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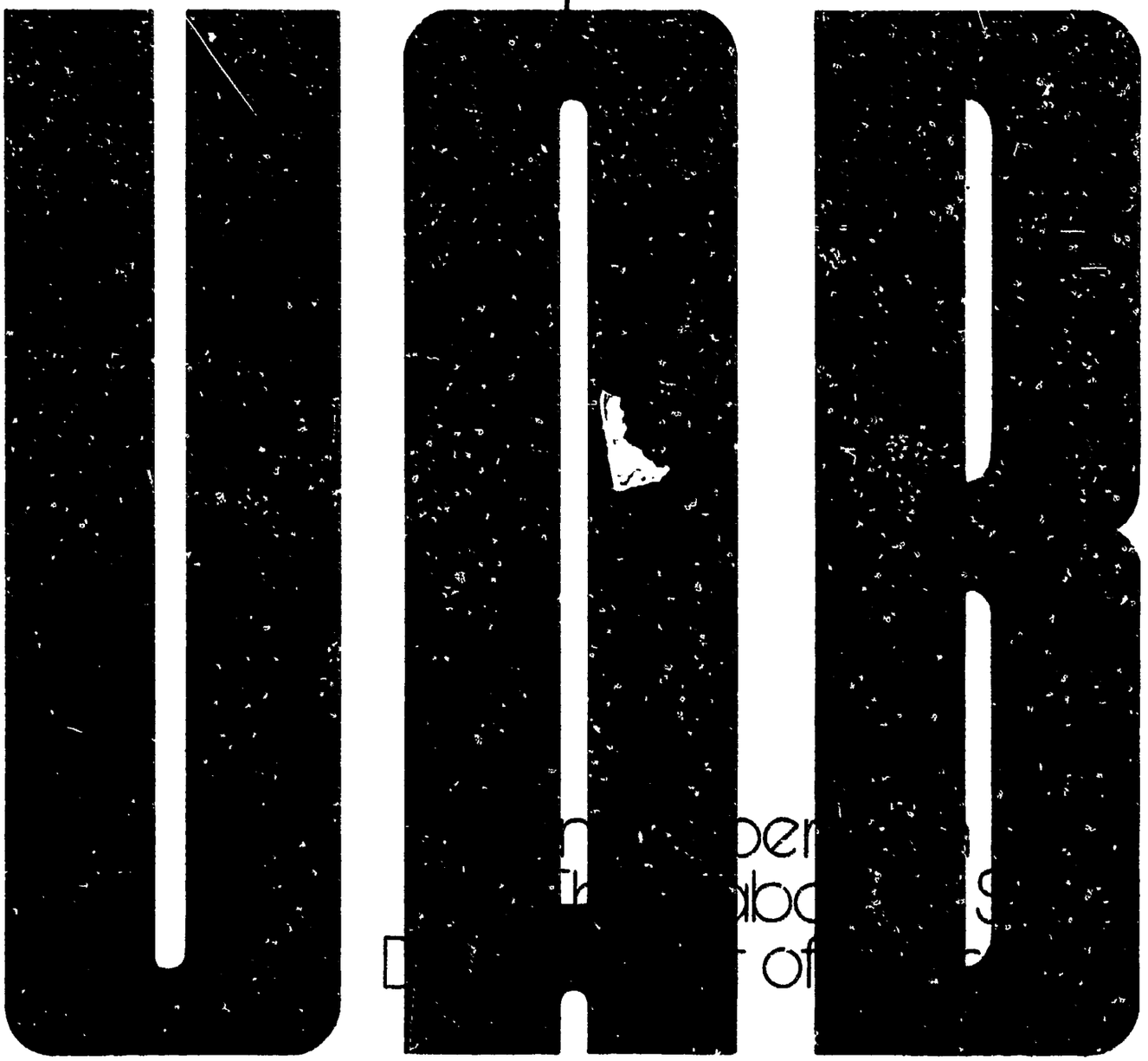
ABSTRACT

The major objective of this program was to maximize probability of success of beginning teachers in Alabama and, thereby, to improve the teaching-learning process for students. In this program, cooperating teachers worked with beginning teachers on a one-to-one basis in the schools. Evaluation of the program's effectiveness was a continuous process. Evaluation of process was conducted by means of cyclical interviews; product evaluation consisted of teacher attitude and achievement, measured by observation, tests, and/or questionnaires. Tentative conclusions derived from this study will form the basis for program revision. A significantly more direct relationship was found to exist between student attitude and teacher competency, and between student attitude and teacher attitude in the experimental group (those beginning teachers working with cooperating teachers) than in the control group. Principals in systems using cooperating teachers rated their first-year teachers significantly higher than did those in systems not using cooperating teachers. Control teachers (those without cooperating teachers) tended to be more authoritarian and to view education as a rigid coverage of subject matter. These tentative conclusions will be examined more thoroughly in the following school year. (Appendixes include descriptions of instruments and sample items, analysis of variance and covariance, and correlations.) (PB)

