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This is the final report of two-thirds of a three-year project jointly sponsored by Adelphi University, Central School District Number Four, Plainview, New York, and the New York State Education Department. The project was discontinued after the second year. A major weakness in teacher education is seen to be the traditional gap between pre-service training (the responsibility of the university), and in-service training (the responsibility of the school). Close cooperation and communication between university and school was intended to unify the student's training and to have a positive effect upon skills, attitudes, values, and behaviors. Tentative conclusions indicated that the closer communication, greater personal involvement of cooperating teachers in the design of the program, and greater acceptance and involvement of student teachers in the affairs of the school were having the desired effect of making the student teaching experience a broader, deeper, more meaningful one. (BP)

A SCHOOL-UNIVERSITY PROGRAM
FOR INTEGRATED TEACHER TRAINING

FINAL REPORT
July 1968

Implementing Agencies:

CENTRAL SCHOOL DISTRICT NO. 4
PLAINVIEW, NEW YORK

ADELPHI UNIVERSITY
GARDEN CITY, NEW YORK

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

A SCHOOL-UNIVERSITY PROGRAM

FOR INTEGRATED TEACHER TRAINING

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JULY 1968

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Central School District No. 4
Plainview, New York

Adelphi University
Garden City, New York

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A SCHOOL-UNIVERSITY PROGRAM

FOR INTEGRATED TEACHER TRAINING

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I. INTRODUCTION

This is the final report of two-thirds of a three year pro-
ject which has been discontinued because of withdrawal of State
support. Accordingly, as will be seen from the narrative report
which follows, little in the way of analyzed data or results can
be reported. It is hoped that this report may nevertheless be
of value to future investigators.

A major weakness in teacher education, according to many
authorities, is the traditional gap between pre-service and in-
service training, with the university assuming responsibility
for preparation of a teacher-in-training, and the school taking
major responsibility for on-the-job training. Student teaching
is usually seen as the responsibility of the university and the
cooperating school. Although the past fifteen years have seen
an increasing tendency by universities to place student teachers
in public school rather than laboratory school settings, the
school, in many instances, has played little role other than as
a repository for the student teacher. Frequently, students are
placed in a school setting which involves little two-way commun-
ication between school and university, and are thus exposed to
experiences which may be minimally related to their classroom
training and which may represent conflicting goals, values or
methodologies. One of the premises upon which this project was
founded was that close cooperation, communication and integra-
tion of effort between school and university could increase the
likelihood of a student receiving a unified training experience
which might have a positive effect upon skills, attitudes, values
and behavior.

Del Popolo and Hillson (6, p. 15) studied the role of pub-
lic schools in the student teaching process and concluded, "The
evidence is impressive. It indicated that a relationship between
public schools and student teaching programs created values which
accrued to both." Allen and Seaberg (1, p.12) suggest that "the
most neglected link between the teacher education institutions
and the public school is the principal. Yet of the triumvirate--
college supervisor, supervising teacher and school principal--the
principal is potentially the most efficacious member of the
teacher education team." On the other hand, Inlaw (15, p.10)
points out that "in many colleges and universities the supervisor
of student teaching is the most underestimated, in fact, an

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almost forgotten member of the department of education," and Johnson (16, p.469) sees the college supervisor as "the lifeline between the central authority and the cooperating centers."

Very few actual research studies are available in areas directly pertinent to this project, although other projects of a somewhat similar nature have been proposed and described, and much has been written in terms of needs and goals.

Havighurst (13) has pointed out the need for revising present teacher training curricula, stating that "such courses should involve actual experience....in the schools themselves, culminating in practice teaching experience in these schools." Anderson (3) and others, describing the reasons for establishing a school-university cooperative program at Harvard, state "the belief that public school systems might more easily close the gap between educational ideals and educational realities if they joined with private universities in programs of research and demonstration." Heathers (14), describing the strategy of educational reform, states, in a section on educating the educators, that "one or two years of professional course work in education should be taken, followed by an apprenticeship of at least two years under careful supervision."

Some of the most pointed attempts at improving teacher training by school-university programs have revolved around the problems of urban schools. Thus, Rivlin (23), describing a program of teacher education for urban schools, includes the following among his basic assumptions:

"No teacher education program can be effective without the close cooperation of schools and colleges."

"The elementary or secondary school classroom and not the college is the place where teachers learn most about how to teach."

"The first years of full-time teaching are of such critical importance in influencing the teacher's professional development, that they should be included in a program of pre-tenure teacher education."

Similarly, Haberman (11), discussing needed changes in teacher preparation, lists the following among ten critical conditions influencing program development:

"The program should breach the gap between a particular university and an urban school system. Most important is a feeling of responsibility to the urban school system on the part of

the college faculty who participate, and a feel-
ing of involvement in teacher education on the
part of the public school personnel."

"Student's professional course work should
be centered on the school neighborhood in which
he will actually work."

"Transfer will be maximized if students in-
tern and begin to teach in the same school neigh-
borhood."

A Hunter College project in New York City, as described by
Haubrich (12), supplied evidence that teacher apprehensiveness
can be alleviated and prospective teacher perceptions modified
by direct contact with children in the schools they will serve,
while a report on the Queens College "Bridge Project" by Edgar (8)
cites the importance of student teacher involvement in the neigh-
borhood schools and joint programming by college and board of
education. The June 1964 report on the Campus School Program of
the New York City Schools further testifies to the effectiveness
of a cooperative program by the schools and colleges improving
the pre-service and in-service growth of teachers.

While these and similar reports focus on preparation of
teachers for urban schools, many aspects of these programs and
much of the valuable learning gained in these projects should
be adaptable in the planning of a school-university program for
suburban teachers. However, no specifically related research
studies involving measurement and evaluation have been located
to this point.

It was therefore proposed that Adelphi University and the
Plainview public schools collaborate on a project of intensive
and planned cooperation in an attempt to provide a developmental
and integrated experience for a group of elementary teachers-in-
training. It was hoped that such a program would result in
measurable differences, when these student teachers were eventu-
ally compared to a control group, in:

1. Internal states such as anxiety, knowledge, attitudes,
   values or goals;

2. Observable factors, such as teaching behavior, super-
   visor's ratings, percentage of group electing intern-
   ship training, employment ratings, etc.

After a planning stage and a pilot operational stage which
will terminate in June 1968, the project was to move into its
full operational stage during the 1968-69 school year. During
this full operational phase it had been expected that twenty
student teachers would proceed through their student teaching

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experience in Plainview, following a program developed cooperatively by school and university personnel, and involving a number of activities additional to the usual student teaching experience. Cooperating teachers were to have participated in a series of planning and training workshops. A control group of student teachers was to proceed through its student teaching experiences elsewhere. Both groups were to have been evaluated on a series of pre-test and post-test measures, with differences to be analyzed statistically. The project was to have concluded with a year of follow-up study of the on-the-job performance of our student teacher graduates. (All of this has been spelled out in detail in the Continuation Request submitted to the State Education Department on April 15, 1968, and amplified in a detailed memorandum on May 28, 1968.)

This report will review the project historically through the planning and pilot operational stages. However, since no true control group was to be identified until 1968-69, and since the manipulation of experimental conditions was necessarily exploratory and consequently inconsistent during the pilot stage, data collection was also conducted in an exploratory fashion (as specified in the May 1967 proposal, page 18) with no attempt to test hypotheses or confirm expectations.

II. PROCEDURES

The nature of this report is such that a historical review of procedures seems more appropriate than the categories suggested in the Instructions for Year End Reports. Information concerning a. Subjects, b. Educational Treatments and c. Instruments Used will be included. However, since no formal data analysis was conducted this will not be presented.

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A. The Planning Stage (1966-67)

The first year of this project (1966-67) was structured as a planning year with the total project initially conceived of as a six-year study. It was originally proposed, during this planning year, that Adelphi University assign several student teachers in their senior year and several students in their junior year to Central Park Road School in Plainview. It was then planned, during this initial year, to field-test various aspects of the proposed experimental program with these students, and to hold regular informal planning conferences between Plainview and Adelphi staff to review these experiences, evaluate their apparent effectiveness and consider alternate approaches. It was further proposed that a series of more formal planning conferences, to include an advisory panel of project consultants, be scheduled during the academic year, preparatory to spelling out experimental design, program specifics, variables to be measured, evaluative data to be collected and statistical treatment for the projected continuation request.

During the 1966-67 school year, Adelphi assigned twelve student teachers in their senior year and twenty-five students in their junior year to the Plainview schools. These students were based at Central Park Road School, but in many cases were assigned placement in other schools of the district for part of their stay. All of these students were enrolled in A.T.E.P. (Adelphi Teacher Education Program) and received their assignment to Plainview as a routine part of their teacher training experience.

A project assistant was appointed to work closely with the building principal and the Co-Principal Investigator for the University, and with cooperating personnel in the home base building to minimize interference with regular duties and on-going activities, to prevent the program from becoming a burden which others might resent, and to maintain detailed records of planning and activity so that a body of process data would be accumulated as a part of the project. It was envisioned that the

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process data would be of primary importance for review and evaluation purposes during the early phases of the project, when objective test data and similar material were not yet available or meaningful. It was felt also that this process data would continue to be of major significance for qualitative evaluation even during the later and more tightly controlled phases of the project, because of the many undefinable and unmeasurable variables which enter into any educational field research project.

The planning year proved to be an active and valuable year as various ideas were field-tested and the administrative problems inherent in the project were confronted and tackled. Many modifications in student placement and training were attempted, and much progress was visible from fall to spring in developing a flexible and fluid operation, allowing for student mobility and differential assignment in terms of perceived need. A review of some of the year's activities follows.

1. Senior Students

Senior student teachers were assigned to three Plainview schools, Central Park Road, Old Bethpage and Oak Drive. Each was assigned to two experiences, one at the intermediate and one at the primary level, with individual modifications in an attempt to meet the needs and preferences of each student teacher.

Student teachers met frequently with the principal after school hours for seminars aimed at orientation to the school, discussions of reading program, grouping policies, procedures for reporting to parents, interviewing techniques and additional curricular issues pertinent to the school system. These seminars were informal, non-credit seminars held in addition to the formal course work.

Each cooperating teacher prepared evaluative reports for the college supervisor and, in addition, informal evaluative material was submitted to the principal, so that both Co-Principal Investigators might share in the training process. The principal also conducted several classroom observations of the student teacher followed by supervisory discussions.

Student teachers met in a series of seminars with other school staff, including specialists in reading, speech, television, and audio-visual.

Student teachers participated in the experimental use of closed-circuit television as a training procedure. In January, several student teachers conducted fifteen-minute lessons with a group of six students, and these lessons were video taped. Following the taped lesson, each student teacher observed the

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lesson in the company of the principal, and this was followed by a supervisory session in which the student teacher served as her own critic and supervisor. She then discussed with the principal, not only her evaluation of the lesson, but her evaluation of this technique for in-service training. This procedure was considered extremely valuable by all the student teachers involved and was repeated in the spring with the new student teachers. In one case, the cooperating teacher participated also in the review session. At the end of the semester, two group sessions were held at which all student teachers observed and criticized each other's tapes, with both the principal and Adelphi supervisor.

Student teachers, accompanied by their field supervisor, observed I.T.A. at Oak Drive School, learned about team teaching, visited a demonstration library materials center, sat in on parent-teacher conferences, and visited other classrooms selected in terms of particular grade or subject interests. Student teachers also met for an after-school seminar with the Plainview Superintendent of Schools.

2. Junior Student Observers

Junior student observers were given the opportunity to visit each of the teachers and classrooms at Central Park Road School and to discuss their observations with the principal. This provided the opportunity to observe a wide range of teaching techniques and methodologies and teaching personalities, as well as the variety of educational programs in operation in Plainview. Additionally, they visited the I.T.A. program at Oak Drive School and the non-graded primary at Old Bethpage School. In Central Park Road School they were able to observe, in addition to the usual wide range of classroom approaches, numerous team teaching techniques, a recently developed science curriculum, the use of closed-circuit television, the utilization of teacher aides, and the various uses to which we are putting a widely heralded library materials center.

3. Other Planning Activities

The building principal met frequently with informed personnel in the area of student teaching to gather information from as wide a range of sources as possible. Among conferences held were the following:

• Dr. Robert Owens and Dr. Stephen Lockwood, both at Brooklyn College, N.Y., concerning problems facing the supervising teacher and administration.

• Mrs. Sylvia Seidman, supervisor from Hofstra, who is

investigating the relationship of student teacher
self-concepts to their direct teaching style, as
determined by the ratio of teacher discussion to
over-all talk in the classroom.

• Dr. Morgenstern, Department of Elementary Education,
    Hofstra University, regarding a student teaching
    center.

• Faculty visitor from the Glassboro State College,
    Glassboro, N.J., regarding teacher training program
    there.

• Superintendent of the Haddon School District, Westmont,
    N.J., relative to the role of a school district in
    student teacher development.

• Students from Wheelock College, Boston, Mass., regard-
    ing the unified teaching procedure.

• Superintendent of the Media School District, in Phila-
    delphia, Pa., regarding the role of the superinten-
    dent in student teaching programs.

• Report from Mrs. Rothman, supervisor at Adelphi, con-
    cerning problems facing universities in this program.

• Mrs. Janet Shultice, supervisor from Hofstra, regarding
    program of improving teachers' classroom behavior.

• Mr. Herbert Levine, Assistant Principal at Plainview
    Junior High School, Plainview, N.Y., regarding the
    Harvard Graduate School at Pittsburgh.

• Dr. Bernard DeCourcy, Assistant Principal at Plainview
    Junior High School, Plainview, N.Y., concerning the
    teacher training program in East Michigan.

• Mrs. Anna Mae Walker, Education Department, Stony Brook
    University, Stony Brook, L.I., regarding teacher
    training program at her University.

• Superintendent and principals of the Eastchester School
    District, Eastchester, N.Y., concerning their student
    teacher training experiences.

The Research Consultant met with student teaching per-
sonnel at Queens College, to review related projects under way
there and to explore long range possibilities for additional
liaison.

Several planning conferences were held with consultants
who were invited to react to written material describing the

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project. Among the consultants were Dr. John Ames of Queens College, Dr. Maurie Hillson of Rutgers University, Dr. Rita Stafford of C. W. Post College, and Dr. Daniel J. Healy, Assistant Superintendent of the Plainview-Old Bethpage School District.

Meetings between Plainview and Adelphi staff were held frequently and regularly. However, it was not possible to accomplish all of the planning hoped for during this planning year. The working through of mechanical and operational procedures with large numbers of individuals (observers, student teachers, cooperating teachers) and the juggling of individual schedules, not only within Central Park Road School, but also among schools, occupied more of the year than was originally anticipated.

Also, unexpected staff changes at Adelphi University directly affected this project when the University appointed a new field supervisor and Co-Principal Investigator for the University in mid-year. This necessarily hindered planning during the crucial mid-year period, while the new Co-Principal Investigator for the University concentrated on the more immediate responsibilities of getting to know her student teachers, defining her role, developing working relationships with cooperating teachers, and simultaneously attempted to catch up with the history of the project to date. Consequently, it was not possible to progress as far as originally planned in field-testing various training and evaluative approaches for their applicability to this project.

Because the planning year, while most productive and valuable, did not bring us to the definitive point initially anticipated, the original plan to move from a planning year directly into full operational activity was modified slightly. A proposal for an experimental program was submitted to the Commissioner of Education calling for the transitional step of a pilot operational phase following the planning phase and preceding the full operational phase. This pilot operational year was to involve a full program of operations with groups of both junior students and student teachers. Pre-testing and post-testing were to be scheduled, but primarily for purposes of field-testing a variety of instruments. It was expected that sufficient experience would have been gained by the cooperating school-university team to permit definition and implementation of the full operational phase in 1968-69.

B. The Pilot Operational Stage (1967-68)

The 1967-68 academic year was to represent the pilot operational phase of the proposed School-University Program for In-

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tegrated Teacher Training. As described in the May 1967 application to the Commissioner of Education, this phase was to involve a full program of operations with groups of both junior students and student teachers. Testing was to be conducted, but primarily for purposes of field-testing a variety of instruments. Control groups were to be selected, but only via post hoc selections and were, therefore, not to be considered or treated as true control groups. The <u>full operational phase</u> of this project was scheduled for the 1968-69 school year.

1. Juniors

A pool of fifty students entering their junior year was selected by Adelphi University, and from this list half were randomly assigned to experimental and half to control groups. A battery of tests (described below) was administered by the Research Associate to the total group at Adelphi. Control group students then proceeded through the Adelphi program normally, and were assigned to other schools for routine observer assignments. The experimental group was assigned to Plainview for further assignment to a school within the Plainview district. During the junior year, these students devoted a half-day per week to their school assignment.

Thus, twenty-five juniors were placed in five schools in the Plainview District—three primary and two intermediate. Principals in all schools were requested to make arrangements permitting junior observers opportunity for actual participation in individual tutoring, small group instruction, and some class teaching. Each junior observer was also programmed in such a way as to permit observation of other activities not regularly included in their particular class assignment. Therefore, during the year all junior observers, in addition to their classroom observation and teaching, were exposed to non-graded primary organization, I.T.A. teaching, closed circuit television, materials center library, and team teaching.

The experimental and control groups of juniors, from whom a great deal of pre-test data was collected during the year, formed the pool from which an experimental and control group of student teachers were to be selected for the <u>full operational phase</u> of the project in 1968-69.

2. Student Teachers

Ten student teachers were assigned to Plainview for a full sixteen-week experience during the fall semester. Half the group spent eight weeks at Central Park Road School assigned to an intermediate grade level, and half was assigned to a primary grade level

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at Old Bethpage School. The two groups switched assignments for the next eight weeks. A wide variety of extra-class experiences was provided for the student teachers, including field trips, visits to other classes and schools, meetings with various specialists and administrative personnel, etc. The student teachers prepared lessons for video tape, observed and criticized themselves in play-back, and reviewed video tapes with their field supervisor and cooperating teachers. University seminars were conducted by their field supervisor at Plainview. Each student teacher maintained a daily log of activities. At the beginning and end of their assignment, student teachers met in a group with the Research Consultant for off-the-record discussions of their reactions. Each student teacher submitted to the Research Consultant a confidential evaluation of her experience with each cooperating teacher. Student teachers participated in a testing program conducted by the Research Associate.

During the spring semester, ten new student teachers were assigned to Plainview for a full sixteen-week experience. Again, half the group spent eight weeks at Central Park Road School assigned to an intermediate grade level, and half was assigned to a primary grade level at Old Bethpage School. The two groups switched assignments for the next eight weeks. During the spring term a number of program modifications were introduced. Video tape was utilized less formally and audio tape more. Student teachers continued to participate in weekly professional hour activities, but these were more highly structured, with eight planned content meetings during the sixteen-week term. Student teachers received more specific early briefing in meetings with the Research Consultant and participated in a more structured testing program (described below).

