The relationships between rankings of student teachers' effectiveness and the student teachers' and supervising teachers' satisfaction with a year-long student teaching program were assessed. Three independent rankings of student teachers were obtained from (1) 85 student teachers, (2) 46 supervising teachers, and (3) 10 university personnel. In order to measure the degree of satisfaction with student teaching, the Purdue Student Teacher Opinionnaire was administered to all student teachers and supervising teachers. Results indicated that both student teachers and supervising teachers tended to perceive the student teaching experience satisfactorily, but student teachers were significantly more critical of certain aspects of school programs than supervising teachers. (Author)
A STUDY OF INTER-RELATIONSHIPS BETWEEN THREE INDEPENDENT RANKINGS
OF STUDENT TEACHER EFFECTIVENESS, AND STUDENT TEACHER AND SUPERVISING TEACHER
ASSESSMENTS OF SATISFACTION IN A YEAR-LONG FIELD PROGRAM.

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Paper prepared for AERA meeting April, 1974
in Chicago, Illinois
Title: A Study of Inter-Relationships Between Three Independent Rankings of Student Teacher Effectiveness, and Student Teacher and Supervising Teacher Assessments of Satisfaction With a Year-Long Field Program

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Objectives: The purpose of this study was to collect data pertinent to the following questions of central interest to the implementers of large, field-based teacher preparation programs: (1) Do student teachers, university methods and supervisory personnel, and supervising teachers agree in their perceptions of the most effective student teachers? (2) Are student teacher evaluations of the student teaching experience as measured by the Purdue Student Teacher Opinionnaire (PSTO) related to the ranking of the student teacher by peers, by university personnel, and by supervising teachers? (3) Are student teacher responses on selected subtests of the PSTO related to one or more of the independent rankings of effectiveness? (4) What degree of congruence is there between student teacher evaluation of the student teaching experience via the PSTO and supervising teacher evaluation of that same experience via a modified PSTO?

Background and Field Base of the Study: Pragmatic in value, the study undergirds evolving modifications in the structure of an on-going "professional-year program." Eighty-five pre-service teachers (primarily female) were clustered in 4 elementary schools during 1972-73 under the intensive supervisory direction of 46 classroom teachers and 10 university personnel. These pre-service, in-service, and university educators participated together in a year-long, field-based effort designed to: (a) develop student teachers into high quality teachers; (b) promote increased
supervisory competence in classroom teachers; (c) provide in-depth clinical oppor-
tunities for teacher trainers and trainers of teacher trainers; and (d) enhance
the educational opportunities of children in the collaborating schools.

Methods instruction was provided in the schools of a small midwestern city in
the areas of language arts, mathematics, science, and social studies and was
integrated with daily student teaching experiences. Volunteer work in community
settings and selected community related readings/observations constituted another
required course. Through rotated classroom placements the student teachers gained
teaching experience in at least two different schools, and three different grade
levels. Structured observations in 10-15 additional classrooms were required and
monitored. They worked with and were supervised by three or more supervising
teachers and 8-10 university personnel. Each methods instructor had teaching and
supervisory responsibilities in each of the four participating schools. In addi-
tion to working with student teachers in the schools, methods instructors offered
weekly seminars for classroom teachers for the purposes of fostering communication,
developing increased expertise in student teacher supervision, improving classroom
skills, and facilitating an interchange of ideas and techniques. The nature of
the program enabled classroom teachers, student teachers, and university personnel
to interact frequently and fostered an unusual sense of togetherness among everyone
involved.

Theoretical Framework: In a study of the relationship between satisfaction and
performance in student teaching (Shapiro and Shapiro, 1972), it was found that
those student teachers ranked at the top and at the bottom in performance both
tended to be less satisfied with their student teaching experience. The current
study utilizes the PSTO as the measure of satisfaction and relates it to three
different rankings of performance to determine if a similar trend exists.
Furthermore, social psychology theory suggests that professional relationships are facilitated when persons are in agreement on the philosophical, psychological, and procedural dimensions in question. Through use of the PSTO and a modified PSTO the degree of supervising teacher and student teacher agreement on student teaching dimensions and relationships can be assessed.

In a review of research related to the influence supervising teachers have on the attitudes and teacher performance of their student teachers, Yee (1969) indicates a tendency of student teachers to shift their attitudes toward those of their supervising teachers. The current study sought to determine if student teacher and supervising teacher see eye-to-eye on such subscales of the PSTO as Teaching as a Profession, Rapport With Supervising Teacher, Rapport With University Personnel, and Professional Preparation. Although no pre-student teaching data were available to document attitudinal shifts by students, the Yee study undergirded expectations that post-student teaching attitudes of students on these four subscales would be similar to those held by their supervising teachers.