First-Year Teacher Pilot Program
An Interim Report



and BIBB COUNTY SCHOOL SYSTEM
BLOUNT COUNTY SCHOOL SYSTEM
JEFFERSON COUNTY SCHOOL SYSTEM
ST. CLAIR COUNTY SCHOOL SYSTEM
SHELBY COUNTY SCHOOL SYSTEM
TUSCALOOSA COUNTY SCHOOL SYSTEM
WALKER COUNTY SCHOOL SYSTEM

1973-74

THE FIRST-YEAR TEACHER PILOT PROGRAM

An Interim Report

The Alabama State Department of Education

in Cooperation with

University of Alabama in Birmingham

and

Bibb County School System
Blount County School System
Jefferson County School System
St. Clair County School System
Shelby County School System
Tuscaloosa County School System
Walker County School System

University of Alabama in Birmingham

July, 1974

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SUMMARY

The 1973-74 school year was the first of two years to be devoted to the operation of the First-Year Teacher Pilot Program. Because of the late date of funding and the subsequent late date of staffing, the University of Alabama in Birmingham and the State Department of Education were unable to begin full operation until October and November, respectively. As a result, this report must be an interim report. Definitive conclusions cannot be set forth; instead, it should be understood that this report is that of a "learning year" as we move to test an innovation in education that has yet to be evaluated adequately in Alabama or elsewhere.

The year has special significance as the beginning of a joint effort by the State Department of Education, local education agencies, and an institution of higher education - in this case, the University of Alabama in Birmingham. These three agencies have formed a Task Force to guide the efforts of participants in the program. Dedicated to the development of a support system to guide and assist first-year teachers, the program has sought to maximize the beginning teacher's success and, thereby, to improve the teaching-learning situation for students.

Significant differences were found in a few instances. It was found that principals rated their first-year teachers significantly higher in systems which nad on-site cooperating teachers working with first-year teachers on a one-to-one basis in the schools. Furthermore, it would appear that teachers who received no special assistance tended to view education as rigid coverage of subject matter and were more authoritarian

and committed to strict adherence to structure within the classroom. Those given special assistance through the several agencies appeared to promote a more cooperative and self-motivated effort in the classroom.

There are several interesting, though statistically insignificant trends evident from the data. From a questionnaire administered to both control and experimental teachers, it is clear that experimental teachers recognize more of their needs in instructional techniques, classroom management, and discipline. Moreover, they appear to feel freer to ask for help and consequently they receive more assistance. This recognition of weakness may be read as a strength on the part of the experimental first-year teacher.

Other observed trends had to do with the relationships between (1) teacher attitude and competency and (2) teacher competency and student achievement. Results from the first year of the program indicate a tendency for control teachers' attitudes and competencies to be negatively related, while this is not the case for the experimental teachers. Furthermore, and possibly more important, competencies for control teachers seemed to be negatively related to student achievement. Again, this negative relationship did not show up in the experimental group. The efforts of the support team seem to have helped bring about the more positive relationship among these variables.

In addition, the study examined the attitude of students of randomly chosen first-year teachers who received special assistance (the experimental group) and students of randomly chosen teachers who did not receive special assistance (the control group). It was found that there was no significant difference in student attitude toward school between the two groups. Student achievement was examined in the same

manner, but no significant difference was found.

Teacher attitudes were studied, but no significant difference was found between control and experimental teachers. Teacher competency was examined by means of an especially constructed instrument, the ETS/UAB Instrument. No significant difference was found.

The second year's study will be a more controlled effort to examine student attitude and achievement as well as teacher attitude and competency. The instruments which are in the developmental stage and have been used this year will be revised and made considerably more reliable. Leads from this year's work will be pursued, particularly through more systematic observation, in an effort to identify and clarify the best practices in first-year assistance. The teacher center which will be in operation next year is expected to provide an effective and efficient mechanism to intensify the impact of the assistance effort.

The First-Year Teacher Pilot Program

CHAPTER I

GENERAL INTRODUCTION

Genesis of the Program

The First-Year Teacher Pilot Program originated in a resolution adopted by the Alabama State Board of Education on January 25, 1972. Contributions to the thinking of the State Board included recommendations by Alabama Education Association members, local superintendents, and the Alabama Association of Colleges for Teacher Education. This program is a part of a massive effort to improve the quality of education in Alabama. In the case of this program, the major objective is to maximize the probability of success of beginning teachers in Alabama, the basic assumption being the belief that the crucial figure in the teaching-learning process is the teacher. The pertinent portion of the resolution is quoted below:

> As a part of the competency-based concept of teacher preparation, establish the first year of teaching as an extended internship to serve as a part of the introduction of the individual to the teaching profession with the teacher-training institution, the local school district, and the State Department of Education assuming appropriate responsibilities for the internship (State Board Resolution, 1972).