A university consultant conducted several group meetings with student teachers on Flanders Interaction Analysis and then met individually with selected student teachers to review matrices derived from audio tapes, and to discuss teaching techniques and definition of goals.

3. Cooperating Teachers

Cooperating teachers participated in an intensive workshop during the summer and in all-day workshops at Adelphi in September, November and March (Appendix A,B,C,D). Cooperating teachers were actively involved in reviewing previous proposals for this project and in recommending modifications for the final operational phase. They have also devoted additional time regularly to a variety of activities including attendance at or participation in seminars, conferences with student teachers, etc. Cooperating teachers also maintained daily logs, wrote confidential evaluations of their student teachers for the Research Consultant, and participated in an intensive testing program conducted by the Research Associate.

4. Evaluation Procedures

A major focus during the first half of this pilot operational year was review and selection of instruments and procedures for data collection. Various methods for analyzing teacher-pupil interaction were reviewed, including Flanders Interaction Analysis, Medley and Mitzel's OScAR Technique, Withall's Social-Emotional Climate, and Ryan's Teacher Characteristics Scale. Additionally, recent variations of the Flanders system by Hough, Honigman, Amidon and Hunter, Simon and Agazarian, and interaction systems proposed by Bellack and by Wightman were reviewed. The Flanders system was selected as being most useful for purposes of this project, in which the data to be collected was also visualized as being part of the ongoing project. The use of video tape recordings as a source of interaction analysis data was explored, and later in the semester audio taping was introduced. It was finally decided to use audio tape recordings for data collection and use video tape more informally, as another instrument in supervision and training.

Process data collected included continuous daily recordings of all aspects of the program, minutes of meetings and conferences, student and teacher logs and evaluations. During the spring semester attempts were made to tighten up the logs, defining more specific record procedures. Also the use of structured check lists or rating scales for use by the student and cooperating teachers in evaluating each other was introduced. During the spring semester a "control" group of student teachers was identified, and some comparative data was collected.

A number of tests were reviewed for possible use as part of a comprehensive pre-test battery later on. A number of different measures of anxiety were considered, and two tests were finally selected: the IPAT Anxiety Scale and the more informal Puchel Experience Comfort Scale aimed specifically at pre-teaching anxieties. From the wide array of personality measures screened, The Cattell Sixteen Personality Factor Scale was chosen. Attitude measurement was focused on the Rokeach "D" Scale (labeled Public Opinion Scale here), and on related measures derived from the work of Kerlinger (Education Scale VII) and Pedhazur (Teachers at Work) in the area of related educational attitudes. All of these tests were administered on a trial basis to juniors at Adelphi, and to student teachers during the fall semester. The tests of attitude and personality were also administered to co-operating teachers. The same battery was administered as a trial pre-test to new student teachers at Plainview at the beginning of the spring term, and to the control group of student teachers also. Additional tests were added to the battery at this time. Rotter's I-E Test, measuring locus of control, was administered to experimental and control student teachers, to juniors at

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Adelphi and to cooperating teachers. Additionally, a sample of intermediate grade pupils, all student teachers, and all cooperating teachers were administered a semantic differential scale for several parallel and pertinent concepts. Only the evaluative dimension of semantic space was investigated at this point.

Reviews of each test or instrument used, and copies of all instruments which are not published and readily available, are included in the appendix (Appendix E,F,G,H,I,J,K,L,M,N).

III. RESULTS

There is no statistical data which can be presented as the results of this project. The "result" of the planning and pilot years was a proposal for a controlled study to be conducted in 1968-69 and, therefore, the only tangible result of this project is the continuation request already submitted to and rejected by the State Education Department. The process data compiled in the past two years (included partially in the appendix of this report and in much greater detail in the appendix of the previous report submitted in August 1967) was invaluable in enabling the investigators to modify procedures constantly, and to organize a program for the operational phase which was meaningful and operationally viable, and which included such vital but less visible features as true faculty involvement. All of this is now lost. One result of this project seems to be a handful of beginning teachers who have gone through a somewhat atypical student teaching experience, which despite its "bugs" seems to have proven satisfying to many of them. Another result is the frustration but also the increased wisdom of the investigators. Perhaps this may yet yield some dividends for the field of education.

While test data was also collected during the pilot year, it was collected "primarily for purposes of field-testing a variety of instruments" (Project Proposal, May 15, 1967, page 8). A control group of student teachers was selected during the spring term but as stated in the proposal these were post-hoc selections and were only tentatively definable as a true control group since they were not randomly selected from the same population as the experimental group. (Selection of a true control group was part of the operational design for 1968-69).

Because of the above limitations, and because the experimental field situation was, itself, in a state of constant modification and flux during the pilot year, no hypotheses were projected nor any specific statistical analyses projected during this time. Had the project continued into its final year, data would have been analyzed in some depth for the purpose of identifying trends, or of seeking clues which might lead to modifications in the instrumentation or proposed data collection. Although rejection of the continuation request negated the need for this, all tests have been scored, test scores computed, and raw data compiled in tabular form. Since future investigators may find some value in this material, results are included in Appendix O.

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IV. DISCUSSION AND SUMMARY

A long recognized problem in the improvement of teacher education is the need for closer relationship between teacher education institutions, student teachers, and the school(s) in which the student teachers work. This project was conceived to seek a solution for that problem, and implemented for two years in a manner representing a recognized compromise between the looseness and subjectivity of many educational innovations in the field and more rigorous, empirical, test-data-oriented studies. The project was conceived as a three year program dealing with one aspect of teacher training. Only the first two years were completed, and while there are no reliable statistical findings, descriptive reports by the persons involved can be adjudged valid.

We have stated that the program proposed for the operational phase "included such vital but less visible features as true faculty involvement." This feature of faculty involvement is an example of a result difficult to quantify or to demonstrate statistically, but perhaps more pertinent than any other single factor to the success of a project in student teacher training. At the beginning of the project, two years ago, cooperating teachers represented a broad spectrum of involvement, from those anxious to help train a new teacher to those seeking to please a principal or to get some additional help with classroom chores or to earn free courses at the university. This project required additional time from cooperating teachers, and for this they were partially compensated. During the course of the two years, cooperating teachers were asked on a number of occasions to review, criticize and modify the project itself, and to address themselves as a group to some of the ethical and professional issues involved in being cooperating teachers.

A gradual, subtle, but clearly discernable change in the attitude of cooperating teachers was noticeable during this two year period. The valuation of their extra services as warranting compensation and the obvious effect of their input upon project development were instrumental in the development of an increasing sense of involvement and responsibility. Despite the continuing differences in teacher personality and teaching style, the project had begun to develop a sense of being which was hardly quantifiable but clearly present.

The Co-Principal Investigator for the University found that the unusually large percentage of her time allotted to the project enabled her to become more thoroughly aware of the needs and problems of the student teachers; that closer and more fre-

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quent contact with school personnel facilitated her under-
standing of the need for mutual adjustment of the cooperating
teachers and the student teachers; her presence on the school
site made feasible an exchange of ideas and materials not pos-
sible in the course of the usual supervisory visits and con-
ference. The super isor became in effect an adjunct member of
the school staff.

Student teachers not only reported but, in their behavior,
obviously came to regard their role as integral in the school
situation. In effect, they became junior members of the staff,
working under the joint supervision and with the aid of both
cooperating teachers and University supervisor. Their reports
on their participation in a variety of school activities indi-
cated their concern with all aspects of the school program.
Their student teaching experience was broadened and deepened
beyond the usual participation in the more usual restricted
practice teaching.

It seems clear that a pilot teacher training project with-
out quantified data or formal hypotheses to be tested can be a
valuable research project.

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APPENDIX

Cooperating Teacher Workshop

August 1967

PLAINVIEW—OLD BETHPAGE
CENTRAL SCHOOL DISTRICT NO. 4
Plainview, New York

Report of

COOPERATING TEACHER WORKSHOP

August 30 and 31, 1967 — at Central Park Road School

WEDNESDAY, AUGUST 30, 1967 — Morning

Mr. Leonard Kramer: "The Project, and the Role of the Coopera-
ting Teacher in the Project"

1. Innovation — workshop for teachers — funded.

2. Brief history of project:

   • Conversation with student teacher gave birth to idea.

   • Interviews in recruitment program brought realization
     of limited experiences of future teachers.

3. Role of cooperating teacher:

   • Goal — do more than any other program has done before.

   • We seek your creativity, etc.

4. Last year's grant:

   • Consultants from other colleges.

   • Failed to talk to last year's cooperating teachers.

   • Student teachers and principal.

   • Reticence to serve as cooperating teachers.

   • Involvement good last year.

5. Goal — "mandate" all schools to accept student teachers.

6. Daily log of what was done with student teachers.

A-1

7. Problems:

   - Problems we start with (see page 1 of final report).

   - Quote from N.Y. TIMES: Universities have had "then" people teach "now" students.

8. Cooperating teacher's role will be one that is part of this total involvement.

9. New design to be given to cooperating teachers for two weeks' study — criticize, suggest, etc.

10. Role of Dr. Trachtman, Research Consultant, described:

    - Testing — student teachers.

    - Observing — student teachers.

    - Discussions — cooperating teachers.

11. Progression of project:

    - Last year — planning stage.

    - First phase this year — pilot operational phase — see it as following junior, senior and young teacher up through project.

12. Hypothesis — student teachers coming through this program will be better than student teachers going through traditional placement.

13. Key person — cooperating teacher:

    - Concerned with kinds of things teachers do with their student teachers.

    - We want to discuss our failures.

    - We want to share our successes.

14. First day — student teacher is to be involved.

15. Junior program:

    - 1/2 day a week.

    - Active as possible.

16. 10 student teachers each semester:

    - 5 at Central Park Road — 8 week periods; and 5 at Old Bethpage — 8 week periods.

A-2

17. Regulations and requirements:

   - 3 full days of cooperating teacher sessions — critique sessions — November, February, June — substitutes will be hired.

   - Workshops — 3 days @ $30 per day.

   - $100 for each eight-week period for <u>overtime</u>. Everything we do after regular school hours must be identified as overtime, i.e., attend seminars with student teachers, etc.

18. Problem — how do you find time to work with student teacher?

19. Distribution of materials:

   - Mrs. Stahl's schedule.

   - Daily log.

   - Instructions for keeping log.

20. Commitments to Plainview and Adelphi policies:

   - School days — curriculum — reading, math and spelling (procedures as outlined).

   •

WEDNESDAY, AUGUST 30, 1967 — Afternoon

<u>Mrs. Elsie Stahl</u>: <u>"Role of the Student Teacher"</u>

1. Reference — <u>Roles in Off-Campus Student Teaching</u>.

2. Goal — to further preparation to become a teacher.

3. Anxiety — vital culmination phase — creates anxieties, "Will I's" and "Do I's"

   - Will I be able to work with cooperating teacher?

   - Will I be able to control class?

   - Will I be able to write plans?

   - Will I be able to find the suitable materials?

A-3

- Will I know how to use them?

- Will I be able to tell if the children learned anything?

- Will I be allowed to teach a great deal?

- Will I be tolerated or will I be part of the school staff?

- Will I know enough about children?

- Do I really know how learning takes place?

- Do I know how to use my voice effectively?

- Do I have enough knowledge of the content?

4. Problems

- Created by own school experiences.

- Created by hearsay.

- Created by too generous or too conservative estimate of own abilities.

- Created by attitude of cooperating teacher toward assignment of student teacher.

- Created by attitude of college instructors.

- Created by own personality.

- Created by manner of dress and grooming.

- Created by quality of college preparation for experience.

- Created by lack of self-imposed goals.

- Created by inter-personal interaction.

- Created by the very fact that she is a student teacher and not a regular teacher in full command.

- Created by preconceived expectations.

- Created by status shifts.

- Created by responsibility without authority.

- Created by personal crises.

- Created by value disagreements.

A-4

<u>THURSDAY, AUGUST 31, 1967</u> — Morning

   <u>General Discussion</u>: <u>"Criteria for Seminars"</u>

   The entire morning was spent reviewing and clarifying the proposed Seminar Schedule. Several adjustments were made which are reflected on the attached copy of the Seminar Schedule.

•

<u>THURSDAY, AUGUST 31, 1967</u> — Afternoon

   <u>Mr. Leonard Kramer</u>: <u>"Phases of the Intermediate and Primary Curriculum"</u>

   In order to make both groups of cooperating teachers aware of each other's curriculum, intermediate and non-graded primary, there were reports by Mr. Kramer on the program at Central Park Road and by several teachers from the Old Bethpage School.

   To further emphasize the tremendous task that faces each elementary school teacher, Mr. Kramer showed two overlays dealing with the basic items and the individual extras that have grown into extraordinary proportions, and the list is extensive of what is "expected" of today's teacher.

   In dealing with the curriculum, each of the areas was discussed and reviewed.

• <u>Math</u> (at Central Park Road)

   The Greater Cleveland Math Program is being used in the 4th grade, so that the transition from the non-graded primary to the intermediate is smooth one. Beginning in the 5th grade, the Silver-Burdett program will be used, extended to the 6th, so that the transition into Junior High School 7th grade math will be a familiar one with the students.

   In addition to the program, there are several organizational techniques used at Central Park Road which involve regrouping for math four times a week, and at various stages of the school year inventory tests are given so as to determine whether or not a child should move from one group to another.

<center>A-5</center>

- **Reading**

    The reading programs at Central Park and Old Bethpage are quite similar.

- **Social Studies**

    This year at Central Park Road we are going to follow the recommended flow chart developed by New York State.

- **Science**

    The science program is done in a cycle fashion, starting with Earth Science in the 4th grade, Biological Science in the 5th grade, and Physical Science in the 6th grade.

- **Library**

    The library program is somewhat different at Central Park Road because of the flexible scheduling and the opportunities that children have for exchanging books and using the library facilities in an informal manner, rather than the traditional structured library schedule.

- **The Old Bethpage Primary School**

    The cooperating teachers working in Old Bethpage have been participating in the non-graded primary school for a number of years and are quite familiar with the organizational procedures and the opportunities that children are given to move at their own speed without being confined to any set level. The information provided by the Old Bethpage teachers included the following:

    - Grouping for math (other teacher).
    - Diagnostic tests.
    - Constant examination for regrouping.
    - Notations on record for level.
    - G.C.M.P. materials
    - Reading — group contiguously, three levels within one room.
    - Others — basically the same.

Mr. Leonard Kramer: **"Exposure of Student Teacher to First Day of School"**

Things the student teacher will see:

- Introduction to class — a student teacher.

- How teacher receives class.

- How children are seated.

- Student teacher talks about herself.

- Attendance.

- Name cards — distribution.

- Lunch count.

- Activities to fix names.

- School regulations.

- Furniture arrangement.

- Clothing hooks.

- Bus lists.

- Getting acquainted with one another.

- Overview of curriculum.

- Supplies needed.

An assignment was given to the cooperating teachers to list those things that student teacher should be doing. Mr. Kramer noted sincere and strong anxieties on the part of cooperating teachers to find out exactly what they are responsible for in relation to training of the student teacher. This will be discussed in detail at the Saturday, September 16th, workshop.

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PLAINVIEW--OLD BETHPAGE
CENTRAL SCHOOL DISTRICT NO. 4
Plainview, New York

Student Teacher Training Program

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STUDENT TEACHER SEMINARS

September 1967--January 1968

(All these seminars, unless identified as being held at
Adelphi, will take place at the Central Park Road School
in the Resource Center.)

Date	Agenda	Participants
Sept. 6	**Orientation to Student Teacher Assignment**	Co-Principal Investigators and Co-operating Teachers will be involved in the seminars.
	Examination of Purpose The Teaching Personality Personal Appearance The First Assignment Seminar Assignments	Other Personnel (to be invited later)
Sept. 13	**Getting to Know "Them"**	
	Examination of Records Cumulative Testing Anecdotal Health Special File Report Cards Confidential Nature	
Sept. 20	**Tea at Adelphi** (Faculty Lounge)	
Sept. 27	**Planning for Teaching** (Learning)	
	The Daily Schedule The Weekly Lesson Plan Long Range Plans	
Oct. 4	**Teaching Methods**	
	Adjusting Plans To Meet Needs Using Methods Related to Purposes Class Organization for Teaching Total class, groups, individuals Unit teaching Team teaching	

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Date	Agenda	Participants
Oct. 11	**Understanding Children and Youth**	Same as preceding page.
	Growth and Development	
	Guidance Function of Teacher	
Oct. 18	**All Day District Professional Conference**	
	NYSTA Assignments To Student Teachers (Paired with Cooperating Teachers)	
Oct. 25	**Classroom Management and Discipline**	
	Classroom Atmosphere	
	Pupil Responsibilities	
	Developing Good Relationships	
	Firmness and Friendliness	
	Teacher Behavior in Difficult Situations	
	Helpers--Psychologist, Nurse, etc.	
	Parent Conferences	
Nov. 1	**Professional Growth (at Adelphi)**	
	Professional Associations	
	Professional Conferences	
	Graduate Study	
	In-Service Education	
	NYSTA Reactions from Students and from Cooperating Teachers	
Nov. 8	**Reading**	Hazel DeLuca, Reading Consultant
	Grouping for Reading	
	Independent Activities	
	Planning	
	For basal reading instruction	
	For individual approach	
	For I.T.A. approach	
Nov. 15	**Mathematics**	
	"Learning" the Program in Use	
	Multi-Level Planning	
	Materials of Instruction	
	Independent Activities	
Nov. 22	**School Resource Personnel**	
	School Psychologist	
	School Nurse	
	Speech Therapist	

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Date	Agenda	Participants

Nov. 29 **Human Relations in Teaching** (Same as preceding pages)

      Dealing with People
        Students
        Colleagues
        Parents
        Others

Dec. 6 **Evaluation of Learning** Mr. Murray Pessel, Principal

      Testing and Grading Procedures Old Bethpage School
      Relating Evaluations to Purposes
      Reporting to Parents

Dec. 13 **Innovative Practices in Teaching**

      Team Teaching
      Non-Graded Primary Mr. Murray Pessel

Dec. 20 **Audio-Visual Instructional Materials**

      Their Role in Teaching
      Types of Materials

Jan. 3 **Seminar Evaluation**

      A Look Backward
      A Look Forward

Jan. 10 **Social Finale**

Note: Student teachers are expected to attend all sessions.

Cooperating Teacher Workshop

September 1967

PLAINVIEW—OLD BETHPAGE
CENTRAL SCHOOL DISTRICT NO. 4
Plainview, New York

REPORT OF COOPERATING TEACHER WORKSHOP

Saturday, September 16, 1967

Held at Adelphi University — Post Hall, Gold Room

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(It should be noted that the workshop held on this day was actually a continuation—the third day—of the Summer Workshop for Cooperating Teachers held on August 30 and 31, 1967.)