Classroom teachers are traditionally stereotyped as being more conservative than liberal. Student teachers are typically assumed to be moderate to liberal in their educational attitudes but certainly more liberal than classroom teachers. University personnel tend to be classified as liberal. Spindler (1955) depicted a value continuum ranging from traditional to emergent and a number of subsequent studies (e.g. Prince, 1957, Thompson and Carr, 1966) have shown that incumbents of various educational positions do tend to take commonly stereotyped positions on this continuum. Loadman and Mahan (1973) found student teacher attitudes toward education to be more progressive than classroom teacher attitudes. Thus, another issue arises. If the student teachers, classroom teachers, and university personnel operate from different personal predilections, can these three groups be expected
to evaluate and rank student teacher performance in similar ways?

**Procedures and Instrumentation:** At the end of the 1972-73 academic year, rankings of student teacher professional effectiveness were obtained from each of three groups of program participants (46 classroom teachers, 85 student teachers, and 10 university methods instructors and supervision specialists). The PSTO was administered to all of the student teachers. The PSTO has high validity and reliability coefficients (Bentley and Price, 1969) and has been employed frequently to measure satisfaction with student teaching conditions in both traditional and innovative programs.

A Modified PSTO, revised to measure the supervising teacher's own opinion of the conditions and treatments encountered by the final student teachers was administered to each supervising teacher.

Relative to the Student Teacher Ranking of Peers, the names of all student teachers were placed on a sheet of paper. This listing was given to pre-service participants along with instructions to rank order the top six student teachers with respect to their classroom teaching effectiveness. All responses were anonymous. The sum of ranks for each student teacher, based upon the responses of peers, was computed. Student teachers with the highest sum of rank were thought to be the most effective professionally. Those teachers receiving few or no votes were thought to be the least effective professionally. The 85 student teachers were then divided into a highest third, middle third, and bottom third on a basis of professional effectiveness for data analysis purposes.

Classroom Teacher Rankings of Student Teachers were obtained by having each classroom teacher rate each of her final two student teachers on 10 professional growth criteria. A five point scale ranging from "1" (some growth) to "5"
(outstanding growth) was employed. The criteria were: reliability, acceptance of responsibility, readiness for daily teaching duties, development of teaching skills, enthusiasm for teaching, sensitivity to interests and needs of individual pupil, verbal reinforcement of pupils, preparation of sound lesson plans, creation of motivating learning environment, effective classroom management. Each student teacher could earn a summated score of 10 to 50. Student teachers with the highest total score on the 10 criteria were thought to be the most effective professionally. Those with the lowest total scores were thought to be the least effective. The 85 student teachers were then divided into a highest third, middle third, and bottom third on a basis of professional effectiveness for data analysis purposes.

University Staff Rankings of Students Teachers were obtained by having each staff member rate every student teacher on five criteria. A five point scale ranging from "1" (unsatisfactory) to "5" (outstanding) was employed. The criteria were: personal characteristics, professional qualifications, instructional effectiveness, classroom management, ability to inspire and motivate pupils. Each student teacher could earn a summated score of 50 to 250 through this procedure. Student teachers with the highest total score on the 5 criteria were thought to be the most effective professionally. Those with the lowest total scores were thought to be the least effective. The 85 student teachers were then divided into a highest third, middle third, and bottom third on a basis of professional effectiveness for data analysis purposes.

Spearman's coefficient of rank correlation was used to compare the three rankings of student teacher professional effectiveness (Siegel, 1956). Similarities and differences between pre-service and in-service teacher responses on selected subscales of the PSTO and Modified PSTO were examined through use of arithmetic means and t-tests.
Results: Analysis of the data indicated that student teachers and supervising teachers both tended to perceive the student teaching experience as satisfactory. This conclusion is based on the observation that the student teachers and supervising teachers had mean scores above 2.5 (see Appendix for description of the PSTO) on each of the four subscales investigated. Student teachers, however, were significantly more critical than supervising teachers with respect to their rapport with supervising teachers. In addition, student teachers were significantly more positive than supervising teachers regarding teaching as a profession and their professional preparation. Table 1 lists summary data for both groups on each of the four subscales and the results of t-tests on the differences between means.

