This study was designed to determine if there were significant differences in the opinions of two groups of student teachers regarding their teaching experience. One group completed student teaching in a teacher/teaching center, the other completed student teaching outside of a teacher/teaching center. Their opinions were measured with twelve variables of the Purdue Student-Teacher Opinionnaire, which was administered to all student teachers completing student teaching at one institution of higher education. Scores for both groups were analyzed by the use of the t-test, and pooled and separate variances estimates were obtained. The results of the study show significant differences in favor of the center student teaching group in four of the twelve variables measured: (1) school facilities and services; (2) student teacher rapport with the principal; (3) curriculum issues; and (4) student teacher rapport with the students. Significant differences in favor of the non-center group were found in relation to one variable only: student teacher rapport with other teachers. The data indicated no significant differences between the two groups on the remaining seven variables: (1) teaching as a profession; (2) student teacher rapport with university supervisor; (3) student teacher load; (4) satisfaction with housing; (5) professional preparation; (6) student teacher rapport with supervising teacher; and (7) community support of education. Eight recommendations for student teaching programs are offered in conclusion. (MM)
COMPARISON OF CENTER AND NON-CENTER PLACED
STUDENT TEACHERS IN THEIR OPINIONS OF THE
STUDENT TEACHING EXPERIENCE

Leonard L. Mitchell
West Virginia Institute of Technology
November, 1974
Most professional educators agree that probably the single most important training phase in teacher preparation is the field experience, particularly student teaching. Institutions have programmatically approached this in a variety of ways, constantly searching, shifting, changing, to develop a field experience that fulfills their perceptions and expectations concerning what a "good" student teaching experience should be.

The hottest educational concept in recent years to become involved in the student teaching experience is the teacher/teaching center. Although the concept has a variety of names and acronyms, as indicated by the Syracuse Teacher Center Project in 1973(1), the major purpose of most centers is to improve the quality of instruction that takes place in schools and classrooms(2). That student teaching is a significant aspect in a center's attempt to improve the quality of instruction, is a widely accepted fact, as indicated by the following typical statements:

As colleges and universities collaborate with school systems in the development of teaching centers, they generally focus on the field experience phase, including student teaching and internships. Both school and university supervising and instructional personnel view the field experience phase as the core of teacher preparation. Herein evolves a situation which demands a review of expectations regarding roles of all individuals involved, if the teaching center is to constitute a fundamental thrust rather than a peripheral innovation in teacher preparation(3).

and:

...the function of a teacher's center is to maintain an effective educational program through continued teacher preparation in the knowledge, attitudes, and techniques of teaching(4).

Since the student teacher is the most important individual in a student teaching program, any substantive data that can be collected pertaining to his/her experience should prove beneficial to an organization in its attempts at...
improving or reconceptualizing its student teaching program. For this, and other reasons, teaching centers should be particularly concerned about their role in and impact on the training of teachers and in the student teaching experience of those under their auspices. In this regard, opinions of students who have taught in a center could provide extremely valuable feedback to center personnel and others interested in the center movement, for, as Woodruff suggests, a student perceives best what he has direct contact with (5).

Purpose and Scope of Study

The purpose of this study was to compare data pertaining to the student teaching experience of two groups of undergraduate secondary teacher education students: those who completed student teaching in and through the direction of a teaching center; and those who completed student teaching under a more traditional, college-based approach. For purposes of the study those in the first group are referred to simply as CENTER, and those in the more traditional group are referred to as NON-CENTER. The students involved in this study were all from the same higher education institution, and had received basically the same preparation in professional education. The study consists of data from 494 teacher education students who had completed student teaching over the past 4 1/2 years. Of those 494 students, 265 completed student teaching in CENTER secondary schools, and 229 completed student teaching in NON-CENTER secondary schools.

Study Hypothesis

If teacher/teaching centers are developed and maintained to improve the quality of the student teaching experience, then the opinions of those who completed student teaching in a CENTER school should be more favorable than those who completed student teaching in a NON-CENTER school vis-à-vis their student teaching experience. Therefore, the following null hypothesis appears to be appropriate:
There is no difference between undergraduate secondary teacher education students who completed student teaching through a teaching center school and those who completed student teaching through a non-center school in their opinions concerning 12 variables in the student teaching experience.