●

In Attendance

- ### Project Personnel

  Mr. Leonard Kramer, Co-Principal Investigator for the School
  Mrs. Elsie Stahl, Co-Principal Investigator for the University
  Dr. Gilbert M. Trachtman, Research Consultant
  Mrs. Lola Gersch, Research Associate
  Mrs. Mimi Krinsky, Project Assistant
  Mr. Ralph C. Grandinetti, Video Specialist

- ### Adelphi Personnel

  Miss Evelyn Konigsberg, Chairman, Education Department
  Miss Julia Pratt, Director of Student Teaching
  Mr. B. J. Eckstein, Grants Research Director

- ### Plainview Personnel

  Dr. Robert F. Savitt, Superintendent of Schools
  Mr. Murray Fessel, Principal, Old Bethpage Grade School

- ### Coop. Teachers—Central Park

  Miss Josephine Cotugno
  Mr. Milton Goldberg
  Mrs. Anna Marianova
  Mrs. Esther Rosen
  Mr. Joseph Vlasits
  Mrs. Florence Seltzer
  Mrs. Lillian Wojnicki

- ### Coop. Teachers—Old Bethpage

  Mrs. Ethel Beller
  Mrs. Jean Edelman
  Mrs. Rhoda Gordon
  Mrs. Harriet Penzel
  Mrs. Penny Price

●

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Topic: <u>"Student Teaching Is the Responsibility of Whom?"</u>

I. <u>The Responsibility of Adelphi University</u>

Speaker: <u>Miss Evelyn Konigsberg</u>

A. Screening Process

    1. Student must be recommended by advisor.

    2. Speech, physical examination.

    3. Approved in general by Department of Education.

B. Placement and Preparation

    1. University has responsibility for having them reasonably well prepared.

    2. Basic preparation includes an understanding of the school organization.

    3. Flexibility of teacher's job is stressed.

    4. Student takes one course in Education each semester; others are liberal arts.

    5. They are given a basic knowledge of what might be expected in a school situation.

    6. The student must fit knowledge gained into school structure to which she is sent.

    7. Consideration is given to needs and talent, for placement in a school.

C. Supervision

    1. Project—bring closer understanding between University people and school personnel.

    2. All supervisors have had classroom experience in areas in which they are dealing with student teacher (direct connection).

    3. Supervisor meets with student teacher weekly.

    4. Supervisor gets to school <u>at least</u> four times per semester.

B-2

5. University's main responsibility is to the student registered there.

6. University often is the mediator between student and cooperating teacher.

7. Must take into consideration the background and personality — this is a University responsibility.

D. Evaluation

1. Because University certifies them.

2. Cooperating teacher's long, detailed evaluation gives clue to how student operates when out in a school.

II. Student Teacher Placement

Speaker: Miss Julia Pratt

A. Classroom teacher needs help and reinforcement in how to deal with student teacher.

B. Students have feeling of fright as well as assurance.

C. Tried to do early screening. Three criteria used:

1. Academic progress in all courses.

2. Subjective judgment by Department members.

3. What they think they are able to do themselves.

Placement is made on the basis of the above criteria.

D. Good cooperating school determined by attitudes of administrators and staff. Are they cooperative, flexible, interested, concerned about working with student teachers?

E. Plainview selection:

1. Junior observation — 20 students. Then make 10 selections for student teaching.

2. Students who want to teach in Nassau and don't live too far away.

F. Evaluation:

1. Forms are suggestions and are by no means final. Don't like checklists.

B-3

2. Make evaluations with student whenever possible. This becomes a partial self-evaluation. The form has four categories.

3. College supervisor goes over form and makes any comments she would like to make.

4. College supervisor observes at least 6 times in the elementary school. Knows students pretty well. Model lesson rather artificial because announced and planned. Informal visits most helpful. Much progress and evaluation of progress depends upon your close association with supervisor.

III. The Responsibility of the College Supervisor

Speaker: Mrs. Elsie Stahl

A. Project gives golden opportunity to find new and better ways to prepare student teachers.

B. Sees student...

...when expected by student
...when not expected by student
...performing lessons in front of each other (might be a 10 minute lesson with just chalk)
...when meet in group
...individual meetings

C. Works with cooperating teachers.

D. Sees herself as student of Education. We have to know what was good, what is going on, visit other schools, know, build on, discover, and try out.

E. Angel guardian and devil's advocate — sees herself as somewhere between both.

F. Feed to cooperating teacher things she finds. Explains philosophy and policies of Adelphi.

IV. Role of the Superintendent in the Student Teaching Project

Speaker: Dr. Robert F. Savitt

A. Our Interest

1. Project provides a ready flow of modern, sophisticated teachers.

B-4

2. American education can be better only if training of teachers can be better. We want teachers trained and knowledgeable in innovations in today's education, not "yesterday's best".

3. Long Island has pattern of education of extremely high caliber. Youngsters must be better prepared than teachers going into other geographic areas.

B. Plainview

1. "Show us another way, and we will do it!"

2. Start where we are and discover new approaches.

3. Elaborate training provided can be an influence back to the University, so that they can realize there can be a constant upgrading.

   (To this point, Miss Konigsberg responded: University is constantly reviewing curriculum. "We expect we will make some changes.")

4. We would like for student teachers:

   a. To prepare for dynamic new role.

   b. To prepare for participation in policy making in school district.

   c. Not going to school only as teacher in classroom. Participation in teacher activities that range far beyond the classroom.

   d. Greater appreciation and understanding of teacher, principal, legal responsibilities of Superintendent and Board of Education.

   e. Idea of what people are committed to — due respect and recognition of responsibilities of all in Education.

5. Role of the local school district:

   a. Provide laboratory of experience — many innovated programs in Plainview, i.e., non-graded primary, I.T.A., resource center library, etc.

   b. Provide a flavor of education of what can be done — need exposure to and knowledge of what can eventually be done.

B-5

c. Staff has extraordinary opportunity to provide for education of prospective teachers.

d. Basic commitment must properly be to meet our responsibility in the first instance.

e. Both programs must be compatible and merged.

f. Separate district program and responsibility.

g. Is local school district ready to commit time and personnel to task of preparation of student teachers when State monies are pulled away? Hopefully, Boards of Education and tax payers will feel this is a responsibility of the schools.

V. Role of the Research Consultant

Speaker: <u>Dr. Gilbert M. Trachtman</u>

A. Problems of the researcher:

1. Do jobs naturally.

2. Measure what takes place to find that something is being done with student teacher.

3. This year, project is in pilot stage — working to see what tools we could use to accumulate meaningful data.

4. Next year, project will be more structured — procedures, schedules, etc., defined.

VI. Role of the Principal

Speaker: <u>Mr. Leonard Kramer</u>

A. Involvement with the following:

1. Adhere to policies of University.

2. Adhere to policies of school district.

3. Work with research director of State Department.

4. Work with research of project.

B. What happens in school depends on attitude of principal.

C. Idea came from a student teacher.

B-6

E. Principal must give the following:

1. Information, guidance to student teachers as well as to staff.

2. Must provide freedom for student teachers to exchange questions and ideas with principal.

3. Must observe.

F. The student teacher must accept idea of observation

G. The cooperating teacher:

1. Student teacher has anxieties, "Will I's" and "Do I's" — the cooperating teacher has same feelings.

2. Project didn't allow time in the past to sit down and talk to cooperating teachers — one of the things we will be working on extensively this year.

3. What should cooperating teacher be responsible for?

4. Log responsibilities.

5. At end of this year, we will know what cooperating teachers should be doing with student teachers.

6. Unable to develop model teacher — may be infinite number of models, of which each teacher is best. Hope to give exposure to many models, so we can see how same goals are attained.

G. Review of minutes of last workshop sessions:

1. Page 7 identified what student teacher could observe the first day — important aspect.

2. Seminars (sequence and content) — cooperating teacher can use this as a guide as to what to work on with student teacher that week.

3. Overtime — amount of money teacher gets depends on the number of hours spent after school hours. Equal to approximately 2 hours weekly. Cooperating teacher is the custodian of own time sheet — procedures previously explained.

VII. The T.V. Taping Program

Speaker: **Mr. Ralph C. Grandinetti**

A. Purpose of the T.V. taping program is two-fold:

1. Give the student teacher opportunity to "see" herself in the role of a teacher, to evaluate herself, and thus grow.

2. To have a before and after measurement of the growth that has taken place as a result of the student teaching experience.

B. During the 16-week student teaching experience, student teachers will tape several 15-minute lessons, followed by critique sessions for self-evaluation.

C. The very first taping and the very last will be done in the same subject area, Language Arts, specifically, Poetry. Purpose is to have fewer variables when comparing the first and last tapings to determine growth (in methods, techniques, rapport with children, etc.). During both tapings, children are to come from another class on the same grade level, again to remove variable with regard to rapport with children of longer association.

D. Clarification was made that these are not to be "T.V. lessons", or lessons geared for T.V. presentation. Rather, they are simply normal classroom lessons that are being put on T.V. tape.

E. Mr. Grandinetti will prepare students for their first taping by taking them through the T.V. studio and acquainting them with facilities and procedures several days before. (Suggestion was made by Mrs. Stahl that this "prep" session might include actual short tapings by the students, perhaps using each other as the "children", in order to get the feel of T.V.)

F. It would have been preferred to tape student teachers directly in the classroom, but necessary portable equipment is unavailable through the project. A point in favor of studio taping vs. classroom taping, however, was that it tended to eliminate the student teacher taking over the total configuration of the classroom teacher, as often happens in the actual classroom.

B-8

Topic: "Evaluation and Reaction to Present Design"

Discussion Leader: Dr. Gilbert M. Trachtman

A. **Design Is Subject to Refinement**

1. The design sets forth all aspects of the project.

2. Since a new design must be submitted each year for approval by the State, it is possible to make changes each year.

3. Teachers are requested to go through the design for their ideas and recommendations for next year.

B. **Testing Program**

1. Since this year is the pilot operational year, the State does not require any substantiating data on the project. The purpose of testing this year, therefore, will be to determine which are meaningful, useful and valid tests for our project (for use next year), rather than for assembling measurable data on the project itself.

2. Testing will be done mainly with the Plainview group. The project will attempt to get some data on the control group through occasional meetings with them at Adelphi and through the Adelphi faculty, so as not to interfere with the schools in which they are student teaching.

3. Dr. Trachtman has a fairly good idea of the areas he wishes to see developed through testing (see below), but has not yet ascertained the instruments to be used to determine these.

4. Possible types of information to be identified:

   a. Basic demographic data on student teachers.

   b. Internal states:

      1) Measurement of attitude and feelings about educational philosophies.

      2) Some measurement of personalities, i.e., democratic vs. autocratic aspects.

      3) Possibly have students write open-ended statements regarding goals, dreams, fantasies.

B-9

c. Observable behavior:

    1) Work out standardized forms for rating video tapes.

    2) Get feedback from cooperating teachers and principals.

5. Possibility of testing cooperating teachers. (Note: This is to be done only if it does not cause apprehension or anxiety on the part of cooperating teachers themselves. All such testing information to be strictly confidential and available to Research Consultant and Associate only.)

    a. Purpose: To determine which cooperating teacher types work best with specific student teacher types.

    b. Premise: The quality of a student's teaching ability upon graduation does not necessarily result only from what she has "inside", but from what her reaction has been to other people, i.e., the cooperating teacher.

    c. It is more complex than merely to state that one cooperating teacher is "better" than another. Rather, one cooperating teacher is better for one particular student teacher than for another. Testing of cooperating teachers, therefore, would identify personality aspects and/or philosophy, and would not judge how "good" a cooperating teacher she is.

    d. At the end of the year, attempt will be made to get feedback from student teachers to determine who "got the most" out of the experience and who "got the least".

    e. With the data received from both student teachers and cooperating teachers, final analysis will be made to determine how to mesh student teacher types with cooperating teacher types for the most positive results.

C. Junior Group (Experimental and Control)

1. Group in whom we have our real investment is the junior group coming to Plainview this year, to which there will be a group of equivalent juniors going elsewhere. These will become our student teacher experimental and control groups for next year.

2. While the juniors starting in Plainview this year will have their junior observation and student teaching experiences in the same district, this does not have to hold true for the control group. Control group is one that will have had all kinds of experiences except that offered by Plainview.

B-10

3. Make-up of experimental group: Experimental group is chosen at random and <u>is not</u> chosen for academic achievement or aptitude. (The only restriction on an experimental group individual would be geographic distance from Plainview, making travel unfeasible.) Experimental group has same college background as control group up until the point that they student teach in Plainview. All juniors, experimental and control, meet in the same seminars back at the college.

D. <u>We Hope To Produce "Better" Teachers</u>

1. We are hoping to prove in three or four years that this program will produce a better prepared teacher than that produced under standard conditions.

2. For next year's project, we would like to predict what should be criteria of the "better prepared" teacher:

   a. Enters profession with less anxiety.

   b. Scores higher on such tests as Minnesota.

   c. At end of first year teaching, principal of the school rates her higher as a first year teacher than other first year teachers.

   e. Shows more stability in a job than other young teachers.

   f. Many other possible measures being considered.

3. There are many variables in project, but these are difficult to overcome under present conditions. Results, therefore, would have to state clearly that the "following results have been achieved, but the data has the following limitations."

4. Significant results vs. meaningful results: Given the expense of the investment and the size or extent of the positive "differences", is the program worth the effort? We would expect that people coming out of our project will be better — but we cannot determine, at this point, <u>how much</u> better.

5. Another benefit which might be derived from the project would be possible modification and restructuring of curriculum back at the college which will have great ramifications.

B-11

E. Cooperating Teacher Group

   1. From the research point of view, Dr. Trachtman stated that
      it would be preferable to use this same group of cooperating
      teachers next year. This, of course, would depend on the
      availability of the teachers.

F. State Interest in Project

   1. This is first project on State-sponsored level dealing with
      training of student teachers.

   2. This project is also attempting to get schools and univer-
      sities to work together.

   3. If project proves successful, the State will attempt to
      spread it into other communities (dissemination aspect).
      State has ability to force the benefits of this kind of
      program into State institutions.

G. Outside-Classroom Experiences for Student Teachers

   1. Dr. Savitt suggested that student teachers be exposed to
      the following experiences outside the classroom in order
      to strengthen the concept that "the classroom teacher is
      part of a total operation":

      a. Visit to School Board meeting.

      b. Visit to Administration Building.

      c. Visit to SOBSEC offices.

      d. View a P.T.A. meeting.

   2. In line with the above, Miss Pratt explained that during
      their four years at the University, students are exposed
      to an extensive program of visits and practical experiences
      involving the total community — agencies, industry, etc.—
      and relating the function of the community agency to that
      of the school. As a result, students come to look upon the
      child in relation to his whole family, whole community,
      rather than as an isolated child.

H. Publicity for the Project

   1. Dr. Savitt felt there is a lack of sufficient publicity on
      the project.

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2. At Dr. Savitt's request, a capsule report of the project will be written up on a quarterly basis and copies sent to him and Miss Konigsberg. Dr. Savitt will attempt to reach certain publications with this material.

3. Dr. Trachtman suggested that we set up meetings with co-operating teachers just prior to each quarterly report, to build their remarks into the report and to "see where we are going."

4. Miss Pratt, on publicity, suggested that those of us involved in the project attempt to get some publicity into periodicals on the various levels, i.e., principal's publications, teacher publications, college publications, etc., which could develop material from the various points of view.

5. Mr. Kramer will be speaking at the N.Y.S.-A.E.S.P. Conference at the Concord Hotel on October 8-11, 1967. We should also attempt to get on panels of other associations.

I. Cooperating Teacher Suggestions for Student Teacher Training

1. Mrs. Stahl commented that she would like to meet with the five cooperating teachers in each school periodically to discuss specific questions about activities with student teachers.

2. Miss Konigsberg, Dr. Savitt and Mr. Kramer concurred that much of what the teacher does with her student teacher is intuitive and that she therefore be left free to carry on her normal activities. However, in addition, certain procedures will be common to all. Not necessary to set down these items as over-all policy. In the event of any question or problem concerning a particular activity, cooperating teacher should meet with Mrs. Stahl and/or Mr. Kramer to work it out.

J. Logs

1. Notes in logs should be brief — no verbatim reports.

2. Cooperating teachers and student teachers will be permitted to keep their logs. At some point during the year, all logs will be called in for a couple of weeks, so that they can be studied.

3. Sometime at mid-year, an attempt will be made to abstract ideas from the logs that could be utilized in setting up a more structured format for all future logs.

K. **General Comments**

1. Mr. Kramer noted that we have set aside a section in the Central Park Road Library for special periodicals of interest to student teachers and cooperating teachers. Any special resource materials or texts which teachers or student teachers desire will be ordered for them.

2. Dr. Savitt stated that those students from last year's project whom the district has hired as first year teachers this year, already appear to be "experienced teachers".

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Cooperating Teacher Workshop

November 1967

PLAINVIEW—OLD BETHPAGE
CENTRAL SCHOOL DISTRICT NO. 4
Plainview, New York

* * REPORT OF COOPERATING TEACHER WORKSHOP * *

Friday, November 17, 1967

Held at Adelphi University

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In Attendance

• **Project Personnel**

Mr. Leonard Kramer, Co-Principal Investigator for the School
Mrs. Elsie Stahl, Co-Principal Investigator for the University
Dr. Gilbert M. Trachtman, Research Consultant
Mrs. Lola Gersch, Research Associate
Mrs. Mimi Krinsky, Project Assistant

• **Coop. Teachers—Central Park**   • **Coop. Teachers—Old Bethpage**

Miss Josephine Cotugno   Mrs. Ethel Beller
Mr. Milton Goldberg   Mrs. Jean Edelman
Mrs. Anna Marianova   Mrs. Rhoda Gordon
Mrs. Esther Rosen   Mrs. Harriet Penzel
Mrs. Florence Seltzer   Mrs. Penny Price
Mr. Joseph Vlasits
Mrs. Lillian Wojnicki   Mr. Murray Fessel, Principal

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I. CRITIQUE OF LAST EIGHT WEEKS

A. Introduction

The workshop was opened by Mr. Kramer, who briefly summarized the progress of the project to date, reiterated in meaningful and practical terms the kind of "better teacher" we are hoping will result from our efforts, and the exciting challenge this presented to all those present and involved in the planning and implementation of the program.

He commented that during the past year we have been collecting data from a wide variety of sources and individuals; now, we must assemble what we have learned into a program that will result in reliable scientific information. Mr. O'Reilly of the State Department recently visited our program and placed particular stress on the need to develop a structure this year that will point up the measurable differences between our program and that of other districts. He would like a general tightening up of activities, comprehensive testing program, and showed great interest and concern in structuring the log entries.

B. Structure of Program

In line with Mr. O'Reilly's suggestion for "tightening up" and stressing certain measurable aspects of the program, the group discussed the practicality of placing the focus on one or two subject areas, rather than on the wide range of activities presently engaged in.