There were statistically significant correlations among all three rankings of student teacher effectiveness (see Table 2). These significant correlations suggest considerable agreement between student teachers and supervising teachers, student teachers and university personnel, and supervising teachers and university personnel. Furthermore, these rank-order correlations indicate a tendency of the underlying ranks to relate in a monotone-increasing manner (Hays, 1963, p. 655).

*Although not reported in the tables, the mean score per each item on the total PSTO was 2.98 for student teachers and 3.22 for supervising teachers. Both of these means are indicative of a satisfactory field experience.
For example, low rankings by student teachers are associated with correspondingly low ranks by supervising teachers and so on.

Several interesting and significant negative relationships emerged: (a) classroom teacher ranking of student teacher and rapport with student teacher (-.32, p < .002); (b) classroom teacher ranking of student teacher and teaching as a profession (-.24, p < .02); (c) university personnel ranking of student teacher and teaching as a profession (-.25, p < .02); (d) classroom teacher ranking of student teacher and professional preparation (-.30, p < .01); (e) classroom teacher ranking of student teacher and total score on the FSTO (-.42, p < .001).

A summary of the correlations between the three rankings of student teacher effectiveness and performance on the four selected subscales of the PSTO is given in Table 3. Also included are correlations between the rankings and total score on the PSTO.

Chi-square analyses of the data revealed significant deviation from independence between the following variables: a) the three rankings of student teacher effectiveness (p < .01); b) supervising teachers' ranking of student teachers and student teachers' views of their rapport with supervising teachers, teaching as a profession, and total score on the PSTO (p < .01); c) student teachers' ranking of themselves and total score on the PSTO (p < .01) (see Table 4).
Implications: These results indicate that while classroom teachers, student teachers, and university personnel have similar perceptions of student teaching effectiveness, student teachers do have different attitudes toward various aspects of teaching from their classroom teachers. Also, a consideration of the significant negative correlations between several of the variables together with the rejection of the hypothesis that these variables are independent suggests that student teachers who received highly favorable rankings from the classroom teachers had correspondingly low scores with respect to rapport with classroom teacher, teaching as a profession, and overall views of school situations and student teaching. At the same time student teachers receiving unfavorable rankings from the classroom teachers had high scores on the same PSTO subscales. This interesting result may be attributed to the fact that the best student teachers may also be the most critical of themselves and school conditions, whereas poorer student teachers are possibly less aware of their own shortcomings and may not be as attentive to school conditions. Of course any conclusions drawn from these results must be based upon careful consideration of the opinionnaire used and the manner in which the rankings of the student teachers were obtained.

Many times one hears teacher trainers puzzling over data which seem to say that the "best student teachers" are the most critical of their student teaching experience, or their supervising teacher, or their university supervisor, or their preparatory course work. An intensive study of this shadowy relationship is needed. A major obstacle to the study is the reliable determination of the "best" student teachers. Objective criteria for the judgment of student teaching effectiveness
is difficult to agree upon and utilize in the field. However, the importance of establishing the relationship would seem to outweigh the inherent difficulties. It may just be that our finest pre-service teachers are possessed of more professional ability, vision, and ambition than are the supervising teachers in whose rooms they are placed.

If this should be the case, the professional growth of the excellent pre-service teacher may be being stunted in the field experience. An easy remedy would be to place the excellent pre-service teacher with an excellent in-service teacher. It is hardly possible. Assuming that the best in-service teachers can be identified, there is little to help teacher trainers to identify the best student teachers before they complete their student teaching experience.
## Table 1

**Means, Standard Deviations and Results of t-tests**
**Between Student Teachers and Supervising Teachers**
**on Selected PSTO Subscales**

<table>
<thead>
<tr>
<th>PSTO Subscales</th>
<th>Student teachers</th>
<th>Supervising Teachers</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSTO-1</td>
<td>3.18</td>
<td>3.61</td>
<td>.001**</td>
</tr>
<tr>
<td>PSTO-2</td>
<td>3.46</td>
<td>3.18</td>
<td>.001**</td>
</tr>
<tr>
<td>PSTO-3</td>
<td>3.11</td>
<td>3.17</td>
<td>.57</td>
</tr>
<tr>
<td>PSTO-4</td>
<td>2.88</td>
<td>2.60</td>
<td>.006**</td>
</tr>
</tbody>
</table>