According to the State Guidelines:

> The First-Year Teacher Pilot Program, as presently visualized, is designed primarily to improve teacher competence, thereby improving the quality and kind of learning opportunities afforded the elementary and secondary students of Alabama. Secondly, it will seek to improve teacher education by assuring the actual competence of those issued professional certificates. Finally, it will provide a means of effecting significant changes in all aspects of education within the State of Alabama.

> The major objective of this First-Year Teacher Pilot Program is to insure the probability of success of the beginning teacher in Alabama by accepting the fact that the success or failure of the beginning teacher is a mutual responsibility of institutions of higher education, local education agencies, the State Department of Education, and professional associations. The program is not a screening device or a means of excluding teachers who have graduated from preservice teacher education programs but rather is a significant means of assisting beginning teachers to become career minded emerging professionals. (Alabama State Department of Education, 1973).

It was not clear precisely what form this year would take; however, it was clear that three elements would be essential:

(1) some form of supervision and guidance of first year teachers;
(2) some form of evaluation;
(3) a cooperative approach which would involve the State Department, local education agencies, and the institutions of higher education.

The Alabama State Department of Education wisely decided to conduct a two-year pilot program on a small but intensive scale in order to determine how such a year would be handled and what difference the year would make. The University of Alabama in Birmingham and Auburn University were selected to cooperate with the State Department of Education and selected local education agencies in this endeavor.

Precedents of the U.A.B.-Based Program

Two specific practices in teacher education predominate in the UAB-Based Pilot Program: in the first place, the program exists in addition to the regular four-year college preparation; in the second place, the program is performance based. In order to set the scene and provide the theoretical and practical background for the UAB based program, a review of the precedents provided by other institutions and programs is in order.

The notion of including an additional year of training in the preparation process of a teacher is not new. Historically both economic depression and economic prosperity have encouraged teacher training in addition to the four-year college preparation: depression, because the surplus of teachers in the market allowed public schools to insist on better preparation; prosperity, because the high wages of prosperous times tended to draw some teachers away from teaching, thus necessitating the training of people who had not initially prepared for teaching. It should be noted that increases given to teachers in service could be tied to requirements of further teacher education.

For whatever reasons, the idea of an additional year (in-service) of teacher training dates back to 1895 when the public schools of Providence, Rhode Island, and Brown University combined to provide novices with the opportunity to teach half-time and attend graduate classes half-time (Brown, 1911).

In 1919, similar plans were operationalized by the University of Cincinnati with the school system in that city (Pechstein, 1923). In the 1930's, Northwestern University and the public schools of Chicago combined in a similar effort (Brink, 1937).

The most recent movement toward an additional year of teacher training began in the early 1950's. Several funding agencies were instrumental in the initial phases of this effort; however, the Ford Foundation (through the Fund for the Advancement of Education) was probably the most significant. The first project undertaken by the Fund for the Advancement of Education was centered in the State of Arkansas with the University of Arkansas (Fayetteville) designing the program

(Clark, 1953). The Fund made grants to additional states during the next few years. The conception operationalized by "The Arkansas Teacher Education Experiment" provided the framework and guidelines for the program in such major state universities as The University of California at Berkeley and the University of North Carolina and in such private universities as Duke, Emory, and Harvard. The individual programs reflected the biases of their planners and directors; but they all included internships ("apprenticeship" or in-service component), and final or advanced certification was dependent on evaluations made by the supervisory staff.

Research reflecting the difference between teachers with and without the additional year of in-service training is scarce. There is evidence that teachers who successfully complete the first year in-service program stay in teaching longer than do those without the additional year of support -- but only if they receive a graduate degree from the program.* This can hardly be construed as objective evidence that in-service support makes for better teaching.

The second major characteristic of the U.A.B.-Based Pilot Program, competency based teacher education, is rooted in the accountability movement of the past decade. In turn, the accountability movement stems from a

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* The University of North Carolina reports that over twice as many fifth-year graduates are actively engaged in some phase of the education profession after five years than are non-program teachers. Two intervening variables might be (1) that fifth-year teachers have MAT degrees, thus make more money; or (2) that the fifth-year program attracts more professional-minded applicants.

rapidly changing society which saw its educational system as dilatory in keeping up with the rapid pace set by the rise of technology and the general knowledge explosion. Society saw schools as not being relevant and demanded an accounting for its dollar. It was these social demands which led to the U.S.O.E.'s request for proposals which would hopefully upgrade the training of elementary teachers. The request for proposals was made in October, 1967, and included specifications for teacher training which added impetus to the "Competency Based Teacher Education" movement (Fortney, 1972).