Dr. Trachtman agreed that isolating one or two subjects would make measurement more feasible, but only if we were prepared to control all other aspects of the program. Since this is not possible, however, he preferred to continue with our present approach, i.e., expose student teachers to as many different experiences as possible. Then, if the project should succeed in producing a better beginning teacher, an analysis could be done in three or four years which would attempt to isolate those specific positive factors.

For the present, therefore, Dr. Trachtman suggested that the student teachers continue to sample a "little bit of everything", with specific emphasis on two areas within the overall picture, one academic and the other psychological, as follows:

1. Academic Area — Tool student teachers up for reading, including important skills in curriculum area, role of the library, reading in other subject areas, etc.

2. Psychological Area — Create in the student teacher a sensitivity about what goes on in the classroom

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sociologically, such as interaction between teacher and students, teacher discussion vs. student elicitation, pupil-to-pupil interaction, reaction of student teacher to cooperating teacher, determining in what atmosphere she feels more comfortable, etc.

C. Teacher Experiences in First Eight Weeks

Teachers voiced their reactions to the first eight weeks, as follows:

1. Introduction of student teacher to the class, in all cases, was done very positively and presented no problem.

2. Problems often arose in setting up after-school meeting times with student teachers due to other college course responsibilities, jobs, transportation problems, etc.

   Suggestions for overcoming this problem were:

   a. Student teachers will be briefed at the outset that they will have to schedule a given afternoon each week to meet with their cooperating teachers. (See D. Student Teacher Orientation on following page.)

   b. Cooperating teacher should indicate his/her interest and concern as a classroom teacher to offer the student teacher this opportunity for learning.

   c. For next term, every effort will be made by the college to limit other college responsibilities for the student teacher.

3. Some student teachers expressed unhappiness about having obligations over and above what is expected of student teachers in other districts, such as staying after school, T.V. taping, etc. Some, on the other hand, are so excited with the program that they have requested permission to stay on to continue student teaching at the completion of the sixteen weeks.

   Dr. Trachtman felt it was important for student teachers to have opportunity to air their opinions and sentiments regarding the program. He has been meeting with them to discuss and resolve these very problems. He felt they must be given the opportunity to develop the understanding that these "greater obligations" are actually greater opportunities for development as teachers.

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4. Cooperating teachers found that most prep time in school was devoted to the student teacher, leaving their own work for evenings at home.

5. Some question arose as to the cooperating teacher having little or no knowledge of the student teacher when she enters the classroom on the first day of school. Teachers were told that they may request from Mrs. Krinsky folders on their respective student teachers, which are made available to the school by Adelphi.

D. Student Teacher Orientation

In order to eliminate some of the problems that have arisen with regard to attitude and expectations of the student teacher, it was suggested that the student teachers be given some sort of orientation as to the kinds of activities that they will experience in this program, opportunities as well as obligations.

Dr. Trachtman, therefore, suggested the following orientation procedure with our present junior observers who will be our student teacher group next year.

1. In June 1968, give juniors an inspirational talk about next year.

2. A day or two before school opens, have them attend one day of the cooperating teacher workshop, which will be specifically devoted to them — orientation as to their role and responsibilities; introduction to their respective cooperating teachers, allowing time for them to get together informally and get to know each other, learn about the classes they will be working with, etc.

E. Student Teacher Involvement in the Classroom

Teachers reacted to the question: "At what point do you have the student teacher actually begin to teach?"

Student teacher involvement with the class on a "teaching" level actually began, during this last experience, anywhere between the first and second day of school, when several conducted class discussions on "What I did last summer," name tag (initial sounds) activity, or gave individual instruction. By the third and fourth day, several gave spelling diagnostic tests either to individual children or full class, most were actually involved with teaching a specific reading group, and one (who had been a junior observer with the same teacher last year) actually gave a full class lesson.

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F. Low-to-High vs. High-to-Low Grade Succession

Discussion came up, on the basis of student teacher adjustment to second experience, as to whether the transition was easier for a student going from a lower grade in her first experience to a higher grade in her second experience, or vice versa. The following points were made:

1. That the adjustment from a higher grade to a lower grade seemed to be the more difficult because of the readiness aspect required in the lower grades.

2. That wider gap in grade between the first and second experience (i.e., 1st to 6th or 6th to 1st, as opposed to 2nd to 4th or 4th to 2nd) might create greater difficulty in the second experience.

   (It was noted that it will be interesting to see just how quickly the adjustment will actually take place in the ensuing weeks.)

In line with the above, it was felt that several possibilities might be considered for next year when assigning student teachers to specific grade levels:

1. Assignment of this year's stronger junior observers to the high-to-low grade levels next year, and the weaker ones to the low-to-high.

2. Permit greater variations between grades in "moving up" than in "moving down".

In any case, these suggestions would have to be considered within the limitations of the available cooperating teachers and their respective grade levels.

G. Limiting Grade Assignments to "Type" and/or Preference

Question arose as to whether we should consider limiting grade level assignments on the basis of student teacher personality (i.e., "primary teacher type") and/or student teacher preference, where there is one. It was generally felt that this was not preferable, as it would deprive a student teacher of the opportunity to judge preference from practical experience, was impractical from the point of view that a beginning teacher should be prepared for any available job opening on the elementary level, and, further, that it is often preferable to give a student reinforcement in an area or grade where she is weakest rather than strongest.

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H. Number and Length of Experiences

Also discussed was number and length of student teacher experiences (i.e., two 8-week; three 5-week; one 12-week and one 4-week) in the sixteen weeks. The majority agreed that there should be two experiences and that, for purposes of development, the two 8-week sessions would prove most feasible. In line with this, it was felt that <u>structuring</u> the student teacher's program for the 8-week period was a necessity so that the experience would be as comprehensive as possible. This would also avoid the possibility of a student teacher having to leave a classroom in the midst of a program which she might have initiated and planned for.

To accomplish this, Mr. Kramer suggested that it might be necessary to identify a set of goals or purposes to be accomplished with the student teacher during the eight weeks.

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II. CRITERIA FOR COOPERATING TEACHER/STUDENT TEACHER INTERACTION

A. <u>When should the cooperating teacher consider the student teacher to be ready to give her first class lesson</u>?

Steps towards readiness:

1. Student teacher should be familiar with children's names and have some general orientation to the class.

2. Student teacher should have had opportunity to observe, develop some feeling for atmosphere of class and personality and style of cooperating teacher.

3. Student teacher should have had experience working with small groups in reading, spelling, etc.

4. Finally, when cooperating teacher recognizes that the student teacher is ready, then the student teacher should prepare and give a short lesson in an area in which she feels particularly strong and which she selected herself. (This should, however, be within the framework of the cooperating teacher's plans.)

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B. **How much assistance should cooperating teacher give student teacher with her lesson plan? In Classroom Lesson? In T.V. Lesson?**

1. **Classroom Lesson** — It should be the student teacher's own lesson. Cooperating teacher should give guidance, but not too much. Good idea suggested was to have cooperating teacher ask the student teacher leading questions about the lesson, without actually telling her what to do, i.e., "How are you going to start the lesson?" "What is the purpose of the lesson?" "How will you provide for children who can't understand the concept being taught?" "How are you going to follow up and conclude?"

2. **T.V. Lesson** — Recognize the student teacher's anxiety, but try to make her understand that this is just another technique—not anything special. Let her do what she thinks she should do. The taping is primarily to be used as a way of identifying student teacher behavior as a teacher. This is basis from which supervisors and outside observers can detect her behavior problems and provide suggestions for improvement.

C. **How does a cooperating teacher evaluate a student teacher's lesson with her?**

1. Discuss the lesson as soon as possible (during the first free period) after lesson is given.

2. Various approaches used by cooperating teachers in the past were:

   a. Cooperating teacher starts out with good points, and then picks up one or two areas that were especially weak, and works on those. Then looks for improvement in these in subsequent lessons. As these improve, goes on to discuss and develop other weaknesses in similar fashion.

   b. Cooperating teacher asks student teacher what she thought of lesson. Then goes on to give her own evaluation.

   c. Cooperating teacher notes questions during the student's lesson, and then (gently) "throws" these back at her.

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3. All notations made during the lesson, questions as to presentation, etc., should be noted in the log, in order to follow trail of the student teacher's progress.

D. <u>Do cooperating teachers ever find it necessary to inter-rupt student teacher lessons?</u>

1. Following are various approaches used by cooperating teachers to interrupt student teacher during a lesson, without actually becoming involved as the "teacher". (This is often done because the student may have indicated, beforehand, a fear of "forgetting something during the lesson".)

    a. Cooperating teacher could sit in on lesson as though she were a student, and ask student teacher to explain something she may have forgotten to develop.

    b. Cooperating teacher purposely involves student teacher in <u>her</u> lessons, so that she could become involved in the student teacher's lesson if she feels it is necessary. Children in class, therefore, accept this as a "natural" occurrence.

2. If student teacher is fearful before the lesson, the cooperating teacher should alay her fears and help her maintain her perspective with, "It is no disaster if you do forget something."

3. A cooperating teacher should <u>never</u> interrupt a student teacher's lesson to <u>criticize</u> anything she is doing.

4. Dr. Trachtman noted that, if breaking in on a lesson, <u>regardless of how it is done</u>, results in resentment or a feeling of threat on the part of the student teacher, then it should not be done. It is important, therefore, that the cooperating teacher attempt to get some feedback from the specific student teacher involved to determine what <u>her</u> reaction is to being interrupted in any manner.

5. Cooperating teacher should try to develop a relationship with the student teacher whereby both have the same privilege to criticize each other's lessons <u>after</u> the lesson and <u>privately</u>.

B. <u>Has the experience of being a cooperating teacher caused</u>

<u>any change in her classroom behavior?</u>

1. Teachers have found themselves highlighting specific techniques, etc., in class in order to show student teacher how to do certain things.

2. Teachers have begun to question themselves—"What am I doing and why?" This, in several cases, has brought about new and refreshing changes in classroom activities.

III. <u>LOGS</u>

A. Dr. Trachtman made the following comments concerning what should be included in the logs, since their purpose is to provide research information on the project. These were discussed and agreed to by the cooperating teachers.

1. Try to report the items that happen in sequence — things done first, next, etc.; give a rough time of day — A.M., Noon Time, P.M.; try to make approximate estimations of time spent — 10 minutes, 15 minutes, etc.

2. Material included should fall somewhere between the "highlights" and "plan book" approach — list things done during the day, detailing the one or two really important items, and the rest to be merely brief notations.

3. Focus should be on what the <u>class is getting</u> (not on what the student teacher is doing or what the cooperating teacher is doing) — "I did this with the class, and then the student teacher did that with the class, or group, etc." The log should tell what is happening in the class, and the student teacher should fade in and out of the picture.

4. Cooperating teacher should include some of the <u>thinking</u> behind her specific activities with the student teacher. For example: The student teacher didn't get to teach before the twelfth day because the cooperating teacher felt she wasn't ready, rather than because it is the cooperating teacher's style to wait twelve days.

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B. In January 1968 the logs will be reviewed again and possibly structured further, so that they more specifically reflect the information required for the research aspect of the project.

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IV. TESTING AND EVALUATION PROGRAM

Dr. Trachtman commented that our purpose this year is to try out many different kinds of tests to determine which are the most valid in terms of providing the information we require.

A. Kinds of Tests

We are looking for two kinds of measurements: Internal and External, as follows:

1. Internal Dimension

   a. Personality aspects of a person's individual characteristics, i.e., outgoingness, withdrawnness, self-concept, etc.

   b. Attitude and philosophy, i.e., philosophy towards education might be more conservative, liberal, activist, pacifist, etc. (These are psychological states that affect functioning of people.)

   c. Anxiety level, i.e., with himself, with other people, in front of a group, etc.

   d. Cognitive knowledge, i.e., knowledge of math, science, educational principles, etc.

2. External Dimension

   a. Demographic information.

   b. Courses taken and grade averages.

   c. Performance in classroom with children, etc.

   d. Ratings by principals on first job.

B. Who Will Be Tested

   1. Testing of Junior Observers — Major thrust in our testing program at the moment is the junior observers, both

experimental and control, who will be the student
teacher experimental and control groups next year.
They will receive all the tests. All will be paper
and pencil tests: personality, character structure,
attitudes, philosophical approaches, anxiety level,
knowledge of education and, later, classroom behavioral
tests. (Testing time to be about 3 hours.)

2. Testing of Student Teachers — This year's student
teachers (both the current and spring groups) will re-
ceive the same tests noted above for junior observers.
Purpose here is merely to see how tests work, rather
than to get information on the student teacher per se.

(Note: In the case of both groups, only Dr. Trachtman
and Mrs. Gersch, his Research Assistant, will view the
individual test results. This material will not be
made available to anyone, either at Plainview or at
Adelphi.)

3. Testing of Cooperating Teachers — Dr. Trachtman com-
mented that the cooperating teachers were perhaps the
most important single factor in the entire project as
regards "effect on the student teacher". He felt,
therefore, that it was important to get as much of the
same information on the cooperating teacher as on the
student teacher, where it applies. He plans to test
cooperating teachers only in those areas that are rele-
vant, such as philosophical attitude, basic liberal/con-
servative approaches, etc.; cooperating teachers will
not be tested psychologically or on factual knowledge.
Further, he is not concerned whether an individual is
more conservative or more liberal. The important factor
is whether the cluster of like or unlike types tends to
make for a better or poorer student teacher.

Dr. Trachtman stressed that every precaution would be
taken to keep test results purely confidential. These
tests would never be available to anyone, except as end
results, which would impersonally state that "these
kinds of personalities, because of this or that kind of
behavior.....", without any mention as to whom.

Testing of cooperating teachers will be done early in
1968 with those teachers who agree to it.

C. Sampling and Conclusions To Be Reached

At the end of this year, we hope to have twenty student
teacher/cooperating teacher interactions to work with,
based on ten situations of students and teachers in two

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pairings, each of which might be classified in one of the following categories:

1. Both cooperating teacher and student teacher react positively to each other.

2. Both cooperating teacher and student teacher react negatively to each other.

3. Cooperating teacher reacts positively to student teacher; student teacher reacts negatively to cooperating teacher.

4. Cooperating teacher reacts negatively to student teacher; student teacher reacts positively to cooperating teacher.

5. And all the "grays" in between.

The questions then to be analyzed will be:

1. How do these consistencies and inconsistencies tie into the personality tests?

2. Do certain kinds of student teachers and cooperating teachers mesh well or not?

Dr. Trachtman commented that since we are committed to the research aspect of the project, he plans to go ahead with this testing program. He asked anyone who strenuously objects to contact him and talk about it privately. Otherwise, he will assume that all cooperating teachers will go ahead with the testing program.

D. Student Teacher Evaluation by Children

In addition to the regular testing program, the children will be asked to give their views of the student teacher on a prepared form, i.e., what they liked or didn't like about the student teacher.

E. Flanders Category System

Mr. Kramer spoke about the Flanders Category System for evaluation of student teacher behavior. It can evaluate a given lesson in terms of percentage of teacher talk and student talk, ratio between direct and indirect influence, and percentage of teacher/student direction. Many samples of T.V. tapes (or audio tapes and direct classroom observation) of a specific student teacher would be needed in

order to come up with a valid evaluation of her classroom behavior.

Teachers felt that difference of age level in children would affect pupil interaction on this type of evaluative matrix. Also noted was that the technique is limited to telling what a teacher did, but did not indicate why she did it.

Benefits of the technique are that it does point up to the student teacher (or experienced teacher) what her classroom behavior is for purposes of evaluation and improvement. From the research point of view, it would show progress, if any, that has taken place.

In any case, we are not yet sure at this point just how the system will be used in the project.

The workshop adjourned at 3:30 P.M., and Mr. Kramer thanked the entire group for a really stimulating and productive discussion.

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Cooperating Teacher Workshop

March 1968

PLAINVIEW—OLD BETHPAGE
CENTRAL SCHOOL DISTRICT NO. 4
Plainview, New York

* * REPORT OF COOPERATING TEACHER WORKSHOP * *

Friday, March 29, 1968

Held at Garden City Hotel, Garden City, N.Y.

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In Attendance

Project Personnel

Mr. Leonard Kramer, Co-Principal Investigator for the School
Mrs. Elsie Stahl, Co-Principal Investigator for the University
Mr. Howard Litvack, Incoming Co-Principal Investigator for the
          University
Dr. Gilbert M. Trachtman, Research Consultant
Mrs. Mimi Krinsky, Project Assistant

Coop. Teachers—Central Park	Coop. Teachers—Old Bethpage
Miss Josephine Cotugno	Mrs. Ethel Beller
Mr. Milton Goldberg	Mrs. Rhoda Gordon
Miss Patricia Molen	Mrs. Cynthia Kushner
Mrs. Florence Seltzer	Mrs. Isobel Price
Mr. Joseph Vlasits	Mrs. Estelle Wald
Mrs. Lillian Wojnicki	Mrs. Shirley Zarwin
	Mr. Murray Pessel, Principal

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Agenda

A.M.: • Short Testing Session for Cooperating
          Teachers
       • Flanders Interaction Analysis
       • Evaluation of Student Teachers
       • Logs
       • Parent-Teacher Conferences

P.M.: • Discussion of Next Year's Program—1968-69

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I. TESTING SESSION FOR COOPERATING TEACHERS

All cooperating teachers present were given two tests to complete, the IE and the Semantic Differential for Cooperating Teachers.

II. FLANDERS INTERACTION ANALYSIS

A. What Is Interaction Analysis?

Dr. Trachtman briefly described the interaction analysis procedure and the various areas of teacher behavior that can be evaluated through the use of this system. A 10-minute sample lesson can be a very effective and accurate one. One of the real benefits of this system is that it provides the teacher with the opportunity to define her own goals and work towards them. By using this tool, the teacher is able to see herself in action, so that she can modify her behavior in terms of what "she wants to be."

B. Research Use in Our Program

Dr. Trachtman commented that, for research purposes, he would like at least one 10-minute audio tape from each cooperating teacher on what she considers to be a "typical lesson," in order to analyze cooperating teacher style and its influence on the student teacher. We want to see how this relationship, combined with the personality factors of both cooperating teachers and student teachers, interact and affect each other. (Although some cooperating teachers had already taped a lesson in January, Dr. Trachtman requested that each submit a new taping, keeping in mind the "typical lesson" aspect.)

C. Effect on Student Teacher Lessons

General feedback on the student teachers' second taping, as it compared to the first, indicated that the second lesson was quite different from the first. Teachers felt that the change was due to the behavioral information provided on the first matrix. (This is not yet verified by statistical analysis.)

Student teachers encountered certain technical problems with the audio taping, such as poor microphone pick-up, which sometimes required the setting up of artificial classroom situations.

D. <u>Training of Cooperating Teachers in Interaction Analysis</u>

Dr. Trachtman suggested that a possible solution to the technical problems noted above might be to train ourselves in this system, so that we could do live evaluations in the classroom as the lesson is going on. The teachers agreed that they would find it valuable to be trained in the interaction analysis system to assist them in their role as cooperating teachers next year. This training should be done early in the year during cooperating teacher workshop time.