Evaluation Instrument

The instrument used to compare these two groups of student teachers was the Purdue Student-Teacher Opinionnaire which is designed to measure student morale. This instrument provides meaningful factor scores which breaks student teacher opinion and morale into some of its dimensions. The following is a categorized description of the twelve factors or variables included in the Purdue Student-Teacher Opinionnaire, hereafter referred to as the PSTO:

Variable 1 - "Student Teacher Rapport with the Supervising Teacher" deals with the student teacher's feelings about his supervising teacher: his competency as a teacher, his willingness and ability to work with student teachers, and his evaluation of the student teacher's work.

Variable 2 - "Student Teacher Rapport with the Principal" deals with the student teacher's feelings about the principal: his professional competency, his interest in student teachers and their work, his ability to communicate, and his skill in human relations.

Variable 3 - "Teaching as a Profession" pertains to the student teacher's evaluation of teaching in terms of personal desires and contributions, satisfaction with teaching, and rewards and demands of the teaching profession.

Variable 4 - "Student Teacher Rapport with the University Supervisor" focuses on his working relationships with student teachers, adequacy of time spent with and in the student teaching school, and his evaluation of the student teacher's work.

Variable 5 - "Community Support of Education" deals with the extent to which the community is willing to support a sound educational program.

Variable 6 - "Student Teaching Load" pertains to such matters as time demands, restriction on non-professional activities, record keeping and clerical work, and their load as compared with other teachers.

Variable 7 - "Student Teacher Rapport with the Students" samples feelings about treatment received from students, reaction to student behavior, acceptance by students, and degree of satisfaction from contacts with students.

Variable 8 - "Student Teacher Rapport with other Teachers" focuses on student teacher relationships with other teachers on the school faculty. The items pertain to student teacher opinion regarding professional ethics, cooperativeness, helpfulness and congeniality of teachers in the student teaching school.

Variable 9 - "Satisfaction with Housing" deals primarily with cost, location, and suitability of housing during student teaching.
Variable 10 - "Professional Preparation" has to do with subject matter courses, lesson planning, training for extra-curricular activities, and adequacy of education courses.

Variable 11 - "School Facilities and Services" pertains to the adequacy of facilities, supplies and equipment, and the efficiency of the procedures for obtaining materials and services.

Variable 12 - "Curriculum Issues" solicits student teacher reactions to the adequacy of the school program, provision for individual differences and the balance of the curriculum.

The PSTO contains 100 items to which students respond in one of four ways; agree, probably agree, probably disagree, and disagree. This provides a four-point scale, with scores approaching four being interpreted as best and those scores approaching one being interpreted as poorest. Overall scores and individual item scores are given as medians, and in addition, percentile norms are given for each of the twelve factors or variables. For this study, the data was subjected to a t-test, which will be described later.

The norm group for the PSTO was composed of 4,432 representative student teachers who were enrolled in 35 different institutions of various size with a wide geographical distribution. Item analysis and factor analysis technique, utilizing the Kuder-Richardson internal consistency formula number 21, showed reliability coefficients for the categories ranging from .53 to .93 with an overall reliability coefficient of .96. Additional statistical data in reference to factor analysis, correlations, percentile distribution of items, etc., may be secured from Purdue University[6].

Parameters and Limitations of the Study

As previously indicated, this study concerns itself with statistically analyzed data from one research instrument, the PSTO. This data was collected from student teachers from one institution of higher education, which had student teachers placed either in a specific Center, or in more traditional schools outside the Center.
Data was collected from all student teachers who had completed their student teaching experience over the past 4 1/2 years, or, from December, 1969, through May, 1974. This comprised 494 pieces of data, 265 of which were from students who were associated with the Center, and 229 of which were from students who were not associated with the Center.

Research Design

Data from the PSTO on the 12 variables or factors previously listed was divided into two groups; CENTER, and NON-CENTER. Each variable for the two groups was then statistically analyzed by utilizing the t-test for significant differences. Estimates of both pooled and separate variance were produced, including t-values, degrees of freedom, two-tailed probabilities, and of course, means and standard deviations.