A good deal of disagreement has accompanied the initiation of CBTE programs. There is large scale disagreement concerning what competencies are most valuable for a teacher to possess in spite of the fact that there exist five variables on which there is consistent positive agreement: clarity, variability, enthusiasm, task orientation, and student opportunity to learn. Other variables which merit further study include teacher indirectness, use of structuring comments, use of multiple levels of discourse, and probing (Rosenshine and Furst, 1971). However, it is not clear from the research what overall teaching behaviors have significant impact on the variables known to be useful. Furthermore, professors outside the schools of education have attacked the concept of CBTE on the grounds that it mistakes skills for education and that its philosophical base is so eclectic as to be non-existent. It is possible that many of the attacks have developed from professors' suspicions that if schools of education insist on a level of competency for their students (and therefore themselves), the CBTE concept will sooner or later find its way into the total university teaching strategy (Broudy, 1973; Hechinger, 1974).

Probably because of the in-house disagreement about the concept of accountability and CBTE and the attacks from without, it was some time before a serious attempt at CBTE implementation was initiated. This was in spite of the U.S.O.E. funding made available after 1967. The first nine proposals were so costly that the U.S.O.E. leadership decided to try to accomplish the same objectives by the utilization of smaller institutions. Their more modest proposals proved to be more in line with the government guidelines, and it is generally through the smaller institutions' leadership that several CBTE implementation plans emerged. In fact, the first CBTE program to be fully operationalized was at Livingston University, a relatively small institution. The Livingston program was in progress by 1969 with substantial federal funding. Even though Livingston was the first institution to be almost totally committed to CBTE, other universities and colleges had made similar thrusts before the Livingston movement. The program of Weber State College (Utah) exemplifies an earlier but more limited approach to CBTE. The faculty at Weber had previously incorporated a Modular Delivery System into the curriculum, which is certainly a component of CBTE, but the commitment was not as total as in later programs.

In the years that followed, funding was made available for implementation of CBTE programs in several institutions. This funding was in widely varying amounts and came from various sources, both private and public.

CHAPTER II

THE U.A.B.-BASED PROGRAM

Organization

To fulfill our responsibility in Alabama's massive effort to improve the quality of public education in Alabama, the University of Alabama in Birmingham (UAB, hereafter) joined hands with the State Department of Education and seven nearby county school systems - Bibb, Blount, Jefferson, St. Clair, Shelby, Tuscaloosa, and Walker. This consortium began gearing for the effort in August of 1973. It should be noted that during this period, all plans were of a tentative nature; it was not known until September 5, 1973, that the funds had been appropriated and that the program would become a reality.

At the first meeting of the UAB Consortium, there were present representatives of the State Department of Education, UAB, and the local education agencies (in the latter case, the superintendents and/or their representatives). It was at this meeting that the concerned agencies agreed upon two basic points which would shape our future course: (1) our research design and report would be strictly regional, comprised of and based on data for the total region, and (2) a Task Force would set policies and procedures. The Task Force was to consist of the coordinators and/or representatives of the State Department of Education, UAB, and the seven local education agencies involved. This organizational scheme is depicted in Figure 1.

This Task Force began meeting on a monthly basis; however, it became apparent that two meetings a month would be needed if we were to