III. <u>EVALUATION OF STUDENT TEACHERS</u>

A. <u>Responsibility of Evaluator</u>

The group discussed "social feelings vs. ethical responsibility" in evaluating student teachers. It was agreed that this is an easy task when evaluating a capable student teacher; it is much more difficult to be candid when the student teacher is not so capable.

Dr. Trachtman commented that the confidential evaluations he received from cooperating teachers on the last group of student teachers tended to give student teachers "the benefit of the doubt." Reactions from both cooperating teachers were usually similar on the obviously poorer ones; there were many more inconsistencies on the mediocre students.

After much discussion concerning the basis on which to evaluate, and the responsibility of the evaluator, the following points were set down as rules to be considered when writing evaluations, in general, and on student teachers, in particular:

1. Describe clearly both the strengths and weaknesses of the individual. Be specific. (The person reviewing the evaluation should be given the opportunity to apply his own personality, philosophy and needs to the evaluation.)

2. Try to be as candid and articulate in writing about <u>weaknesses</u> as you are when writing about strengths. The evaluator must put himself on record concerning issues that deal with extreme problems.

3. Do not use general comments, such as "she's no good" or "I don't recommend her."

Dr. Trachtman informed the teachers that the confidential evaluations for this period would be done on a prepared check list form, with a short informal summary at the end. (These were later distributed.) He requested that teachers make a note of any inadequacies or changes that might be required on this check list, so that it can be revised, if necessary, for the fall term.

B. Cooperating Teacher Expectations of Student Teacher

As an outgrowth of the evaluation process came a discussion concerning what the cooperating teacher should expect of her student teacher. Should she be expected to emulate the cooperating teacher, or be encouraged to develop her own teaching personality? Dr. Trachtman stated that the student teacher would first have to master the skills of her trainer, i.e., the cooperating teacher, and then, hopefully, she could develop in her own right, using the information and material she received as she sees fit. Mr. Kramer outlined this procedure as follows:

1. First, the cooperating teacher is the "teacher" of the student teacher—give student teacher basic needs, approaches, techniques, program of organization, etc., by having her observe the cooperating teacher as a competent professional.

2. Student teacher then tries these ideas out in the class by herself.

3. Student teacher then has opportunity to be critically evaluated and assisted by the cooperating teacher concerning things she did right or wrong.

4. Upon completion of the above, the student teacher should, to a greater or lesser degree, start to project her own personality into her teaching.

C. Student Teacher Expectations of Cooperating Teacher

Cooperating teachers also commented that they would like feedback from student teachers on what the student teachers expect from them. This information will be made available at the end of this semester in composite, retrospective form from student teacher questionnaires.

IV. LOGS

Dr. Trachtman discussed the procedure to be followed for log keeping for the coming (fourth) experience.

A. Student Teacher Logs

Student teachers are to continue to keep their logs as currently structured.

B. Cooperating Teacher Logs

Cooperating teacher logs are to be done on a more informal basis, eliminating the strict day-by-day structure. The focus should be on what is happening with the student teacher. Record the high points (which could mean several entries on one day, and perhaps none on another day). Make sure to include the specific dates on which entries are made. Following are some examples of items to be included:

1. When the cooperating teacher introduces the student teacher for the first time to a certain type of lesson, technique, approach, etc.

2. The first time the student teacher gives a lesson.

3. The first time the student teacher takes over the class by herself.

4. The first time she goes on a class trip.

5. When the student has a particular success or failure.

6. When a particularly important happening occurs.

V. PARENT-TEACHER CONFERENCES

A. Parent Reactions to Student Teacher in Classroom

Teachers reported that most parents at the parent-teacher conferences seemed pleased that the class had a student teacher. Viewed her as another "helping hand" and more individual attention for their children.

B. Student Teacher Involvement in Conferences

The degree of student teacher involvement in parent-teacher discussions varied with each cooperating teacher, from complete involvement, to occasional comments, to just being in the room and listening. One teacher felt that parents weren't as outspoken with the student teacher in the classroom; most felt they were not inhibited by her presence.

VI. DISCUSSION OF NEXT YEAR'S PROGRAM—1968-69

The entire afternoon was devoted to a careful review of the 1967-68 design for the purpose of extracting ideas and recommendations from the entire group, to be incorporated in the project design for 1968-69.

A. Junior Observers

Dr. Trachtman clarified that the 50 junior observers from Adelphi this year have been broken up into two groups: 25 in the experimental group (observing in Plainview); 25 in the control group (observing in other districts). Of the 25 experimental juniors presently in Plainview, 20 will become student teachers in the Plainview project next year; similarly, 20 of the 25 control group juniors will become student teachers in other districts and will continue as the control group.

At the present time, juniors are in the district for a 3-hour block of time either one morning or one afternoon a week. It was felt that this observation time should be increased. This would have to be instituted by Adelphi, and to date our requests for increased time for junior observations have been refused due to scheduling problems at Adelphi.

In order to determine the kinds of experiences the junior observers are receiving, both in Plainview and in other districts, Dr. Trachtman commented that he is planning, at the end of this semester, to distribute a pointed questionnaire to all the juniors (experimental and control). Hopefully, the responses should point up favorable differences in the kind of observation program our experimental juniors are being exposed to.

B. College Supervisor

The College Supervisor requested additional time at the school to allow for observation of student teachers, conferences with cooperating teachers, administrators, etc. Working in the necessary number of student teacher observations, in particular, has proven to be very difficult due to the normal daily interruptions in regular classroom instruction. Since this situation cannot be remedied on the school level, it should be taken into consideration by the college.

C. Cooperating Teachers

We have found from our experience this year that a cadre of ten cooperating teachers, each to handle four student teaching sessions, has proven to be unrealistic. Most teachers require a one- or two-session break during the year. Therefore, for next year, we plan to increase the cooperating teacher group to fifteen, and all will be involved in the entire program of cooperating teacher workshops throughout the year.

D. Student Teachers

It was agreed that the versatility of the student teacher training program (which includes such special activities as I.T.A. observations, team teaching, non-graded, special-subject workshops) be continued next year. Feedback from student teachers who are presently first-year teachers indicates that these exposures have proven to be very valuable to them as beginning teachers.

Teachers agreed that an important aspect of an effective teacher-in-training program should be to give the student teacher the opportunity to be left alone in the classroom for periods up to a full day. Cooperating teachers would have to carefully determine at what point the student teacher was ready for this experience—it might take place either at the end of her first experience or sometime during the second experience, depending upon the specific student teacher involved. (The legality aspect of this question will have to be checked into.)

Teachers requested that student teachers not be required to take any additional courses back at the College during their student teaching semester because of the interference with student teaching preparation and after-school conferences. Mr. Litvack explained that in order to be a full-time student at Adelphi, a student must carry 12 credits: 9 for student teaching, and 3 in another course at the College. Two possible suggestions were offered to alleviate this problem:

1. Increase student teaching time to 18 weeks, instead of the present 16, and give 12 credits for student teaching.

2. Offer another 3-credit course at Plainview, to be given by Plainview people with adjunct status. (This had been suggested to Adelphi last year, but was not accepted.)

E. Articulation of School-University Program

Suggestion was made that cooperating teachers should have an opportunity to sit in on student teacher seminars at the College

to get a familiarity with the background material that the student teacher is receiving. Unfortunately, this would be difficult to arrange, as most courses are given during the cooperating teacher's school day. Two solutions were offered and agreed upon as goals for next year:

1. That we try to approximate the above by having a half-day workshop early in the year at which Adelphi faculty will give an intensive description of ATEP, i.e., what is being taught in each of the subject areas. Then, later in the year, another half-day workshop should be held, at which our cooperating teachers will brief the Adelphi faculty as to what they feel is good or lacking in the Adelphi seminar program from the practical teaching point of view.

2. Teachers also requested more cooperating teacher meetings with the Adelphi supervisor, both on an individual and group basis.

G. Taping Program

Dr. Trachtman stated that we are planning to limit the use of video tape for next year, with greater concentration on audio taping, since the audio tapes can adequately give us the interaction analysis information we are seeking. This will eliminate the Audio Specialist from the budget for next year.

H. Cooperating Teacher Workshops

The two-week summer workshop originally planned for the summer of 1968 will have to be eliminated due to anticipated cut in the project budget. Instead, teachers agreed to hold a more intensive series of shorter workshops during the school year, as follows: three 2-day workshops at the beginning of the year, followed by several 1-day workshops spaced throughout the rest of the year. It was strongly felt that all teachers who will be cooperating teachers during the year be involved in all the workshops.

The workshops will be designed to include the following:

1. Interaction analysis training.

2. Meetings with Adelphi faculty to brief teachers on Adelphi curriculum, and to evaluate Adelphi seminar program vis a vis the school.

3. Definition of goals and objectives of the project.

4. Teacher behavior with student teachers.

I. Cooperating Teacher/Junior Observer Meeting—June 1968

(<u>Note</u>: Our present <u>junior observers</u> will be the <u>student teacher</u> group next year — therefore, the use of the term "junior observer" instead of "student teacher" in the following discussion.)

The group discussed a half-day combined cooperating teacher/ junior observer workshop for purposes of orienting next year's student teachers to the program and just getting to know each other (as proposed in the November 17, 1967, Cooperating Teacher Workshop Minutes). Since there will be no pre-school workshop time, it was felt that such a meeting would be most effectively combined with the final cooperating teacher workshop in June of this year. Junior observers will only be involved for a half-day, in the afternoon.

Proposed organization of the workshop is as follows:

1. A.M. Session — Cooperating teachers meet alone for final discussion of year's work and preparation for next year's program.

2. Lunch Hour — Junior Observers invited to join cooperating teachers for lunch and remainder of day.

3. P.M. Session — Cooperating teachers and junior observers meet together for student teacher orientation, followed by informal get-acquainted session.

The meeting was adjourned at 3:30 P.M.

Flanders Interaction Analysis

FLANDERS INTERACTION ANALYSIS

The Flanders System of Interaction Analysis is an obser-
vational procedure which can be used to classify the verbal
behavior of teachers and pupils. Using this system, verbal
behavior in the classroom is classified into ten category
designations. There are seven categories for teacher be-
havior, four of which are classified as indirect influence:
They are: 1) accepting pupil feeling, 2)praising or en-
couraging, 3) accepting pupil ideas, 4)asking questions.
There are three categories of direct teacher influence,
which are: 5) giving information or opinion, 6)giving
directions, and 7) criticizing. Two categories of pupil
talk are used in the system: 8) pupil response to the
teacher, and 9) pupil initiated talk. Category 10 is
used to indicate silence or confusion. After a lesson
has been categorized by a trained observer, the data is
summarized for interpretation by entering category numbers
in the form of tallies into a 10 row by 10 column table
called a matrix. The completed matrix provides a picture
not only of the percentage of interactions falling into
each category, but also of the general sequence of re-
sponses. Although an exact representation of the sequen-
tial time element of the entire lesson is not shown, re-
cording the numbers in the matrix in an overlapping fashion
preserves the sequential time element of adjacent numbers.
Thus, the researcher might note that praise followed stu-
dent response about 10% of the total lesson time and yet
be unable to ascertain from the matrix whether the praise
occurred mostly at the beginning or at the end of the
lesson. However, this information can be extracted from
the raw data, if pertinent.

Interaction Analysis was developed and refined by Flanders
in the early 1950's. J. P. Anderson (2) contributed sig-
nificantly to the validation of Interaction Analysis when
he found that observers using the system perceived teacher
influence in essentially the same way as did the teacher's
pupils.

I/D ratios (indirect/direct) were computed for each matrix:
a)the "I/D Ratio" showing the overall use by the student
teacher of indirect statements as compared to direct state-
ments--Flanders categories 1+2+3+4 divided by categories
5+6+7; b)the "Revised I/D" emphasizing the motivating and
control statements--categories 1+2+3 divided by categories
6+7.

TALLYING WORKSHEETS

Date_____   Teacher_____

Time: From_____ To_____   Lesson Activity_____

Grade_____   Tally Prepared By_____

1._____	1._____	1._____	1._____	1._____
2._____	2._____	2._____	2._____	2._____
3._____	3._____	3._____	3._____	3._____
4._____	4._____	4._____	4._____	4._____
5._____	5._____	5._____	5._____	5._____
6._____	6._____	6._____	6._____	6._____
7._____	7._____	7._____	7._____	7._____
8._____	8._____	8._____	8._____	8._____
9._____	9._____	9._____	9._____	9._____
10._____	10._____	10._____	10._____	10._____
11._____	11._____	11._____	11._____	11._____
12._____	12._____	12._____	12._____	12._____
13._____	13._____	13._____	13._____	13._____
14._____	14._____	14._____	14._____	14._____
15._____	15._____	15._____	15._____	15._____
16._____	16._____	16._____	16._____	16._____
17._____	17._____	17._____	17._____	17._____
18._____	18._____	18._____	18._____	18._____
19._____	19._____	19._____	19._____	19._____
20._____	20._____	20._____	20._____	20._____
21._____	21._____	21._____	21._____	21._____
22._____	22._____	22._____	22._____	22._____
23._____	23._____	23._____	23._____	23._____
24._____	24._____	24._____	24._____	24._____
25._____	25._____	25._____	25._____	25._____

E-2

MATRIX — CATEGORIES FOR INTERACTION ANALYSIS

Date_____   Teacher's Name_____

Time_____   Lesson Activity_____

Grade_____   Matrix prepared by_____

	1	2	3	4	5	6	7	8	9	10	Total
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
Tot											
%											

Interpretation

<u>Teacher Talk (Cols. 1-7)</u> %_____

<u>Student Talk (Cols. 1-9)</u> %_____

ID Ratio $\dfrac{\text{Col. 1-4}}{\text{Col. 5-7}}$

_____

Revised ID Ratio $\dfrac{\text{Col. 1-3}}{\text{Col. 6-7}}$

_____

E-3

IPAT Anxiety Scale

IPAT ANXIETY SCALE

The Anxiety Scale is a brief, non-stressful, clinically-valid questionnaire for measuring anxiety throughout the adult range. "The Scale can be used not only for initial diagnosis, but also in follow-ups as a 'clinical thermo-meter' for charting progress or change of level with psy-chotherapy, medication, change of situation, etc., in research or practice." (5) Construct validity is estimated at +.85 to +.90 for the total Scale, depending on method of estimation used. External validity to a psychiatric criterion ranges from +.30 to +.40, but it has also been demonstrated that the consensus of psychiatrists' diagnosis as to anxiety level correlates higher with scores on this anxiety test factor than with any other known personality factor, with low inter-clinician reliability limiting the maximum value attainable (which might have reached +.60 or +.70 if corrected for attenuation). Reliability data ranges from +.87 to +.93 for test-retest analysis of dependability, and +.80 to +.91 for split-half studies of homogeneity.

The Scale consists of 40 multiple choice items carefully selected from an initial pool of four or five thousand potential items. A single total anxiety score is derived from responses to all 40 items. It is also possible to break this down into covert and overt anxiety and into five factorial components of anxiety, but only the total anxiety score has been considered in this study.

Fuchel Experience Comfort Scale

(E-C Scale)

FUCHEL EXPERIENCE COMFORT SCALE (E-C SCALE)

This is an informal inventory of 26 items which aims to elicit information about anxiety specifically related to the classroom teaching situation. While specific reliability and validity data have not been gathered, it has been useful as an auxiliary tool in conjunction with more standardized measurement instruments (9) and was used in this study as an adjunct to the IPAT Anxiety Scale. The Scale consists of 26 items, each referring to a specific experience in the classroom which a teacher might have in the course of a normal teaching experience. For each item there is a three-point check list in terms of the frequency with which this has been experienced in the past, and a four-point check list in terms of the confidence the respondent feels about coping with the situation.

E-C SCALE

Below is a list of statements about experiences you may have had with children.

In the left hand column, put an X in the space that shows how much experience you have had with each of the situations described in that statement.

In the right hand column, put an X in the appropriate space to indicate whether you feel very confident (VC), fairly confident (FC), somewhat insecure (SI), or very insecure (VI) with that situation. If you have had no experience with that kind of situation, imagine how you would feel.

Please be certain you answer in both columns for each statement.

Your answers are being used for research purposes only. Please be as frank as you can in your responses.

Experience				Confidence			
never	some-times	often		very confi. (VC)	fairly confi. (FC)	some insec. (SI)	very insec. (VI)
			1. Playing with a group of children				
			2. Planning a lesson				
			3. Watching verbally aggressive behavior				
			4. Setting behavior limits for one child				
			5. Watching behavior which is in conflict with your value system				
			6. Teaching one child a skill or subject				
			7. Setting behavior limits for a group of children				
			8. Handling a disagreement between yourself and a superior (teacher, supervisor, principal)				
			9. Observing a child who is engaging in sexual behavior				

Experience				Confidence			
never	some-times	often		very confi. (VC)	fairly confi. (FC)	some insec. (SI)	very insec. (VI)
			10. Planning a trip with children				
			11. Handling the child who defies				
			12. Discussing what you have seen with fellow students, teachers, etc.				
			13. Handling the child who clings				
			14. Watching physically aggressive behavior towards others				
			15. Standing up in front of a class (or large group) and teaching or presenting some material				
			16. Handling a child who is engaging in sexual behavior				
			17. Handling scapegoating				
			18. Handling verbally aggressive behavior towards others				
			19. Handling behavior which is in conflict with your value system				
			20. Teaching a group of children a skill or subject				
			21. Handling physically aggressive behavior towards others				
			22. Being friendly "at a distance" with children				
			23. Talking with children about things that might make you feel uncomfortable (marijuana, sex, racial issues)				
			24. Talking with a large group of children - conducting a discussion				
			25. Handling a child who is aggressive towards you (hits, spits, kicks)				
			26. Talking with a small group of children				

G-3

Cattell Sixteen Personality Factor Scale

(16 P.F.)

CATTELL SIXTEEN PERSONALITY FACTOR SCALE (16 P.F.)

This scale measures sixteen, factor analytically derived aspects of personality which have been established as unitary, psychologically-meaningful entities consistent with general psychological theory. The sixteen dimensions are essentially independent and may be listed, non-technically, as follows: aloof-warm, dull-bright; emotional-mature, submissive-dominant, glum-enthusiastic, casual-conscientious, timid-adventurous, tough-sensitive, trustful-suspecting, conventional-eccentric, simple-sophisticated, confident-insecure, conservative-experimenting, dependent-self sufficient, uncontrolled-self controlled, stable-tense. More technical descriptions of each factor are available in the manual (4). Form C of the 16 P.F. was developed as a shorter form than previous test forms and with an index to guard against attempts at distortion of the self picture. Each dimension is tapped by six questions, except general intelligence where eight items are used. An additional seven items are included to tap motivational distortion. The mean correlation of all single items with the factor they represent is +.37, and the mean correlation of each group of items with the factor it represents is +.71, which is quite high for so brief a test. As evidence of external validity, the test manual cites a large number of studies demonstrating that the various factors measured typically predict for a wide variety of real-life situations. Reliability ranges from +.32 to +.71 for the various factor scales, but the authors point out that, while some of these are not high, their departure from unity covers "function-fluctuation", i.e., real changes in level of traits over time as well as test unreliability.