Results of the Study

Results of the statistical analysis of the data described is provided on the following table.
<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>N CENTER</th>
<th>MEAN CENTER</th>
<th>STDEV CENTER</th>
<th>N NON-CENTER</th>
<th>MEAN NON-CENTER</th>
<th>STDEV NON-CENTER</th>
<th>POOLED VARIANCE EST.</th>
<th>SEPARATE VARIANCE EST.</th>
<th>t-value</th>
<th>df CENTER</th>
<th>df NON-CENTER</th>
<th>2-tail t-value CENTER</th>
<th>2-tail t-value NON-CENTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Student Teacher Rapport with Supervising Teacher</td>
<td>265</td>
<td>60.6113</td>
<td>12.160</td>
<td>229</td>
<td>60.0917</td>
<td>10.962</td>
<td>50</td>
<td>.620</td>
<td>491.11</td>
<td>483.03</td>
<td>.713</td>
<td>491.11</td>
<td>.713</td>
</tr>
<tr>
<td>2. Teaching as a Profession</td>
<td>265</td>
<td>32.0850</td>
<td>11.253</td>
<td>229</td>
<td>32.0917</td>
<td>11.440</td>
<td>37</td>
<td>.37</td>
<td>492.714</td>
<td>492.714</td>
<td>.618</td>
<td>492.714</td>
<td>.618</td>
</tr>
<tr>
<td>3. Student Teacher Rapport with Principal</td>
<td>265</td>
<td>36.0830</td>
<td>7.629</td>
<td>229</td>
<td>32.4541</td>
<td>7.515</td>
<td>30</td>
<td>.30</td>
<td>486.51</td>
<td>484.06</td>
<td>.418</td>
<td>484.06</td>
<td>.418</td>
</tr>
<tr>
<td>4. Student Teacher Rapport with University Supervisor</td>
<td>265</td>
<td>31.0850</td>
<td>6.958</td>
<td>229</td>
<td>36.9660</td>
<td>7.629</td>
<td>30</td>
<td>.30</td>
<td>486.51</td>
<td>484.06</td>
<td>.418</td>
<td>484.06</td>
<td>.418</td>
</tr>
<tr>
<td>5. Community Support of Education</td>
<td>265</td>
<td>52.0500</td>
<td>4.088</td>
<td>229</td>
<td>56.9660</td>
<td>4.014</td>
<td>30</td>
<td>.30</td>
<td>486.51</td>
<td>484.06</td>
<td>.418</td>
<td>484.06</td>
<td>.418</td>
</tr>
<tr>
<td>6. Student Teacher Rapport with Students</td>
<td>265</td>
<td>23.0850</td>
<td>3.976</td>
<td>229</td>
<td>23.0850</td>
<td>4.014</td>
<td>30</td>
<td>.30</td>
<td>486.51</td>
<td>484.06</td>
<td>.418</td>
<td>484.06</td>
<td>.418</td>
</tr>
<tr>
<td>7. Student Teacher Rapport with Other Teachers</td>
<td>265</td>
<td>20.0500</td>
<td>3.976</td>
<td>229</td>
<td>20.0500</td>
<td>4.014</td>
<td>30</td>
<td>.30</td>
<td>486.51</td>
<td>484.06</td>
<td>.418</td>
<td>484.06</td>
<td>.418</td>
</tr>
<tr>
<td>8. Satisfaction with Housing</td>
<td>265</td>
<td>15.7623</td>
<td>3.750</td>
<td>229</td>
<td>17.8981</td>
<td>4.580</td>
<td>30</td>
<td>.30</td>
<td>486.51</td>
<td>484.06</td>
<td>.418</td>
<td>484.06</td>
<td>.418</td>
</tr>
<tr>
<td>9. Preparation</td>
<td>265</td>
<td>18.8960</td>
<td>3.19</td>
<td>229</td>
<td>18.8960</td>
<td>3.19</td>
<td>30</td>
<td>.30</td>
<td>486.51</td>
<td>484.06</td>
<td>.418</td>
<td>484.06</td>
<td>.418</td>
</tr>
<tr>
<td>10. School Facilities and Services</td>
<td>265</td>
<td>24.2491</td>
<td>3.616</td>
<td>229</td>
<td>24.2491</td>
<td>4.580</td>
<td>30</td>
<td>.30</td>
<td>486.51</td>
<td>484.06</td>
<td>.418</td>
<td>484.06</td>
<td>.418</td>
</tr>
<tr>
<td>11. Curriculum Issues</td>
<td>265</td>
<td>15.9956</td>
<td>3.349</td>
<td>229</td>
<td>15.9956</td>
<td>3.349</td>
<td>30</td>
<td>.30</td>
<td>486.51</td>
<td>484.06</td>
<td>.418</td>
<td>484.06</td>
<td>.418</td>
</tr>
<tr>
<td>12. TOTAL</td>
<td>265</td>
<td>30.0750</td>
<td>3.18</td>
<td>229</td>
<td>30.0750</td>
<td>3.18</td>
<td>30</td>
<td>.30</td>
<td>486.51</td>
<td>484.06</td>
<td>.418</td>
<td>484.06</td>
<td>.418</td>
</tr>
</tbody>
</table>
Summary and Interpretation of Results