FIGURE 1

ALABAMA FIRST-YEAR TEACHER PILOT PROGRAM

University of Alabama in Birmingham Consortium

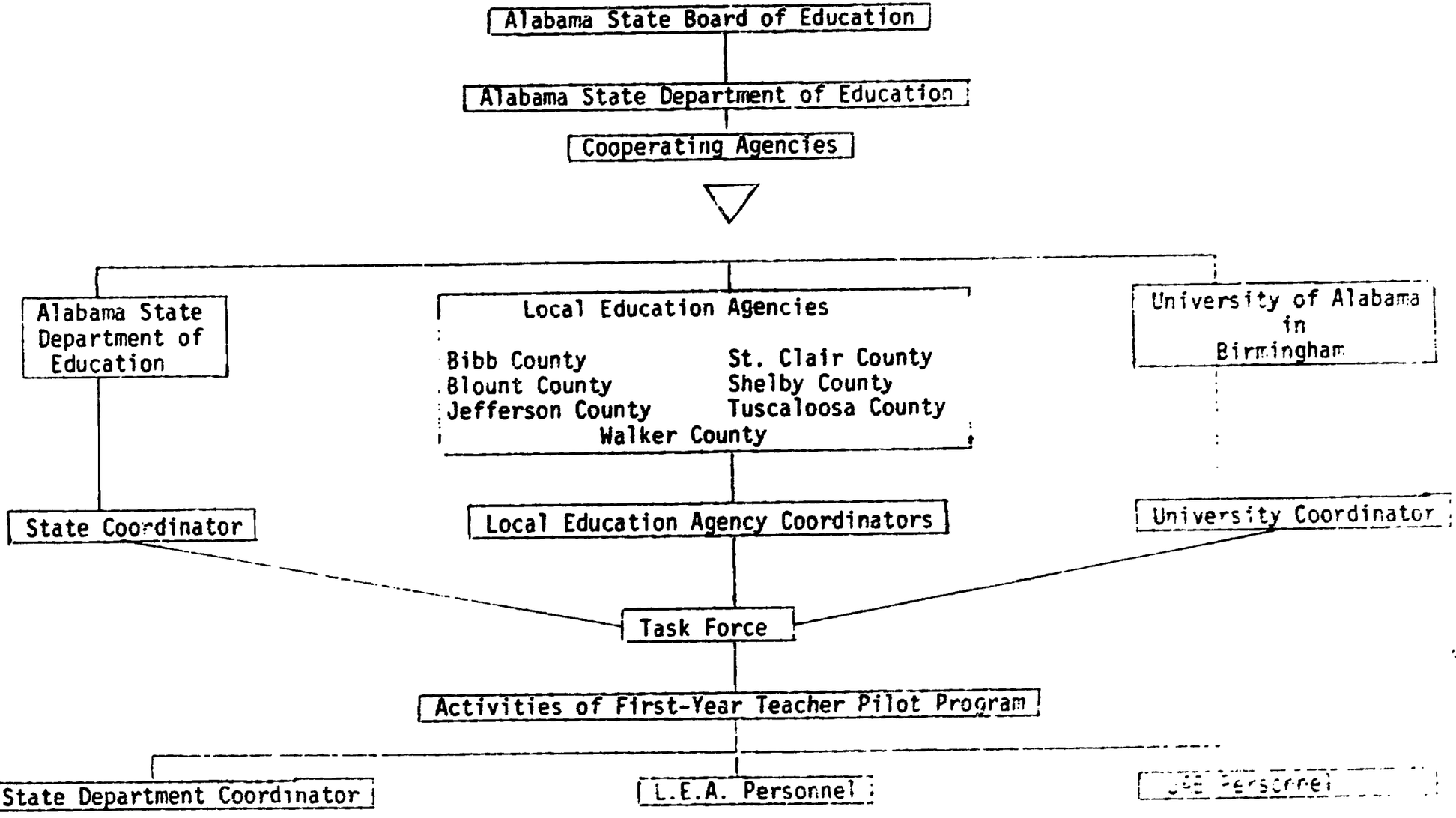
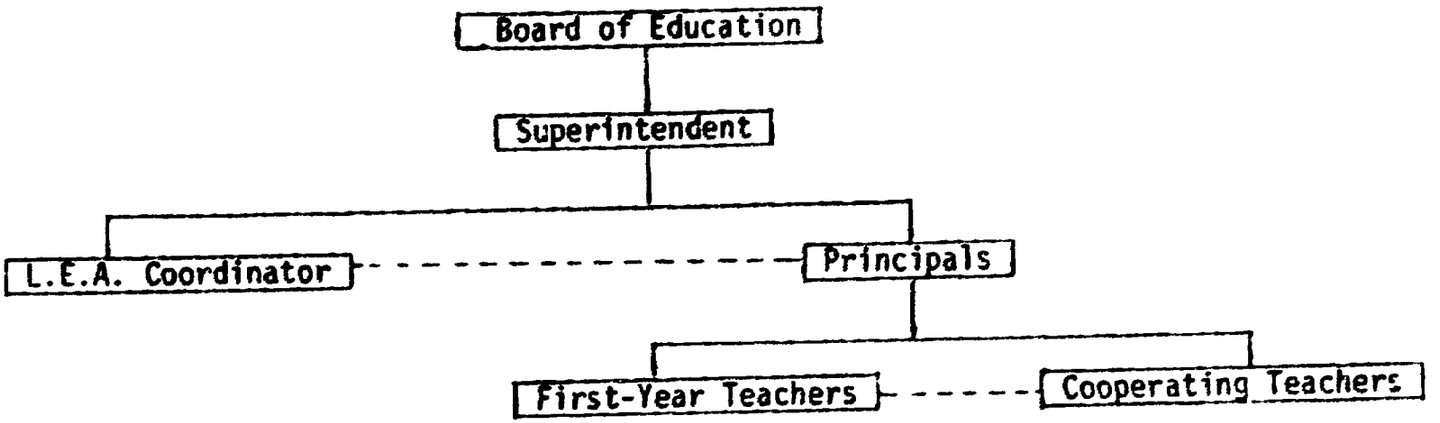


FIGURE 2

ORGANIZATION: COUNTIES C AND G



Support Team

L.E.A. Coordinator
L.E.A. Principal
L.E.A. Cooperating Teacher
U.A.B. Clinical Professor
S.D.E. Consultant