Public Opinion Scale

PUBLIC OPINION SCALE

This Scale is actually the Rokeach Dogmatism (D) Scale under another name, for purposes of this study. The D Scale was used to measure the openness of a teacher's belief system. Rokeach compares the open and closed persons in the following way: "The closed person sees the world as being relatively threatening. The open person sees the world as being relatively friendly. The closed person judges ideas in terms of the authority of the source of the ideas and the extent to which the ideas correspond to his own beliefs. The open person tends to judge ideas on their own intrinsic merit." (24)

Form E of the D Scale contains 40 items. The subjects indicate disagreement or agreement with each item on a scale ranging from -3 to +3, with the zero point excluded in order to force responses toward agreement or disagreement. The scale is subsequently converted, for scoring purposes, to a 1-to-7 scale by adding a constant of 4 to each item score. The total score is the sum of scores obtained on all items in the test.

The reliability of Form E was well established by Rokeach and others in a series of studies at Michigan State University (1955,1956), Ohio State University (1955), University College in London, England (1954), Birbeck College, England (1954), New York Veteran's Administration Domiciliary (1958), and Vauxhall Motors, England (1954). Reliabilities have ranged from .68 in one of the Ohio State samples to .93 in one of the V.A. samples. Seven of the ten ranged from .74 to .85. A review of more recent data by Zagona and Zurcher substantiates the reliability and validity of the scale. "Recently collected data on the reliability and validity of Rokeach's Dogmatism Scale are reviewed. Test-retest reliability coefficients for the scale obtained by the authors are compared with those cited by Rokeach. Reliability is shown to be about the same for High Dogmatics as for Low Dogmatics. The construct validity of dogmatism is shown to be supported by validity data resulting from experimental-observational studies of individual behavior and group processes." (29)

Additional verification of the D Scale's validity was presented by Rokeach and Fruchter in 1956 (25) based on a factor analytic study of the D Scale and the F Scale along with some other measures of personality and political persuasion. Their findings suggested that the D Scale was indeed a measure of general authoritarianism in comparison to the right wing bias of the F Scale. A more recent factor analytic study by Kerlinger and Rokeach (18) supported the concept of dogmatism as a measure of general authoritarianism.

PUBLIC OPINION SURVEY

Given below are 40 statements that express a number of important social and personal questions on which we all have beliefs and opinions. We all think differently about such matters, and this scale is an attempt to let you express your beliefs and opinions on them. A number of conflicting and opposing points of view are included. You will find yourself agreeing strongly with some of the statements, disagreeing just as strongly with others, and agreeing and disagreeing less strongly with still others. Whether you agree or disagree with any statement, you can be sure that many other people feel pretty much the way you do. Please try to respond to all the statements as honestly and frankly as you can.

<u>Instructions</u>: Respond to each of the items as follows:

Agree very strongly:	+3	Disagree very strongly:	-3
Agree strongly:	+2	Disagree strongly:	-2
Agree:	+1	Disagree:	-1

For example, if you <u>agree very strongly</u> with a statement, write a +3 on the short line preceding the statement, but if you should happen to <u>disagree</u> with it, write -1 in front of it. Respond to each of the statements as best you can. Please do not omit any. Go rapidly but carefully. Do not spend too much time on any one statement; try to respond and then go on.

____ 1. A group which tolerates too much differences of opinion among its own members cannot exist for long.

____ 2. A man who does not believe in some great cause has not really lived.

____ 3. My blood boils whenever a person stubbornly refuses to admit he's wrong.

____ 4. A person who gets enthusiastic about too many causes is likely to be a "wishy-washy" sort of a person.

____ 5. In times like these it is often necessary to be more on guard against ideas put out by people or groups in one's own camp than by those in the opposing camp.

____ 6. Most people just don't know what's good for them.

____ 7. Fundamentally, the world we live in is a pretty lonesome place.

_____ 8. Unfortunately, a good many people with whom I have dis-
cussed important social and moral problems don't really
understand what's going on.

_____ 9. There are a number of persons I have come to hate because
of the things they stand for.

_____ 10. When it comes to difference of opinion in religion, we
must be careful not to compromise with those who believe
differently from the way we do.

_____ 11. The highest form of government is a democracy and the high-
est form of democracy is a government run by those who are
most intelligent.

_____ 12. There is so much to be done and so little time to do it.

_____ 13. In times like these, a person must be pretty selfish if he
considers primarily his own happiness.

_____ 14. If given the chance I would do something of great benefit
to the world.

_____ 15. The United States and Russia have just about nothing in
common.

_____ 16. It is often desirable to reserve judgment about what's
going on until one has had a chance to hear the opinions
of those one respects.

_____ 17. In the long run the best way to live is to pick friends
and associates whose tastes and beliefs are the same as
one's own.

_____ 18. Man on his own is a helpless and miserable creature.

_____ 19. It is only when a person devotes himself to an ideal or
cause that life becomes meaningful.

_____ 20. It is only natural for a person to be rather fearful of
the future.

_____ 21. Most of the ideas which get printed nowadays aren't worth
the paper they are printed on.

_____ 22. A person who thinks primarily of his own happiness is be-
neath contempt.

_____ 23. It is better to be a dead hero than a live coward.

_____ 24. Most people just don't give a "damn" for others.

_____ 25. While I don't like to admit this even to myself, my secret
ambition is to become a great man, like Einstein, or
Beethoven, or Shakespeare.

_____ 26. To compromise with our political opponents is dangerous because it usually leads to the betrayal of our own side.

_____ 27. It is only natural that a person should have a much better acquaintance with ideas he believes in than with ideas he opposes.

_____ 28. Even though freedom of speech for all groups is worthwhile goal, it is unfortunately necessary to restrict the freedom of certain political groups.

_____ 29. In the history of mankind there have probably been just a handful of really great thinkers.

_____ 30. Once I get wound up in a heated discussion I just can't stop.

_____ 31. I'd like it if I could find someone who would tell me how to solve my personal problems.

_____ 32. If a man is to accomplish his mission in life it is sometimes necessary to gamble "all or nothing at all."

_____ 33. There are two kinds of people in the world: those who are for truth and those who are against the truth.

_____ 34. In this complicated world of ours the only way we can know what is going on is to rely on leaders or experts who can be trusted.

_____ 35. The present is all too full of unhappiness. It is only the future that counts.

_____ 36. The worst crime a person could commit is to attack publicly the people who believe in the same thing he does.

_____ 37. In a heated discussion I generally become so absorbed in what I am going to say that I forget to listen to what the others are saying.

_____ 38. Of all the different philosophies which exist in this world there is probably only one which is correct.

_____ 39. The main thing in life is for a person to want to do something important.

_____ 40. In a discussion I often find it necessary to repeat myself several times to make sure I am being understood.

Kerlinger Education Scale VII

This refers to the Kerlinger Progressivism-Traditionalism Scale and was used to measure teacher attitudes toward education.

The ES-VII is a shortened form of the ES-VI. It was used in the present study in place of the longer form in order to reduce the total number of items which respondents will be required to answer from 106 to 90. "The 46-item scale, with 23A (Progressivism) and 23 B (Traditionalism) items, was constructed from a pool of some 100 items used in earlier research....The following criteria guided item selection: (1) factor loadings greater than .34 on one factor only; (2) item-total r's greater than .34: A items with A totals and B items with B totals; and (3) wide coverage of educational attitude content. Redundant items were deleted and some items were rewritten to improve wording. Since ES-1, the predecessor of ES-VI, yielded reliabilities only in the .70's, it was decided to increase the probability of adequate reliability. Unfortunately, it was not possible to find 50 items that satisfied all three criteria. The 46 items that satisfied the criteria most adequately were interspersed at random in a seven-point summated-rating (Likert) scale. The instructions emphasized honest response by stressing the wide variety of response possible." (17) The instrument was administered to three samples of graduate students of education and teachers at New York University (1964), the University of North Carolina (1965), and the University of Houston (1965). The samples totaled 1304 subjects. Reliabilities for A and B measures taken separately ranged from .79 to .86. Kerlinger indicated that ES-VI was also administered to 161 graduate students of education in Canada and to a heterogeneous sample of 228 professors and students in New York with results similar to those obtained in the original three samples.

Factor analysis of the data obtained from the original three samples supports the validity of the construct, Progressivism-Traditionalism, and of the scale as a measure of the attitudes of individuals with reference to that construct.

> "First, the apparent inconsistency of predicting two educational attitude factors and actually getting more than two factors is resolved. When we resort to second-order factor analysis, we see that theory and empirical evidence agree. We were able to reduce a multi-faceted attitude domain to two basic factors. The evidence for the empirical 'reality' of progressivism and traditionalism, then, is strong.

"Second, the study evidence also shows how and why it is possible to measure the A and B dimensions successfully, even though they are multidimensional. Despite the emergence of eight interpretable factors, the A and B measures, both combinations of three or more factors, consistently show substantial reliabilities. This is explained by the positive correlations among the A and B first-order factors and by item variance summation, a phenomenon long ago elucidated by Cronbach (1951).

"When we examine the rotated first-order factor matrices, we find, along with the larger loadings, many small positive loadings on each factor. The cumulative effect over many items is to produce positive correlations among the item clusters and among the factors. In addition, Cronbach showed that, under certain conditions, the cumulative effect of a general or large group factor is to increase the reliability of a test. He pointed out that as a test is lengthened such a factor will contribute to more and more of the total test variance. This seems to be what happens in the present case of the A and B even though both are multifactorial.

"Third, the small amount of bipolarity in the data further supports the theory. Although no attempt was made in this study specifically to test the bipolarity implications of the theory, the amount of bipolarity that appeared seems consistent with it.

"Fourth, the degree of factorial invariance found in this study with samples from different regions of the country is encouraging. Although there were differences, especially between the Texas sample and the other two samples, the large factors emerged clearly in all three samples.

"Finally, the factors of the first-order analysis, as defined by the items, are unusually interesting because the progressive factors seemed to define different progressive philosophies of education rather than substantive educational areas, whereas the traditional factors pretty much reflected educational conservatism and dissatisfaction with modern education.

"In sum, the evidence of this study and the studies that preceded it supports the contention that educational attitudes consist of two relatively independent basic dimensions that can legitimately be called 'progressivism' and 'traditionalism', and it casts doubt on the notion that educational attitudes form a bipolar continuum." (17)

Kerlinger suggested in a brief footnote that the 30-item Scale, ES-VII, is an adequate measure of the same attitudes toward education measured by ES-VI. "Since this paper was written, the results obtained with ES-VII, a 30-item (15 $\underline{A}$ and 15 $\underline{B}$ items) scale whose items were selected from those of ES-VI on the basis of factor saturations, item-total $\underline{r}$'s, and content, have been analyzed. The scale was administered to 800 teachers and graduate students of education in New York and Indiana. The $\underline{A}$ and $\underline{B}$ subscales had reliabilities in the high .70's, almost all items had substantial item-total $\underline{r}$'s, and subsample means and standard deviations were quite similar to those of ES-VI. More important, first-order factor analyses support the results and conclusions of the present study. For another research purpose, moreover, the items of ES-VII were included with the items of another scale in a second-order factor analysis. The oblique $\underline{A}$ and $\underline{B}$ first-order factors fell on two orthogonal second-order factors, just as the $\underline{A}$ and $\underline{B}$ first-order factors of this study did." (17)

As previously indicated, the ES-VII was used in this study to measure teacher attitudes toward education, and was conceived of as a dependent variable in the study.

EDUCATION SCALE VII

Instructions: Given below are 30 statements·on educational ideas
and problems about which we all have beliefs, opinions, and attitudes.
We all think differently about such matters, and this scale is an
attempt to let you express your beliefs and opinions. Respond to each
of the items as follows:

Agree Very Strongly:	+ 3	Disagree Very Strongly:	- 3
Agree Strongly:	+ 2	Disagree Strongly:	- 2
Agree:	+ 1	Disagree:	- 1

For example, if you agree very strongly with a statement, you would
write +3 on the short line preceding the statement, but if you should
happen to disagree with it, you would put a -1 in front of it. Re-
spond to each statement as best you can. Go rapidly but carefully.
Do not spend too much time on any one statement; try to respond and
then go on.

_____ 1. Learning is essentially a process of increasing one's store
of information about the various fields of knowledge.

_____ 2. The curriculum consists of subject matter to be learned and
skills to be acquired.

_____ 3. The learning of proper attitudes is often more important
than the learning of subject matter.

_____ 4. It is more important that the child learn how to approach
and solve problems than it is for him to master the subject
matter of the curriculum.

_____ 5. The true view of education is so arranging learning that
the child gradually builds up a storehouse of knowledge
that he can use in the future.

_____ 6. What is needed in the modern classroom is a revival of the
authority of the teacher.

_____ 7. Teachers should keep in mind that pupils have to be made
to work.

_____ 8. Schools of today are neglecting the three R's.

_____ 9. Standards of work should not be the same for all pupils;
they should vary with the pupil.

_____ 10. The goals of education should be dictated by children's
interests and needs, as well as by the demands of society.

_____ 11. Each subject and activity should be aimed at developing a particular part of the child's makeup: physical, intellectual, social, moral, or spiritual.

_____ 12. Right from the very first grade, teachers must teach the child at his own level and not at the level of the grade he is in.

_____ 13. Teachers need to be guided in what they are to teach. No individual teacher can be permitted to do as he wishes, especially when it comes to teaching children.

_____ 14. Learning experiences organized around life experiences rather than around subjects is desirable in our schools.

_____ 15. We should fit the curriculum to the child and not the child to the curriculum.

_____ 16. Subjects that sharpen the mind, like mathematics and foreign languages, need greater emphasis in the public school curriculum.

_____ 17. Since life is essentially a struggle, education should emphasize competition and the fair competitive spirit.

_____ 18. The healthy interaction of pupils one with another is just as important in school as the learning of subject matter.

_____ 19. The organization of instruction and learning must be centered on universal ideas and truths if education is to be more than passing fads and fancies.

_____ 20. The curriculum should contain an orderly arrangement of subjects that represent the best of our cultural heritage.

_____ 21. True discipline springs from interest, motivation, and involvement in live problems.

_____ 22. Emotional development and social development are as important in the evaluation of pupil progress as academic achievement.

_____ 23. Education and educational institutions must be sources of new social ideas.

_____ 24. Children should be taught that all problems should be subjected to critical and objective scrutiny, including religious, moral, economic, and social problems.

_____ 25. One of the big difficulties with modern schools is that discipline is often sacrificed to the interests of children.

_____ 26. Teachers should encourage pupils to study and criticize our own and other economic systems and practices.

____ 27. Children need and should have more supervision and discipline than they usually get.

____ 28. Schools should teach children dependence on higher moral values.

____ 29. The public school should take an active part in stimulating social change.

____ 30. Learning is experimental; the child should be taught to test alternatives before accepting any of them.

Teachers at Work

TEACHERS AT WORK

This is a rating scale developed by Pedhazur (21) for the purpose of distinguishing between pseudo progressives and "genuine" progressives in educational attitudes. It consists of episodes depicting teacher-student interactions in which the teachers employ the mechanics or facade of progressivism but, in essence, contradict its philosophy and the behaviors implied by its philosophy. In each episode, the teacher either manipulates the students, encourages destructive criticism, or encourages intragroup aggression and competition. The respondents rate each teacher depicted in an episode on a six-point scale from "very poor" to "excellent". Factor analytic studies of this scale indicated that the scale related to the D Scale (+.34 to +.45) and two factors were identified, "teaching content" and "class management." Since Kerlinger's ES-VII Scale loaded on neither factor and the D Scale loaded on both, Kerlinger sees this as evidence of the validity of the TAW Scale. Its test-retest reliability is +.80.

TEACHERS AT WORK

In the following pages you are presented with observations of teachers at work. You are asked to act like an observer who enters classrooms, observes teachers, and rates them. However, instead of you going into the classroom, we provide you with observations made by competent observers and ask you to rate each teacher on a scale ranging from Very Poor to Excellent.

We realize that it is difficult to evaluate a teacher on the basis of one observation. Yet, when the need arises, people are able to make evaluations even when little information is provided.

At the bottom of each observation you will find a scale on which you will indicate your evaluation of the teacher by placing a check on the scale. If, for example, you think the teacher is Very Good you will place a check on the scale thus:

```
                                        ✓
  |—————————|—————————|—————————|—————————|—————————|
 Very       Poor      Fair      Good      Very      Excellent
 Poor                                     Good
```
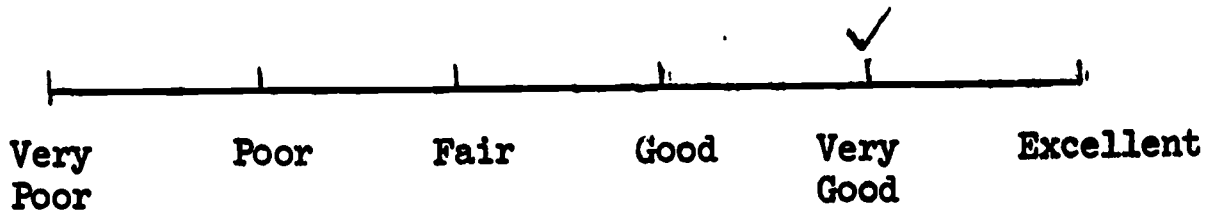
Do this for all observations. Remember, each observation deals with a different teacher. Therefore, evaluate each teacher independently of all other teachers. That is, you should not let your evaluation of one teacher affect your evaluation of any other teacher.

Thank you for your cooperation.

Fifth Grade

Teacher: What did you see in the newspapers yesterday of nationwide importance?

Many answers. One child says, "The coal strike." From this the teacher led a discussion about coal - where it comes from, how it is formed, etc.

Teacher: What subject area would this come under for our study today?

Child: Social studies

Teacher: What word can you think of that rhymes with coal?

Child: Goal

Teacher: Good. Today we shall study the 'oa' family and learn to pronounce and spell words of this family. What subject area will this come under?

After many guesses, one child says, "language arts."

Teacher: Quite right. Language arts.