A. Variable 1 - Student Teacher Rapport with Supervising Teacher:

Probabilities under pooled and separate variance estimates are .620 and .618 respectively, therefore the null hypothesis is accepted.

It was expected that there would be a significant difference in this variable, in favor of the Center. Emphasis is placed on placement of student teachers under master teachers in specific schools, and a number of in-service workshops and graduate courses are offered to supervising teachers to enhance their role and to build their expertise as supervising teachers. Apparently this has not made any difference in the student teacher-supervising teacher relationship. Perhaps it may be assumed that when a teacher elects to serve as a supervising teacher he/she makes a commitment to that responsibility and may have or develop notions as to how to best function in that role, regardless of the number or types of in-service programs or graduate courses that may be required or offered.

B. Variable 2 - Student Teacher Rapport with Principal:

Probabilities under pooled and separate variance estimates are .714 and .713 respectively, therefore the null hypothesis is accepted.

It was expected that there would be a significant difference in this variable, in favor of the Center. Principals are involved in the selection of their schools as placement areas for student teachers, and they are also very much involved in the actual placement of student teachers within their building. Here too, in-service workshops and graduate courses are made available to principals to enhance their role and build their expertise as principals of buildings in which student teachers are trained. Apparently this has not made any difference in the student teacher-principal relationship. Building principals have complex roles and responsibilities in the performance of their duties. Thus they may not perceive the student teacher-principal relationship as a high priority, item in the hierarchy of responsibilities inherent in the position, or they just may not have adequate time to spend in working with student teachers in relation to other duties and responsibilities. The responsibility for the student teacher...
is probably delegated to the assigned supervising teacher, and the principal maintains simply a peripheral interest and/or involvement.

C. Variable 3 - Teaching as a Profession:

Probabilities under pooled and separate variance estimates are both .413, therefore the null hypothesis is accepted.

It was not expected that there would be any difference in this variable between the two groups. All students had received basically the same professional preparation, including work as tutors, teacher aides and observers, and had taken the same education courses.

It is assumed that most students had already built their own philosophy of education and had a basic understanding of the teaching profession, and their role in it. Apparently nothing occurred during their student teaching, either in Center or Non-center schools, to alter their perceptions and/or expectations of teaching as a profession.

C. Variable 4 - Student Teacher Rapport with University Supervisor:

Probabilities under pooled and separate variance estimates are .764 and .763 respectively, therefore the null hypothesis is accepted.

It was not expected that there would be any difference in this variable between the two groups.

The same supervisors from the institution visit student teachers in the Center, and those who are not in the Center. The same supervisory procedure is utilized for both groups of student teachers.

E. Variable 5 - Community Support of Education:

Probabilities under pooled and separate variance estimates are both .418, therefore the null hypothesis is accepted.

It was expected that there would be a significant difference in this variable, in favor of the Center. The Center operates in a large urban area which has a strong
tax base for school support, whereas the Non-center schools are located in communities that are small and rural, with a commensurately weaker tax base. It is assumed that perhaps student teachers from both groups, being in the school and community for such a short time, didn't have the time or inclination to investigate this aspect of the student teaching experience.

F. Variable 6 - Student Teacher Load:

Probabilities under pooled and separate variance estimates are both .859, therefore the null hypothesis is accepted.