FIGURE 3

ORGANIZATION: COUNTY F

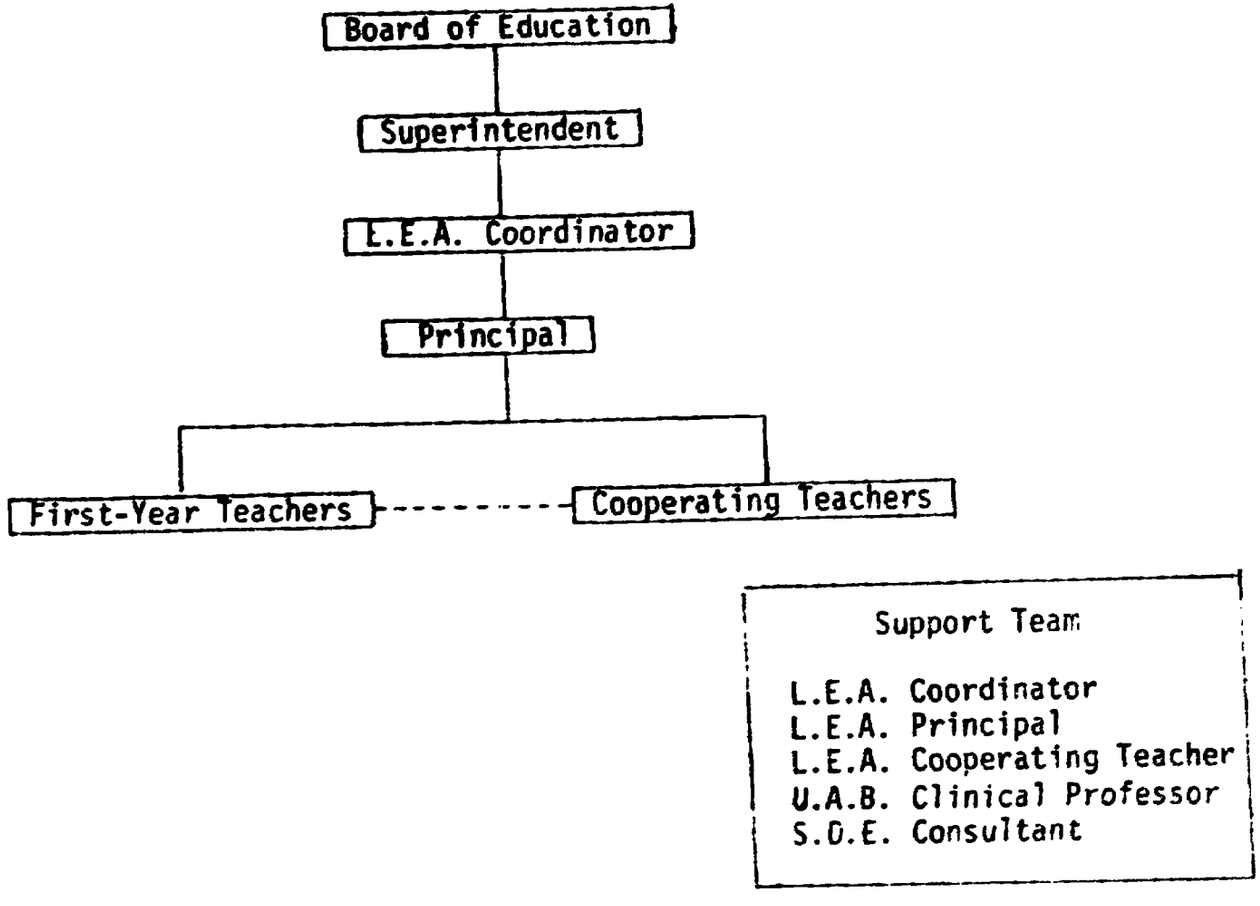
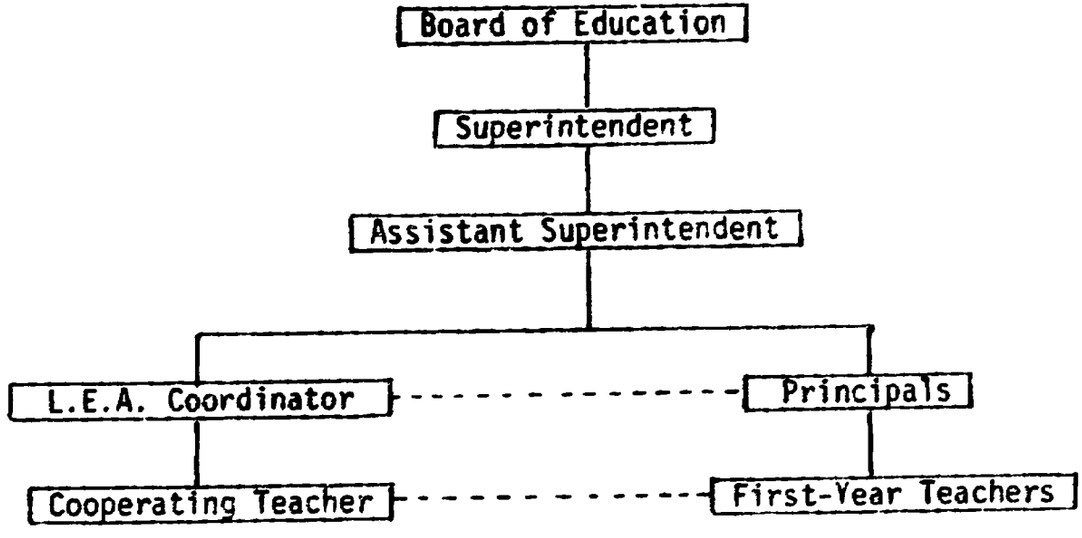