Very Poor	Poor	Fair	Good	Very Good	Excellent

Fourth Grade

The Good Citizens Club is holding a meeting. . . Officers
are elected by the group. The purpose of the club is to teach
children to be better citizens. The order of procedure is as follows:
the president. . .bangs her gavel on the desk and. . .says: "The
meeting of the Good Citizens Club will come to order." Each child
then takes from his or her desk a booklet whose title is All About
Me . . .and places it on top of his desk. The vice-president calls
the name of a child, gets the child's booklet, and places it on the
teacher's desk. The president then calls on the child and asks,
"Robert, have you been a good citizen this week?" The president
says, "Name some of the good things you have done," and Robert tries
to recall some, like opening doors for people, running errands etc.
Next the president asks the class if it remembers any good things
the child has done. Each point is written in the child's booklet
by the teacher. The president then says to Robert, "Name the bad
things you have done. . ." Robert reports the wrongs he has committed
during the week, and the class is asked to contribute information
about his behavior. This too is written in the booklet by the teacher.
When one child reports a misdemeanor of another the teacher asks for
witnesses before recording the incident.

Very Poor	Poor	Fair	Good	Very Good	Excellent

Please Note: Although this is a teacher's own account, we would like you to treat it in the manner you treat the observations.

              *   *   *

A Teacher's Account

The following is an outline of how I plan to have an indoor drinking fountain installed this school term through cooperative planning and the democratic process. In launching the project those who are in charge must take a lead in planning and interesting each person to a degree that he will participate in the study of school problems and in the formation of school policy and program.

September 7. The first meeting of the Willing Workers Club will be held with P.T.A. members present. Plans will be made to do something tangible for the school during the term. Out of the many suggestions which the club will give, the project of installing an indoor fountain will be decided upon.

September 14. At the second meeting of the club, the city nurse will be invited to give a talk on the importance of water in the body and the unsanitary fountain and results. Community needs will be discussed by the group.

The committee on contacting key people of the community will make its report. The ways and means committee will become active in the second meeting. The money will be raised at the end of four weeks and the fountain will be installed as a result of cooperative planning by a democratic community.

Very Poor	Poor	Fair	Good	Very Good	Excellent

K-5

After playtime. Jim is crying.

Teacher: What's the matter, Jim?

Jim: No one wants to play with me. They always keep me out of all the games.

Teacher: Can you think of any reason? Can you think of something you have done?

No answer.

Teacher: Class, may I have your attention. Jim, here, complains that no one wants to play with him. Now, let's be reasonable, let's discuss it like grown-ups. The best thing is not to keep things inside but tell the other person how one feels. I suggest you tell Jim what is bothering you and I am sure we can straighten things out.

Several children start speaking together.

Teacher: One minute, please. Everyone will get his chance. Just be patient.

Tom: Yesterday Jim pushed me and poked me with the elbow. He always does it. Why should I play with him?

Linda: When he has something, he never wants to share.

Rachel: He always wants my things.

Robert: He is a cry-baby.

After all the children were given a chance to explain, teacher says: "You see, Jim, they have all kinds of reasons. I am sure now that you have heard what they don't like you will not do it again. And you people, I want you to help Jim. You told him what you think. Now let's all help him be one of us. I am sure it will make us all feel better. We are all going to be good friends. Aren't we?

A number of children nod.

Very Poor	Poor	Fair	Good	Very Good	Excellent

K-6

Fifth Grade

The children are taking turns reading to the class stories they have made up. Charlie's is called The Unknown Guest.

"One dark, dreary night, on a hill a house stood. This house was forbidden territory for Bill and Joe, but they were going in anyway. The door creaked, squealed, slammed. A voice warned them to go home. They went upstairs. A stair cracked. They entered a room. A voice said they might as well stay and find out now; and their father came out. He laughed and they laughed, but they never forgot their adventure together."

Teacher: Are there any words that give you the mood of the story?

Lucy: He could have made the sentences a little better. . .

Gert: His sentences are too short. . .

Charlie and Jeanne have a discussion about the position of the word "stood" in the first sentence.

Teacher: Wait a minute; some people are forgetting their manners. . .

Jeff: About the room: the boys went up the stairs and one "cracked," then they were in the room. Did they fall through the stairs, or what?

The teacher suggests Charlie make that a little clearer. . .

Teacher: We still haven't decided about the short sentences.

Gwynne: I wish he had read with more expression instead of all at one time.

Rachel: Not enough expression.

Teacher: Charlie, they want a little more expression from you. I guess we have given you enough suggestions for one time, Charlie, haven't we?

Very Poor	Poor	Fair	Good	Very Good	Excellent

K-7

Sixth Grade.   Scene: Weekly class meeting.

Sally, the chairman, calls for the secretary's report. Items mentioned are chalk on walls outside of school, sale of Christmas seals, one-cent fine for leaving things on desk.

Teacher: (to secretary) Say "carried" rather than "voted through." (To chairman): I think you forgot your standing committee.

Judy reminds the group to bring things for the Junior Red Cross packages.

Teacher asks Judy to repeat what they need for the packages.

Chairman calls for old business.

Teacher: I think Wyland needs to give a report on duties.

Wyland reports.

There is some discussion about watering plants.

Teacher: Don't you think we should have a council report?

Council report follows.

Very Poor	Poor	Fair	Good	Very Good	Excellent

Rotter's I-E Test

ROTTER'S I-E TEST

This is a test of locus-of-control developed by Rotter (26)
as a measure of this specific aspect of personality. The
test consists of 29 items, each consisting of a pair of
statements. For each item the subject is asked to select
the statement he believes most. As evidence of discriminant
validity, the author offers low correlations with such var-
iables as intelligence, social desirability, and political
liberalism. Construct validity is supported by predictions
of differences in behavior for individuals above and below
mean of the scale or from correlations with behavioral cri-
teria. Reliability in terms of test-retest correlations
ranges from +.60 to +.83. Internal consistency coefficients
are +.69 to +.76.

IE

Form S-I

This is a set of questions to find out the way in which certain important events in our society affect different people. Each item consists of a pair of alternatives lettered a or b. Please select the one statement of each pair (and only one) which you more strongly believe to be the case, as far as you are concerned. Be sure to select the one you actually believe to be more true rather than the one you think you should choose or the one you would like to be true. This is a measure of personal belief; obviously there are no right or wrong answers.

As you read the pair of statements for each item, choose the one statement, either a or b, you believe to be most true, and circle a or b depending on your choice. Always choose one or the other statement, whether a or b. Please answer these items carefully, but do not spend too much time on any one item. Be sure to make a choice for every item, and to circle your choice.

In some instances you may find that you believe both statements or neither one. In such cases, be sure to select the one you more strongly believe to be the case as far as you're concerned. Also, try to respond to each item independently when you make your choice; do not be influenced by your previous choices.

Circle a or b for each item:

1.
   a. Children get into trouble because their parents punish them too much.

   b. The trouble with most children nowadays is that their parents are too easy with them.

2.
   a. Many of the unhappy things in people's lives are partly due to bad luck.

   b. People's misfortunes result from the mistakes they make.

3.

a. One of the major reasons why we have wars is because people don't take enough interest in politics.

b. There will always be wars, no matter how hard people try to prevent them.

4.

a. In the long run people get the respect they deserve in this world.

b. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.

5.

a. In school, the idea that teachers are unfair to their pupils is nonsense.

b. Most students don't realize the extent to which their grades are influenced by accidental happenings.

6.

a. Without the right breaks, one cannot be an effective leader.

b. Capable people who fail to become leaders have not taken advantage of their opportunities.

7.

a. No matter how hard you try, some people just don't like you.

b. People who can't get others to like them don't understand how to get along with others.

8.

a. Heredity plays the major role in determining one's personality.

b. It is one's experiences in life which determine what they are like.

9.
   a. I have often found that what is going to happen will happen.

   b. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.

10.
   a. In the case of the well prepared student in school, there is rarely, if ever, such a thing as an unfair test.

   b. Many times school examination questions tend to be so unrelated to course work that studying is really useless.

11.
   a. Becoming a success is a matter of hard work; luck has little or nothing to do with it.

   b. Getting a good job depends mainly on being in the right place at the right time.

12.
   a. The average citizen can have an influence in government decisions.

   b. This world is run by the few people in power, and there is not much the little guy can do about it.

13.
   a. When I make plans, I am almost certain that I can make them work.

   b. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.

14.
   a. There are certain people who are just no good.

   b. There is some good in everybody.

15.

   a. In my case getting what I want has little or nothing to do with luck.

   b. Many times we might just as well decide what to do by flipping a coin.

16.

   a. Who gets to be the boss often depends on who was lucky enough to be in the right place first.

   b. Getting people to do the right thing depends on ability; luck has little or nothing to do with it.

17.

   a. As far as world affairs are concerned, most of us are the victims of forces we can neither understand nor control.

   b. By taking an active part in political and social affairs the people can control world events.

18.

   a. Most people don't realize the extent to which their lives are controlled by accidental happenings.

   b. There really is no such thing as "luck".

19.

   a. One should always be willing to admit mistakes.

   b. It is usually best to cover up one's mistakes.

20.

   a. It is hard to know whether or not a person really likes you.

   b. How many friends you have depends on how nice a person you are.

21.

    a. In the long run the bad things that happen to us are balanced by the good ones.

    b. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.

22.

    a. With enough effort we can wipe out political corruptions.

    b. It is difficult for people to have much control over the things politicians do in office.

23.

    a. Sometimes I can't understand how teachers arrive at the grades they give their students.

    b. There is a direct connection between how hard a pupil studies and the grades he gets.

24.

    a. A good leader expects people to decide for themselves what they should do.

    b. A good leader makes it clear to everybody what their jobs are.

25.

    a. Many times I feel that I have little influence over the things that happen to me.

    b. It is impossible for me to believe that chance or luck play an important role in my life.

26.

    a. People are lonely because they don't try to be friends.

    b. There's not much use in trying too hard to please people; if they like you, they like you.

27.

    a. There is too much emphasis on athletics in high school.

    b. Team sports are an excellent way to build character.

28.

    a. What happens to me is my own doing.

    b. Sometimes I feel that I don't have enough control over the direction my life is taking.

29.

    a. Most of the time I can't understand why politicians behave they way they do.

    b. In the long run the people are responsible for bad government on a national as well as on a local level.

Semantic Differential Scale

SEMANTIC DIFFERENTIAL SCALE

The semantic differential is a "simple-looking but highly sophisticated" graphic rating scale (22,p.360) consisting of a number of graphic, seven-unit rating scale with opposing, or bi-polar, adjectives at each end. These scales set up a "semantic space, a region of some unknown dimensionality and Euclideon in character. Each semantic scale... is assumed to represent a straight line function that passes through the origin of this space, and a sample of such scales then represents a multidimensional space." (20,p.25) Factor analytic studies have yielded three dimensions of meaning, evaluation, potency and activity. Evaluation accounts for approximately twice the variance of either of the other two. With the semantic differential we can measure the meaning, in any given sense, to any individual, of literally any concept within his ken. Then the similarity between any two concepts can be measured by means of a D (distance) measure. Many validity studies are cited, especially in terms of the evaluative dimension, and a number of significant correlations with external criteria have been found. Reliability studies indicate item reliability about +.85 with adults. Evidence for children's reliabilities from a variety of studies shows similar results with children above third grade. (7)

Student teachers, cooperating teachers, and a sample of children were asked to evaluate four school-related concepts on the evaluative dimension. Children evaluated Student Teacher, Teacher, School, and Myself. Student teachers evaluated Pupils, Cooperating Teacher, School, and Myself. Cooperating teachers evaluated Student Teacher, Pupils, School, and Myself.

NAME_____ DATE_____

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┌─────────────────────────────────┐
│            PUPILS               │
└─────────────────────────────────┘
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GOOD _____:_____:_____:_____:_____ BAD

FRIENDLY_____:_____:_____:_____:_____ UNFRIENDLY

RIGHT _____:_____:_____:_____:_____ WRONG

HAPPY _____:_____:_____:_____:_____ SAD

HELPFUL _____:_____:_____:_____:_____ HARMFUL

WONDERFUL _____:_____:_____:_____:_____ TERRIBLE

M-2

NAME _____ DATE _____

COOPERATING TEACHER

GOOD _____:_____:_____:_____:_____ BAD

FRIENDLY _____:_____:_____:_____:_____ UNFRIENDLY

RIGHT _____:_____:_____:_____:_____ WRONG

HAPPY _____:_____:_____:_____:_____ SAD

HELPFUL _____:_____:_____:_____:_____ HARMFUL

WONDERFUL _____:_____:_____:_____:_____ TERRIBLE

M-3

NAME_____ DATE_____

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                    ┌─────────────────────┐
                    │       SCHOOL         │
                    └─────────────────────┘
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GOOD _____:_____:_____:_____:_____ BAD

FRIENDLY _____:_____:_____:_____:_____ UNFRIENDLY

RIGHT _____:_____:_____:_____:_____ WRONG

HAPPY _____:_____:_____:_____:_____ SAD.

HELPFUL _____:_____:_____:_____:_____ HARMFUL

WONDERFUL _____:_____:_____:_____:_____ TERRIBLE

NAME_____ DATE_____

MYSELF

GOOD _____:_____:_____:_____:_____ BAD

FRIENDLY _____:_____:_____:_____:_____ UNFRIENDLY

RIGHT _____:_____:_____:_____:_____ WRONG

HAPPY _____:_____:_____:_____:_____ SAD

HELPFUL _____:_____:_____:_____:_____ HARMFUL

WONDERFUL _____:_____:_____:_____:_____ TERRIBLE

M-5

NAME_____ DATE_____

| PUPILS |

GOOD _____:_____:_____:_____:_____ BAD

FRIENDLY _____:_____:_____:_____:_____ UNFRIENDLY

RIGHT _____:_____:_____:_____:_____ WRONG

HAPPY _____:_____:_____:_____:_____ SAD

HELPFUL _____:_____:_____:_____:_____ HARMFUL

WONDERFUL _____:_____:_____:_____:_____ TERRIBLE

NAME_____ DATE_____

| STUDENT TEACHER |

GOOD _____:_____:_____:_____:_____ BAD

FRIENDLY _____:_____:_____:_____:_____ UNFRIENDLY

RIGHT _____:_____:_____:_____:_____ WRONG

HAPPY _____:_____:_____:_____:_____ SAD

HELPFUL _____:_____:_____:_____:_____ HARMFUL

WONDERFUL _____:_____:_____:_____:_____ TERRIBLE

M -7

NAME_____ DATE_____

┌─────────────────────────────┐
│   SCHOOL   │
└─────────────────────────────┘

GOOD _____:_____:_____:_____:_____ BAD

FRIENDLY _____:_____:_____:_____ UNFRIENDLY

RIGHT _____:_____:_____:_____ WRONG

HAPPY _____:_____:_____:_____ SAD

HELPFUL _____:_____:_____:_____ HARMFUL

WONDERFUL _____:_____:_____:_____ TERRIBLE

M-8

NAME_____ DATE_____

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┌─────────────────────────────┐
│           MYSELF            │
└─────────────────────────────┘
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GOOD _____:_____:_____:_____:_____ BAD

FRIENDLY _____:_____:_____:_____:_____ UNFRIENDLY

RIGHT _____:_____:_____:_____:_____ WRONG

HAPPY _____:_____:_____:_____:_____ SAD

HELPFUL _____:_____:_____:_____:_____ HARMFUL

WONDERFUL _____:_____:_____:_____:_____ TERRIBLE

NAME_____ AGE_____ BOY_____ GIRL_____

GRADE_____ TEACHER'S NAME_____ DATE_____

STUDENT TEACHER

GOOD _____:_____:_____:_____:_____ BAD

FRIENDLY _____:_____:_____:_____:_____ UNFRIENDLY

RIGHT _____:_____:_____:_____:_____ WRONG

HAPPY _____:_____:_____:_____:_____ SAD

HELPFUL _____:_____:_____:_____:_____ HARMFUL

WONDERFUL _____:_____:_____:_____:_____ TERRIBLE

M-10

NAME_____ AGE_____ BOY_____ GIRL_____

GRADE_____ TEACHER'S NAME_____ DATE_____

<div style="border:1px solid black; display:inline-block; padding:10px;">MY TEACHER</div>

GOOD _____:_____:_____:_____:_____ BAD

FRIENDLY _____:_____:_____:_____:_____ UNFRIENDLY

RIGHT _____:_____:_____:_____:_____ WRONG

HAPPY _____:_____:_____:_____:_____ SAD

HELPFUL _____:_____:_____:_____:_____ HARMFUL

WONDERFUL _____:_____:_____:_____:_____ TERRIBLE

M-11

NAME_____ AGE_____ BOY_____ GIRL_____

GRADE_____ TEACHER'S NAME_____, DATE_____

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+-------------------------+
|         SCHOOL          |
+-------------------------+
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GOOD _____:_____:_____:_____:_____ BAD

FRIENDLY _____:_____:_____:_____:_____ UNFRIENDLY

RIGHT _____:_____:_____:_____:_____ WRONG

HAPPY _____:_____:_____:_____:_____ SAD

HELPFUL _____:_____:_____:_____:_____ HARMFUL

WONDERFUL _____:_____:_____:_____:_____ TERRIBLE

M-12

NAME_____ AGE_____ BOY_____ GIRL_____

GRADE_____ TEACHER'S NAME_____ DATE_____

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+---------------------+
|       MYSELF        |
+---------------------+
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GOOD _____:_____:_____:_____:_____ BAD

FRIENDLY _____:_____:_____:_____:_____ UNFRIENDLY

RIGHT _____:_____:_____:_____:_____ WRONG

HAPPY _____:_____:_____:_____:_____ SAD

HELPFUL _____:_____:_____:_____:_____ HARMFUL

WONDERFUL _____:_____:_____:_____:_____ TERRIBLE

M-13

<u>Student Teacher's Attitude Questionnaire</u>

and

<u>Cooperating Teacher's Attitude Questionnaire</u>

STUDENT TEACHER'S ATTITUDE QUESTIONNAIRE

This questionnaire, and the parallel Cooperating Teacher's
Questionnaire, were devised by Moskowitz (19) at Temple
University to assess the attitudes and the degree of satis-
faction of student teachers and their cooperating teachers
toward one another. These questionnaires consist of items
which were generated from favorable and unfavorable comments
made by student teachers and cooperating teachers about one
another. The attitude questionnaires are made up of parallel
items so that the same questions the cooperating teachers
answer on the Cooperating Teacher's Attitude Questionnaire
(C.T.A.Q.) are rephrased to apply to the student teachers on
the Student Teacher's Attitude Questionnaire (S.T.A.Q.)

Each questionnaire contains 11 items. Subjects check their
reactions to each item on a nine-point scale. Scores range
from 11 to 99, with higher scores indicating more positive
attitudes. Reliabilities of S.T.A.Q. and C.T.A.Q. are +.87
and +.92, respectively.