It was not expected that there would be any difference in this variable between the two groups. Student teacher loads and assignments are fairly constant whether they have a Center or Non-center placement.

G. Variable 7 - Student Teacher Rapport with Students:

Probabilities under pooled and separate variance estimates are both .013, therefore the null hypothesis is rejected. There is a high statistical significance (.01 level) in favor of the Center.

It was expected that there would be a significant difference in this variable, in favor of the Center. As was mentioned in part E, the Center operates in a large urban area with a strong tax base for school support. Salaries are quite high for teachers, and a plethora of well qualified, dedicated teachers apply each year in this area, with only a few being chosen. Schools are well-equipped, the urban community offers many academic and cultural advantages, and as a result the students are well-rounded, highly motivated, and academically-oriented to a large extent, with a large proportion going on to post-secondary education. This environment is in direct contrast to the small, rural areas in which Non-center student teachers are placed. Therefore, students in Center schools, being more academically-oriented and more aware of the advantages of both secondary and post-secondary education, are more likely to meet or exceed student teacher expectations, which most certainly has a direct affect on the type and strength of rapport between student and student teacher.
H. Variable 8 - Student Teacher Rapport with Other Teachers:

Probabilities under pooled and separate variance estimates are .012 and .011 respectively, therefore the null hypothesis is rejected. There is a high statistical significance (.01 level) in favor of the Non-center group.

It was expected that there would be a significant difference in this variable, in favor of the Center. This, of course, was not the case. A possible explanation might be that employment of teachers in the Center area is highly competitive, as indicated in part G. Teachers come into the system with diverse backgrounds and from many different geographical areas. The Non-center groups serve in areas that tend to employ teachers who are from the general area served by the school systems. In addition, a large majority of the Non-center student teachers came from these areas originally, or reside in the area where they are student teaching. Thus they are imbued with the same values, beliefs, and attitudes as the teachers with which they work. Therefore, relationships may tend to be close in the Non-center schools, and perhaps somewhat cautious in the Center Schools.

I. Variable 9 - Satisfaction with Housing:

Probabilities under pooled and separate variance estimates are .485 and .484 respectively, therefore the null hypothesis is accepted.

It was not expected that there would be any difference in this variable between the two groups. Students generally commute to their assigned school from their college dormitory, from their homes, or from their apartments. No changes in housing are necessitated by the student teaching assignment.

J. Variable 10 - Professional Preparation:

Probabilities under pooled and separate variance estimates are .070 and .072 respectively, therefore the null hypothesis is rejected. There is a statistical significance (.07 level) in favor of the Center.

It was not expected that there would be any difference in this variable between the two groups. This was not the case, and is quite a curious discrepancy since students in both groups received the same preparation at the institution involved.
Certainly the setting in which the student teaching experience occurs has much to do with the difference. If the institution's preparation program accentuates certain innovative practices and/or concepts, and the student teacher is placed in a situation which does not commensurately support such practices and/or concepts, then surely the student teacher may question the preparation received at the institution. If the preparation and the coaching situation complement or supplement each other, then surely the student teacher may see the institution's preparation program as adequate.

K. Variable 11 - School Facilities and Services:

Probabilities under pooled and separate variance estimates are both .000, therefore the null hypothesis is rejected. There is an extremely high statistical significance (.00 level) in favor of the Center.

It was expected that there would be a significant difference in this variable, in favor of the Center. As was mentioned in part G, the Center operates in a large urban area, one of the largest in the state. There is a strong tax base for school support, programs are well financed and supported, schools are well-equipped, and many cultural and academic advantages are available. Non-center schools are rural, small, poorly equipped, and have a weaker tax base for school and program support. Therefore it was not unexpected that student teachers perceived school facilities and services as more than adequate in the Center schools.

L. Variable 12 - Curriculum Issues:

Probabilities under pooled and separate variance estimates are both .000, therefore the null hypothesis is rejected. There is an extremely high statistical significance (.00 level) in favor of the Center.

