSAMPLES

Based Upon Individual Items

<table>
<thead>
<tr>
<th>Rating Item</th>
<th>Subsamples1 and Rater2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PI A B C</td>
</tr>
<tr>
<td><strong>THE STUDENT TEACHER:</strong></td>
<td></td>
</tr>
<tr>
<td>1 - makes careful plans</td>
<td>ns ns ns</td>
</tr>
<tr>
<td>2 - uses techniques that reduce the amount of &quot;teacher talk&quot;</td>
<td>ns ns ns</td>
</tr>
<tr>
<td>3 - secures constructive pupil participation in learning activities</td>
<td>ns .20 ns</td>
</tr>
<tr>
<td>4 - makes provisions for individual differences</td>
<td>ns .20 ns</td>
</tr>
<tr>
<td>5 - develops effective problem solving and critical thinking processes on the part of the pupils</td>
<td>.20 ns ns</td>
</tr>
<tr>
<td>6 - accepts and uses pupil contributions</td>
<td>ns .20 ns</td>
</tr>
<tr>
<td>7 - acts as if he thinks each and every student is important</td>
<td>.10 .20 ns</td>
</tr>
<tr>
<td>8 - treats his students as able, dependable, friendly people</td>
<td>.02 .20 ns</td>
</tr>
<tr>
<td>9 - emphasizes investigation, instruction, and activity</td>
<td>ns ns ns</td>
</tr>
<tr>
<td>10 - uses positive techniques to help pupils develop control and self-discipline</td>
<td>ns ns ns</td>
</tr>
<tr>
<td>11 - assumes responsibility</td>
<td>ns ns ns</td>
</tr>
<tr>
<td>12 - uses constructive criticism and self evaluation</td>
<td>ns ns ns</td>
</tr>
</tbody>
</table>

1. PI = Project Interaction N=28
   MEP = Methods Experience N=18
   BOTH = PI and MEP N=12
   TOTAL = one or both projects N=58
   CONTROL = students not in projects N=35

2. A = Student teacher ratings
   B = Cooperating teacher ratings
   C = Campus supervisor ratings

3. All differences at or approaching significance were in favor of the field experience group except on this single comparison.