NAME OF STUDENT TEACHER_____

NAME OF YOUR COOPERATING TEACHER_____

SCHOOL_____ GRADE_____ DATE_____

THIS QUESTIONNAIRE IS TO EXAMINE YOUR REACTIONS TOWARD YOUR COOPERAT-
ING TEACHER. THE RESULTS WILL BE USED AS GROUP DATA. YOUR RESPONSES
WILL BE KEPT CONFIDENTIAL. PLEASE CIRCLE THE NUMBER ON THE SCALES
BELOW WHICH BEST INDICATES YOUR FEELINGS TOWARD YOUR COOPERATING
TEACHER FOR EACH OF THE FOLLOWING STATEMENTS:

1. When my cooperating teacher offers suggestions or ideas to me,
   he (she) makes me feel like

1	2	3	4	5	6	7	8	9

   always   sometimes   never
   trying them   trying them   trying them

2. I find that my cooperating teacher allows me to use my own ideas
   in planning my lessons

1	2	3	4	5	6	7	8	9

   not at   half of   all of
   all   the time   the time

3. In our talks concerning my lessons, my cooperating teacher tells
   me what is wrong with my teaching

1	2	3	4	5	6	7	8	9

   quite   some of   not at
   a lot   the time   all

4. The talks that I have with my cooperating teacher are

1	2	3	4	5	6	7	8	9

   very   sometimes   not at all
   helpful   helpful   helpful
   to me   to me   to me

5. In terms of being flexible and willing to make changes, I find
   my cooperating teacher

1	2	3	4	5	6	7	8	9

   very set   sometimes   very
   in his   willing to   willing to
   ways   make changes   make changes

6. I find my cooperating teacher is

1	2	3	4	5	6	7	8	9

   very hard   as easy to work   very easy
   to work with   with as most   to work with

7. I believe my cooperating teacher understands and accepts the feelings I have about my teaching situation

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

all of
the time
                 some of
                 the time
                                        not at
                                        all

8. My cooperating teacher makes me feel willing to discuss my lessons with him (her)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

not at
all
                 sometimes
                                    always

9. The way my cooperating teacher criticizes me, causes me to

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

always
accept the
criticism
                 sometimes
                 accept the
                 criticism
                                      always
                                      reject the
                                      criticism

10. In comparing my ideas about teaching with those of my cooperating teacher, we seem to

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

agree on
most things
                 agree on ½,
                 disagree on ½
                                        disagree on
                                        most things

11. My cooperating teacher praises me

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

very
little
                 sometimes
                                      quite a
                                      lot

NAME OF COOPERATING TEACHER_____

NAME OF YOUR STUDENT TEACHER_____

SCHOOL_____ GRADE_____ DATE_____

THIS QUESTIONNAIRE IS TO EXAMINE YOUR REACTIONS TOWARD YOUR STUDENT
TEACHER. THE RESULTS WILL BE USED AS GROUP DATA. YOUR RESPONSES
WILL BE KEPT CONFIDENTIAL. PLEASE CIRCLE THE NUMBER ON THE SCALES
BELOW WHICH BEST INDICATES YOUR FEELINGS TOWARD YOUR STUDENT TEACHER
FOR EACH OF THE FOLLOWING STATEMENTS:

1. When I offer suggestions or ideas to my student teacher, he (she)

1	2	3	4	5	6	7	8	9
always tries them				sometimes tries them				never tries them

2. I find that I can allow my student teacher to use his (her) own
ideas in planning lessons

1	2	3	4	5	6	7	8	9
not at all				half of the time				all the time

3. In our talks concerning his (her) lessons, I find I must tell my
student teacher what is wrong with his (her) teaching

1	2	3	4	5	6	7	8	9
quite a lot				some of the time				not at all

4. I believe my student teacher thinks that the talks we have are

1	2	3	4	5	6	7	8	9
very helpful to him				sometimes helpful to him				not at all helpful to him

5. In terms of being flexible and willing to make changes, I find
my student teacher

1	2	3	4	5	6	7	8	9
very set in his ways				sometimes willing to make changes				very willing to make changes

6. I find my student teacher is

1	2	3	4	5	6	7	8	9
very hard to work with				as easy to work with as most				very easy to work with

N-4

7. I believe my student teacher understands and accepts the feelings
   I have about his (her) teaching situation

1	2	3	4	5	6	7	8	9

   all of   some of   not at
   the time   the time   all

8. My student teacher seems willing to discuss his (her) lessons and
   problems in teaching with me

1	2	3	4	5	6	7	8	9

   not at   sometimes   always
   all

9. When I find it necessary to criticize my student teacher, in
   return ne (she)

1	2	3	4	5	6	7	8	9

   always   sometimes   always
   accepts the   accepts the   rejects the
   criticism   criticism   criticism

10. In comparing my ideas about teaching with those of my student
    teacher, we seem to

1	2	3	4	5	6	7	8	9

    agree on   agree on ½,   disagree on
    most things   disagree on ½   most things

11. My student teacher does things which are deserving of praise

1	2	3	4	5	6	7	8	9

    very   sometimes   quite
    little   a lot

N-5

Test Data

STUDENT TEACHER ATTITUDE QUESTIONNAIRE

Student Teacher Experimental Group	March	June
1)	91	84
2)	91	
3)	82	93
4)	71	76
5)	97	
6)	69	91
7)	87	
8)	80	76
9)	80	49
10)	93	79
Total	841	548
Mean	84.1	78.3

COOPERATING TEACHER ATTITUDE QUESTIONNAIRE

Cooperating Teachers for Experimental Group Student Teachers	March	June
1)	82	71
2)	97	
3)	82	91
4)	86	81
5)	95	86
6)	84	98
7)	89	
8)	88	76
9)	88	50
10)		91
Total	791	644
Mean	87.9	80.5

SELF ANALYSIS FORM (IPAT ANXIETY SCALE)

Student Teachers Experimental Group			Student Teachers Control Group		
	Pre	Post		Pre	Post
1)	16	20	1)	13	21
2)	18	36	2)	11	8
3)	34	37	3)	16	18
4)	31	15	4)	21	19
5)	15	22	5)	41	40
6)	20	17	6)	15	21
7)	14	13	7)	38	44
8)	6	8	8)	35	39
9)	22	44	9)	20	16
10)	10	6	10)	21	
T otal	186	218	Total	231	226
Mean	18.6	21.8	Mean	23.1	25.1

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EXPERIENCE CONFIDENCE SCALE

	Student Teachers Experimental Group				Student Teachers Control Group			
	Pre		Post		Pre		Post	
	Experience	Confidence	Experience	Confidence	Experience	Confidence	Experience	Confidence
1)	2.19	2.96	2.31	2.61	2.08	3.42	2.31	2.81
2)	1.62	2.04	2.04	2.46	1.96	3.15	2.15	3.03
3)	2.04	2.53	2.42	2.52	2.08	2.73	2.31	3.11
4)	1.92	2.69	2.69	2.69	1.88	2.58	2.19	3.35
5)	2.19	2.69	2.38	3.04	1.77	2.15	2.31	3.19
6)	2.04	3.42	2.23	3.58	2.19	3.07	2.50	3.42
7)	2.31	3.07	2.35	3.11	2.38	2.12	2.50	2.65
8)	2.08	2.53	2.50	2.81	2.42	2.81	2.31	2.46
9)	2.23	3.11	2.27	2.81	2.08	2.96	2.46	3.58
10)	1.96	2.81	2.38	2.80	2.15	2.46		
Total	20.58	27.85	23.57	28.43	20.99	27.45	21.04	27.60
Mean	2.06	2.79	2.36	2.84	2.10	2.75	2.34	3.07

EDUCATION SCALE VII

	Student Teachers Experimental Group					Student Teachers Control Group					Cooperating Teachers	
	Pre		Post			Pre		Post			Pre	
	A	B	A	B		A	B	A	B		A	B
1)	90	66	97	65	1)	89	66	101	63	1)	95	73
2)	89	57	87	59	2)	84	62	68	91	2)	93	78
3)	82	68	77	59	3)	93	57	130	63	3)	102	61
4)	81	49	78	67	4)	89	62	100	52	4)	85	61
5)	91	53	79	64	5)	95	52	101	45	5)	92	72
6)	90	60	86	60	6)	93	60	90	49	6)	88	67
7)	89	50	92	53	7)	78	56	81	55	7)	100	53
8)	61	74	74	61	8)	87	62	94	63	8)	78	58
9)	97	58	97	64	9)	84	52	85	53	9)	92	68
10)	96	55	98	65	10)	100	72			10)	72	77
										11)	84	51
Total	866	590	865	617		892	601	850	534	12)	96	65
Mean	86.6	59.0	86.5	61.7		89.2	60.1	94.4	59.3	13)		
										14)		
										15)	101	57
										16)	75	45
										Total	273	916
										Mean	90.9	65.4

TEACHERS AT WORK

	Student Teachers Experimental Group		Student Teachers Control Group		Cooperating Teachers	
	Pre	Post	Pre	Post		
1)	17	21	22	22	1)	25
2)	15	13	19	14	2)	15
3)	19	16	17	17	3)	11
4)	17	9	17	17	4)	14
5)	12	11	10	12	5)	17
6)	20	22	14	11	6)	14
7)	11	13	14	17	7)	12
8)	7	9	26	23	8)	12
9)	11	11	15	9	9)	17
10)	19	18	12		10)	21
					11)	11
Total	148	143	166	142	12)	21
Mean	14.8	14.3	16.6	15.8	13)	
					14)	
					15)	13
					16)	14
					Total	217
					Mean	15.5

PUBLIC OPINION SURVEY

	Student Teachers Experimental Group		Student Teachers Control Group		Cooperating Teachers
	Pre	Post	Pre	Post	
1)	138	128	121	109	148
2)	122	133	121	100	145
3)	151	142	159	123	140
4)	124	119	156	154	107
5)	117	116	91	106	,154
6)	132	120	110		117
7)	133	133	143		133
8)	93	98	129	112	114
9)	131	159	118	104	121
10)	148	131	138		145
11)	-	-	-	-	110
12)	-	-	-	-	165
13)	-	-	-	-	
14)	-	-	-	-	
15)	--	-	-	-	133
16)	-	-	-	-	135
Total	1289	1279	1286	808	1867
Mean	128.9	127.9	128.6	115.4	133.4

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LOCUS OF CONTROL - IE (FORM SI)

	Student Teachers Experimental Group	Student Teachers Control Group	Cooperating Teachers
1)	10	13	3
2)	11	9	3
3)	9	7	
4)	4	17	6
5)	9	11	
6)	14	4	4
7)	18	12	
8)	13	6	
9)	15	5	0
10)	5	5	7
11)	-	-	7
12)	-	-	9
13)	-	-	6
14)	-	-	7
15)	-	-	10
16)	-	-	7
Total	108	89	77
Mean	10.8	8.9	6.4

INTERACTION ANALYSIS MATRIX

Student Teachers Exper.Group	February ID Ratio	February Revised ID Ratio	March ID Ratio	March Revised ID Ratio	*May ID Ratio	*May Revised ID Ratio	June ID Ratio	June Revised ID Ratio
1)	3.11	12.0	1.45	5.22	1.95	14.33	2.47	12.00
2)	.64	.86	.66	.4	.61	.93	2.07	4.85
3)	1.58	1.73	2.09	3.33	4.04	13.5	1.92	10.50
4)	.47	.76	1.39	3.58	.92	2.2	3.89	3.50
5)	.7	.45	.93	.24	2.3	26.0		
6)	.68	1.42	.66	5.00	.32	3.12	.74	2.18
7)	1.97	8.33	2.33	6.16	1.18	13.0		
8)	.91	2.81	1.1	1.62	.33	1.06		
9)	.84	3.5	.51	.6	.87	2.23	1.57	1.28
10)	1.0	1.36	1.06	1.83	1.7	7.8	7.33	8.14
Total	11.90	32.96	10.09	24.65	14.22	84.37	19.99	42.45
Mean	1.19	3.30	1.92	2.74	1.42	8.44	2.85	6.06

*May data is video tape. All others are audio tapes.

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INTERACTION ANALYSIS MATRIX

Cooperating Teacher	ID Ratio	Revised ID Ratio
1)	1.2	6.75
2)	1.34	7.2
3)		
4)	1.53	30.0
5)		.
6)	1.47	5.85
7)		
8)		
9)	1.54	3.0
10)	2.68	1.05
11)	4.55	24.0
12)	4.41	2.14
13)	1.58	.83
14)	4.47	34.0
15)	.	.
16)	.74	.77
Total	25.51	115.57
Mean	2.31	10.50

IPAT 16 PERSONALITY FACTOR TEST

Student Teachers

Experimental Group

	A	B	C	E	F	G	H	I	L	M	N	O	Q_1	Q_2	Q_3	Q_4
1)	8	6	9	4	9	10	10	8	5	5	4	4	6	6	7	3
2)	4	6	6	8	4	5	2	8	10	8	6	5	5	6	10	4
3)	10	5	8	4	9	6	8	9	8	6	5	6	7	7	9	4
4)	10	4	8	4	9	6	6	6	6	6	8	2	4	8	4	2
5)	7	5	6	4	9	4	6	7	5	8	6	4	7	7	8	3
6)	12	7	6	12	6	4	9	6	8	7	7	2	11	10	8	2
7)	10	7	10	6	9	2	9	10	6	4	3	4	6	6	5	3
8)	7	4	10	10	9	4	12	6	5	7	8	5	6	8	6	1
9)	8	4	6	5	7	4	8	8	11	8	8	4	2	7	6	5
10)	10	4	9	8	7	8	6	6	5	4	8	3	10	6	8	6
Total	86	52	78	65	78	53	76	74	69	63	63	39	64	71	71	33
Mean	8.6	5.2	7.8	6.5	7.8	5.3	7.6	7.4	6.9	6.3	6.3	3.9	6.4	7.1	7.1	3.3

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IPAT 16 PERSONALITY FACTOR TEST

Student Teachers

Control Group

	A	B	C	E	F.	G	H	I	L.	M	N	O	Q₁	Q₂	Q₃	Q₄
1)	8	6	7	2	8	7	8	7	6	6	0	4	9	8	7	7
2)	6	5	10	2	10	6	8	8	6	4	4	3	8	8	10	2
3)	10	4	8	8	12	6	10	10	7	7	6	4	6	10	6	3
4)	7	4	8	6	6	4	4	10	8	6	4	4	6	6	6	5
5)	8	7	8	7	7	6	4	12	7	4	4	2	8	8	4	5
6)	12	4	11	2	6	5	7	4	4	6	8	2	6	8	8	2
7)	10	4	8	1	4	6	11	9	4	8	6	6	4	8	4	10
8)	8	5	5	10	7	3	7	6	8	8	6	7	5	10	6	8
9)	11	5	7	8	7	2	6	10	2	7	6	2	2	7	7	3
10)																
Total	80	44	72	46	67	45	65	76	52	56	44	34	54	73	58	45
Mean	8.9	4.9	8.0	5.1	7.4	5.0	7.2	8.4	5.8	6.2	4.9	3.8	6.0	8.1	6.4	5.0

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IPAT 16 PERSONALITY FACTOR TEST

Cooperating Teachers

	A	B	C	E	F	G	H	I	L	M	N	O	Q_1	Q_2	Q_3	Q_4	Total
1)	8	6	6	8	10	8	10	8	4	6	4	6	16	8	12	2	122
2)	8	5	11	2	8	3	10	10	2	5	3	5	2	6	7	4	100
3)	8	5	5	7	9	6	7	9	4	8	6	4	6	8	6	8	114
4)	11	3	8	6	8	4	12	5	6	10	7	4	7	7	7	2	111
5)	6	4	6	2	10	6	8	9	1	6	4	8	4	2	8	8	102
6)	8	2	10	7	5	6	9	10	2	6	6	4	6	8	10	3	112
7)	7	5	10	3	7	1	8	8	2	8	6	5	8	5	8	7	105
8)	9	7	7	1	8	8	4	10	5	8	4	6	6	5	10	0	105
9)	7	6	6	4	5	8	6	10	4	5	4	7	2	10	9	7	107
10)	4	4	10	2	3	6	6	11	2	8	4	4	6	12	9	6	107
11)	4	6	8	7	5	1	3	2	3	8	5	3	10	8	9	3	96
12)	12	5	8	7	10	5	7	8	7	8	9	3	8	3	8	7	121
13)																	
14)																	
15)	7	7	3	9	2	4	5	9	8	10	8	7	6	6	9	6	106
16)	9	4	8	8	8	5	9	11	3	6	3	4	9	6	8	5	105
Total	108	69	106	73	98	71	104	120	53	102	73	70	90	94	120	68	1513
Mean	7.71	4.9	7.6	5.2	7.0	5.1	7.4	8.6	3.8	7.3	5.2	5.0	6.4	6.7	8.6	4.9	108.1

SEMANTIC DIFFERENTIAL

Student Teachers Experimental Group

	Pre					Post				
	Pupil	Coop Teach	School	Myself	Total	Pupil	Coop Teach	School	Myself	Total
1)	26	28	26	24	104	24	28	26	22	100
2)	25	25	24	24	98	34	21	20	26	101
3)	24	27	26	26	103	25	26	22	24	97
4)	20	20	23	21	84	23	22	21	19	85
5)	27	28	30	27	112	24	25	24	24	97
6)	28	23	27	26	104	25	22	26	26	99
7)	26	27	26	23	102	27	22	27	24	100
8)	21	24	22	20	87	26	24	20	21	91
9)	25	28	27	25	105	21	21	10	19	61
10)	26	28	29	28	111	20	19	22	22	83
Total	248	258	260	244	1010	249	230	218	227	914
Mean	24.8	25.8	26.0	24.4	101.0	24.9	23.0	21.8	22.7	91.4

Student Teachers Control Group

	Pre					Post				
	Pupil	Coop Teach	School	Myself	Total	Pupil	Coop Teach	School	Myself	Total
1)	27	30	30	28	115	23	21	19	26	98
2)	26	2C	23	25	94	26	23	28	26	103
3)	27	30	26	27	112	21	26	20	26	93
4)	26	27	28	27	108	26	25	27	28	106
5)	26	25	27	25	103	28	25	28	24	105
6)	23	29	26	26	104	26	22	25	24	97
7)	26	27	27	23	103	19	30	26	26	101
8)	16	23	24	25	88	25	13	23	22	83
9)	28	28	28	28	112	29	28	30	28	115
10)	25	27	24	23	99					
Total	250	266	255	257	1038	223	213	226	228	892
Mean	25.0	26.6	25.5	25.7	103.8	24.8	23.7	25.1	25.3	99.1

SEMANTIC DIFFERENTIAL

Cooperating Teachers

	Pupil	Coop Teach	School	Myself	Total
1)	27	24	26	25	102
2)	27	26	27	24	104
3)					
4)	29	25	26	28	108
5)					
6)	22	20	22	22	86
7)					
8)					
9)	23	25	26	20	94
10)	24	21	21	25	91
11)	25	23	23	23	94
12)	28	16	24	27	105
13)	22	21	20	22	85
14)	28	26	28	27	109
15)	27	29	21	25	102
16)	24	28	28	25	105
Total	306	284	292	293	1158
Mean	25.5	23.7	24.3	24.4	98.8