It was expected that there would be a significant difference in this variable, in favor of the Center. This is partially due to reasons cited in parts G and K. Programs
receive adequate financial support, and in fact, innovative programs are encouraged. Schools in the Center operate such programs as: team teaching, open classrooms, small and large groups instruction, seminars for students, individualized instruction, non-graded schools, modular scheduling, and a number of other more innovative programs and/or concepts. Non-center schools do not have adequate financial or other types of support to encourage this type of experimentation.

M. Total of Twelve Variables:

Probabilities under pooled and separate variance estimates for the totals of the twelve variables are both .076, therefore the null hypothesis is rejected. There is a statistical significance (.076 level) in favor of the Center. Even though this appears to be the case, this significance level is probably somewhat distorted due to the fact that both variables 11 and 12 were beyond the .000 level of significance, obviously weighing the total results in favor of the Center.

Recommendations

1. There needs to be a total re-examination of placement procedures and policies. The study has shown that there is no difference in student teacher-supervising teacher and student teacher-principal relationships. Perhaps this is partially due to the placement procedures and policies. Traditionally the student teacher is assigned to a supervising teacher by the principal. Criteria under which this assignment is made may be less than objective. Center personnel need to take a more active role in the choice of supervising teachers, as do the student teachers themselves.

2. There needs to be a careful examination made of in-service workshops and/or graduate courses offered to supervising teachers and/or principals. A major thrust of the Center is to provide the above services to enhance their role and to build their expertise as teacher educators. Careful analysis of objective data concerning workshops and graduate courses may provide clues, or guidelines, for increasing the efficacy of these offerings.

3. Principals, as the educational leaders in their respective schools, need to take an active role in Center activities. They should be utilized more as consultants,
resource persons, lecturers, and small and large group leaders in Center and teacher
education programs to promote more contact, more understanding, and more communication
between themselves and prospective teachers, supervising teachers, college personnel,
and Center personnel.

4. Student teachers need to have an opportunity to become familiar with all aspects
of community support of education. This could be done through Center and/or college
programs, or more logically, through programs conducted at the public school level
where student teachers are placed.

5. Student teachers need training and expertise in dealing with students of low
motivation and low achievement. The study shows that student teachers in Non-center
schools are less able to establish rapport with students of this type, who do not
meet student teacher expectations. Juxtaposed with this is the possibility that
student teacher expectations may be too high, or unrealistic. In this event, college or
Center programs need to deal with this by exposing student teachers to a variety of
students in a variety of schools throughout their teacher preparation program. Central
to the possible amelioration of this issue is the placement of student teachers, and other
pre-service students, with public school teachers who have demonstrated ability in working
with students of this type.

6. Programs or procedures need to be initiated and implemented to increase student
teacher rapport with other teachers. Student teachers need to feel that they are
accepted, part of the "team", and important in the total educational program of the school.
Even though they are in a building or a program for a short period, they are forming
perceptions and opinions about teaching, teachers, and students that may be the basis
for future activities or decision-making. All teachers, not just the supervising teacher,
serve an important function in the education of these prospective teachers.

7. Institutions need to re-examine their preparation programs to insure that student
teachers are not receiving a jaundiced or myopic conception of teaching. The study
seemed to indicate that student teachers in Non-center schools were somewhat skeptical
of their professional preparation vis-à-vis their student teaching situation and experience. Institutions need to insure that student teachers, as much as possible, be trained to cope with a wide spectrum of educational situations. Possibilities include teacher aide programs, tutoring, observation, simulated teaching, gaming, microteaching, multi-student teaching opportunities; to name a few.

8. If teacher/teaching centers are making some differences in student teachers opinions regarding the student teaching experience then perhaps it may be beneficial to establish programs whereby student teachers are placed in center schools for a period of time, and then placed in Non-center schools for an equal period of time. Useful and informative feedback and comparisons could then be made. Students would be exposed to a variety of teaching environments, they would be able to form more realistic concepts of teaching and their role as a teacher, the institution and the Center would receive more objective data from these students concerning their experience, and as a result, more sophisticated research could be conducted on this most vital aspect of teacher preparation.
References

(1) Yarger, Sam J. and Albert Leonard. *A Descriptive and Analytical Study of the Teaching Center Movement in American Education*. School of Education, Syracuse University. Sponsored by the National Teacher Corps and the Office of Career Education of the United States Office of Education.