FIGURE 4

ORGANIZATION: COUNTY E

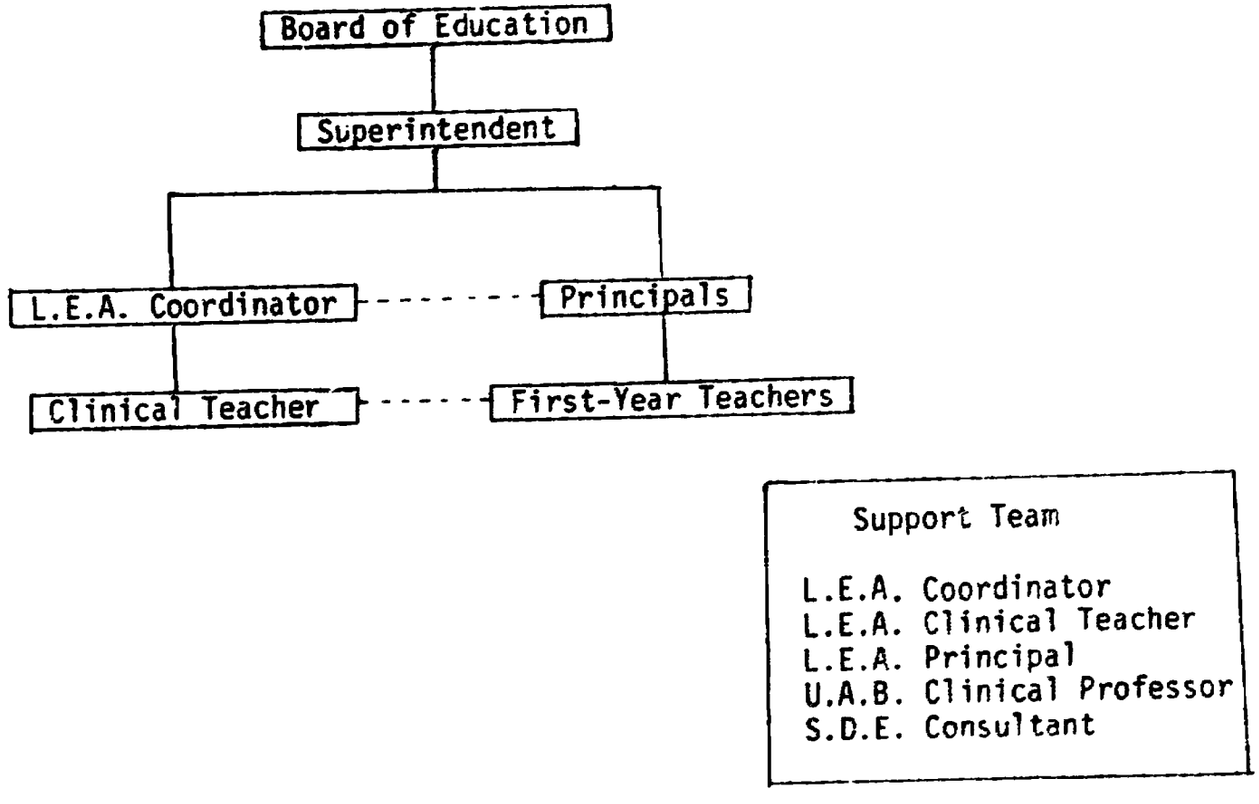


Support Team

L.E.A. Coordinator or Cooperating Teacher
L.E.A. Principal
U.A.B. Clinical Professor
S.D.E. Consultant

FIGURE 5

ORGANIZATION: COUNTY D



team was, again, slightly different. By way of clarification of terminology, it should be noted that County D has given the title of "clinical teacher" to the person who functioned in the same manner as did the cooperating teacher in County E (Figure 4).

Organizational variation is apparent, also, in Figures 6 and 7. In these models, the coordinator is working with individual teachers; the support team reflects the organizational pattern.

State Department Organization

The State Department of Education had a State Program Administrator and two consultants whose duties were to work with this program.

Their duties were comprised of several tasks:

(1) scheduling all team meetings, serving as chairmen of the various support teams, and preparing reports concerning each meeting of each support team;

(2) visiting all beginning teachers assigned to them to discuss and to review the teachers' problems and progress and to render such assistance as was indicated as being necessary;

(3) serving as liaison between beginning teachers and the total support team as such.

