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#### ABSTRACT

This document discusses the First-Year Teacher Pilot Program, a project designed to judge the impact of an additional year of internship for teachers. Subjects of the study were two groups of 100 first-year teachers. Members of the experimental group were assisted in areas of skills and competencies by university personnel and State Department of Education consultants. The other group formed the control group, with which the experimental teachers and their students were compared. The research objectives were to provide insights and conclusions into specific goals set by veteran teachers, administrators, and the first-year teachers themselves. The methods for gathering data to ascertain the degree to which the objectives of the program were achieved included standardized tests, nonstandardized tests, assistance reports, and interviews. The report concluded that a more positive relationship existed between student attitude and teacher competency in the experimental group than in the control group. (Author/JS)



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Preliminary Results of a First-Year Teacher

Pilot Program:

Data Analysis, Interpretation, and Projections

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Preliminary Results of a First-Year Teacher Pilot Program:
Data Analysis, Interpretation and Projections

#### Introduction.

The First-Year Teacher Pilot Program, a project designed to judge the impact of an additional year of "internship" for teachers, came into being as the result of an Alabama State Board of Education Resolution, January 25, 1972. This resolution suggested that the teacher training institution, local educational agency, and the State Department of Education share responsibilities for insuring the probability of success of the beginning teacher in the state of Alabama.

The University of Alabama in Birmingham was one of two universities chosen to help implement the State Board resolution, and in that role joined with seven surrounding county systems and the State Department of Education in forming a support team to work with a portion of the first-year teachers in these seven counties.\*

The University personnel (six clinical professors), and the three State Department of Education consultants worked with a coordinator in each county to assist a random sample of first-year teachers in areas of skills and competencies jointly determined by veteran teachers, administrators and first-year teachers themselves. The experimental group of first-year teachers numbered one hundred (100); the control group, with which the experimental teachers and their students were compared, also numbered one hundred (100).



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The funding agency is the State Department of Education, Montgomery, Alabama

### Program Objectives.

The general research objectives of the UAB based program were to provide insights and conclusions concerning the following specific goals:

- to determine the most common and specific needs of first year teachers with respect to skills and knowledge,
- 2. to develop instruments to enable beginning teachers and their support teams to systematically assess progress toward the identified goals,
- 3. to identify the most effective support techniques developed during the pilot program.
- 4. to identify potential problem areas so that they might be avoided
- 5. to assess the value of the First-Year Teacher Pilot Program with respect to teacher competency, reflected in (1) teacher attitudes and behavior and (2) student attitudes and achievement.

The following specific questions were addressed in an effort to evaluate the First-Year Teacher Pilot Program in terms of the objectives:

- 1. Were student attitudes significantly different between control and experimental teachers?
- Were teacher attitudes significantly different between control and experimental teachers.
- 3. Was student achievement significantly different between control and experimental teachers?
- 4. Were teacher competencies significantly different between control and experimental teachers?
- 5. Was the correlation of student attitude to teacher attitude and/or competency significantly different between control and experimental teachers?
- 6. Was the correlation of student achievement in the elementary grades to teacher attitude and/or competency significantly different between control and experimental teachers?

## Instrumentation.

Methods for gathering the data needed to ascertain the degree to which the stated objectives of the program were achieved included the following:

- 1. Standardized Tests (students of Experimental & Control teachers)
  A. Grades 3, 4, 5 (California Achievement Test; pre and posttest)
  - B. Grades 8-12 (School Morale Scale; attitude, posttest)
- 2. Non-Standardized Tests (Experimental & Control teachers and students)
  - A. Grades 3, 4, 5 (Cowles Attitude Test; pre and posttest)
    B. Semantic Differential Attitude Instrument (all first-year
  - teachers; pre and posttest)

    C. Educational Testing Service/HAR Competency instrument (all 1
  - C. Educational Testing Service/UAB Competency instrument (all firstyear teachers; posttest only)



- Assistance Reports (based on conferences, visits, or observation of experimental first-year teachers) by:
  - A. Clinical Professors

C. Principals

B. Cooperating Teachers

- D. SDE Coordinator and consultants
- 4. Interviews (Experimental only, both formative and summative)
  - A. First-year teachers (experimental)
- D. Coordinators (LEA, SDE, UAB)
- E. Clinical professors

- B. Principals
- C. Cooperating teachers
- Questionnaire (Experimental and Control first-year teachers)

### Data Analysis and Interpretation.

Student attitudes were measured by the Cowles Pupil Opinion Instrument for both elementary and special education students. Attitudes for secondary students were measured by the School Morale Scale Grade level and initial differences in attitudes (measured by pretest) were treated as control variables when available. The influence attributable to these variables was taken out by the use of analysis of variance and/or analysis of covariance. It was found that, in all comparisons, student attitude did not differ significantly between control and experimental group teachers.