**p< .01

*PSTO-1 -- Rapport with Supervising Teacher; PSTO-2 -- Teaching as a Profession;
PSTO-3 -- Rapport with University Personnel; PSTO-4 -- Professional Preparation.
Significance levels determined by t-tests following tests of equality of variances.
Degrees of freedom adjusted by Welch's method for PSTO-1, PSTO-3; variances pooled for PSTO-2, PSTO-5.
Table 2
Spearman Rank-Order Correlations for Three Rankings of Student Teacher Effectiveness\(^a\)

<table>
<thead>
<tr>
<th></th>
<th>ST</th>
<th>CT</th>
<th>UP</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST</td>
<td>1.00</td>
<td>.34**</td>
<td>.55**</td>
</tr>
<tr>
<td>CT</td>
<td>.36**</td>
<td>1.00</td>
<td>.38**</td>
</tr>
</tbody>
</table>

** p< .01.

\(^a\)ST - Student Teachers; CT - Classroom (supervising) Teachers; UP - University Personnel.
Table 3

Spearman Rank-Order Correlations Between Three Rankings of Student Teacher Effectiveness and Selected PSTO-Subscales and PSTO-Total

<table>
<thead>
<tr>
<th>Rankings&lt;sup&gt;a&lt;/sup&gt;</th>
<th>PSTO-1</th>
<th>PSTO-2</th>
<th>PSTO-3</th>
<th>PSTO-4</th>
<th>PSTO-Tot</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST</td>
<td>.04</td>
<td>-.05</td>
<td>-.15</td>
<td>-.09</td>
<td>-.07</td>
</tr>
<tr>
<td>CT</td>
<td>-.32**</td>
<td>-.24*</td>
<td>-.14</td>
<td>-.30**</td>
<td>-.42**</td>
</tr>
<tr>
<td>UP</td>
<td>-.10</td>
<td>-.25*</td>
<td>-.11</td>
<td>-.09</td>
<td>-.18</td>
</tr>
</tbody>
</table>

<sup>a</sup>ST - Student Teachers; CT - Classroom (supervising) Teachers; UP - University Personnel.

<sup>b</sup>PSTO-1 - Rapport with Supervising Teachers; PSTO-2 - Teaching as a Profession; PSTO-3 - Rapport with University Personnel; PSTO-4 - Professional Preparation; PSTO-Tot - Total Score on PSTO.

*<sup>p</sup><.05.

**<sup>p</sup><.01.
Table 4
Summary of Chi-square Analyses a

<table>
<thead>
<tr>
<th></th>
<th>CT</th>
<th>UP</th>
<th>PSTO-1</th>
<th>PSTO-2</th>
<th>PSTO-3</th>
<th>PSTO-4</th>
<th>PSTO-Tot</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST</td>
<td>14.12**</td>
<td>26.67**</td>
<td>3.14</td>
<td>0.54</td>
<td>7.68</td>
<td>8.03</td>
<td>14.12**</td>
</tr>
<tr>
<td>CT</td>
<td>--</td>
<td>16.85**</td>
<td>12.55**</td>
<td>11.74**</td>
<td>4.30</td>
<td>5.58</td>
<td>19.76**</td>
</tr>
<tr>
<td>UP</td>
<td>--</td>
<td>--</td>
<td>1.49</td>
<td>5.58</td>
<td>4.84</td>
<td>4.76</td>
<td>2.81</td>
</tr>
</tbody>
</table>

**p < .01.

a $X^2_{4,.05} = 9.49; X^2_{4,.01} = 11.67.$
Appendix

Example Items: The Purdue Student-Teacher Opinionnaire

Key: A.T. = Associate Teacher (Student Teacher)

A. From Original PSTO

1. My contacts with the students I taught were highly satisfying and rewarding. A PA PD D

45. My professional preparation made me feel competent during my student teaching experience. A PA PD D

99. The university supervisor's evaluation of my teaching was justified. A PA PD D

B. From Modified PSTO

1. My A.T.'s contacts with the students she taught were highly satisfying and rewarding. A PA PD D

45. My A.T.'s professional preparation made her feel competent during her student teaching experience. A PA PD D

99. The University supervisor's evaluation of my A.T.'s teaching was justified. A PA PD D

C. Scale Value Attached to Responses

A = 4; PA = 3; PD = 2; D = 1

Thus, means of 2.5 are considered neutral, means greater than 2.5 are considered to reflect positive opinions toward the student teaching experience, and means less than 2.5 are considered to reflect negative opinions.
References


Yee, A. H. Do Cooperating Teachers Influence the Attitudes of Student Teachers? *Journal of Educational Psychology*, 1969, 60, 327-332.