Teacher attitudes, both elementary and secondary, were measured by the Semantic Differential Instrument. Pretest scores were available, and hence analysis of covariance was used. <u>Overall</u>, no significant difference was found between control and experimental teachers; however, two terms on the Semantic Differential <u>did</u> elicit significantly different responses between experimental and control teachers. Control teachers were more committed to "authoritarianism", and to the notion that "education is strict coverage of subject matter."

Student achievement was measured by the California Achievement Test (elementary students), and the Peabody Individual Achievement Test (special education students). No achievement measure was used for secondary students.



Both pretest and posttest scores were available for elementary and special education students, and thus it was possible to treat grade level and initial differences in achievement as control variables. It was found that, using these control variables, student achievement was not significantly different between students of control and experimental teachers.

Teacher competency was measured in several ways. The Educational Testing Service contributed items to an instrument for measuring competencies outlined by UAB staff. On the basis of the ETS/UAB Instrument alone, no significant difference in competency was found between control and experimental teachers. In addition to the ETS/UAB instrument, the First-Year Teacher Pilot Program personnel developed three competency measuring instruments (Forms L, M, and N) to measure proficiency in professional behavior, managerial tasks, and planning-instructional strategies, respectively. Based on the data from two readings, it was found that principals rated significantly higher those experimental teachers who had cooperating teachers assigned to them on a one-to-one basis.

Using the Fisher  $\not$  - transformation, significance tests were done between control and experimental groups on correlations between (a) student and teacher attitudes, (b) student achievement and teacher attitude, (c) student attitude and teacher competency, and (d) student achievement and teacher competency. A significant difference (p<.05) was evident in two of the tests made. These were: (1) student attitude (Pupil Opinion) and teacher competency (ETS/UAB) and (2) student attitude (SM Scale) and teacher attitude (Semantic Differential).

By way of interpretation, it can be said that a <u>more positive relationship</u> existed between student attitude (Pupil Opinion) and teacher competency (ETS/UAB) in the experimental group than in the control group. Indeed, since the correlation



in the control group was negative (-0.275), it could be said that teacher competency as measured for the control group may be adversely influencing student attitude.

Similarly, it can be said that a <u>more positive relationship existed</u>

<u>between</u> student attitude (SM Scale) and teacher attitude (Semantic Differential)
in the experimental group than in the control group. Again, the correlation for
the control group was significantly negative (-0.4356). It is certainly
strange that, in the control group, student attitude was negatively influenced
by teacher attitude. It appears, that, <u>without the assistance of the support</u>
team, those teacher attitudes that are deemed desirable may be inaappropriate.

Although it did not occur to a statistically significant extent, it was found, through a questionnaire administered late in the year, that teachers in the experimental group 1) recognized more of their needs, 2) asked for more assistance, and 3) consequently received more help in areas of instructional techniques, classroom management, and discipline in the classroom.

# Recommendations and Projections.

A number of recommendations resulted from the first year of work. Since it appeared that the contact between first-year teachers and support personne? was profitable, a Teacher Center was set up on campus in order to allow a clinical professor to work with many more teachers at a time on skill development through such procedures as micro-teaching and peer and instructor critique and analysis.

Most of the instruments have been reassessed and revised. For example, all form which LEA personnel use have been altered to better conform with competencies upon which the program was built. The ETS/UAB instrument has been improved through both item and factor analysis. In addition, a low



inference interaction analysis/observation system, administered by the SDE consultants, has been added to better judge the climate of first-year teacher's classrooms. Finally, in order to enlarge the program input base, an advisory committee, made up of lay people, student representatives, and representatives of professional organizations, has been added. An informal survey suggests that the outlined changes and additions are meeting with rather wide approval.