Each first-year teacher was assigned to one of the State Department consultants or to the State Department coordinator.

University Organization

UAB geared for the program by delineating specific roles for UAB personnel. In general, the UAB coordinator was responsible for coordinating efforts of all UAB program personnel and for serving as liaison agent for UAB with the State Department of Education and local education agencies. The UAB coordinator was responsible for seeing that research/evaluation instruments were developed and used, that all data were analyzed, and that a report was produced and disseminated.

FIGURE 6

ORGANIZATION: COUNTY A

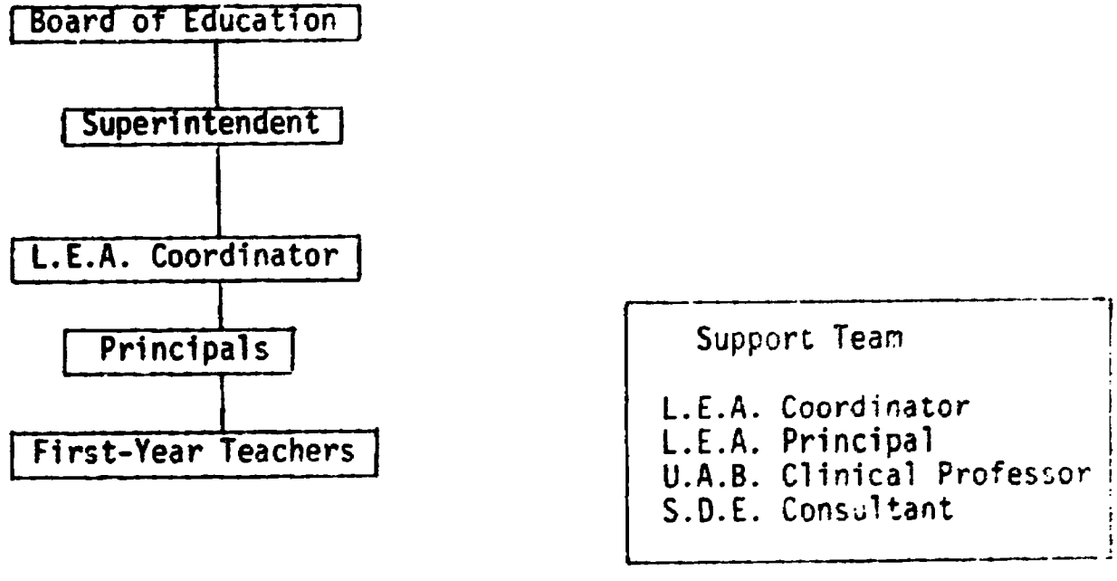
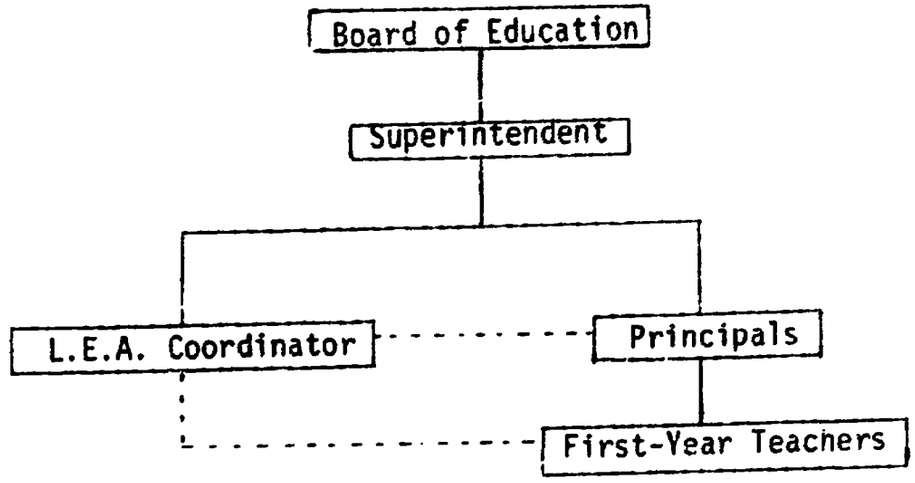


FIGURE 7

ORGANIZATION: COUNTY A



Support Team

L.E.A. Coordinator
L.E.A. Principal
U.A.B. Clinical Professor
S.D.E. Consultant

UAB professional personnel included three faculty members from the Department of Elementary Education and three faculty members from the Department of Secondary Education. It should be noted that teaching experience in public schools was one of the criteria for their selection because it was felt that such a background was essential. These faculty members served as clinical professors for elementary and secondary first-year teachers. One of the clinical professors was a specialist in special education. Because of the number of special education units added by the State, it was anticipated that this would be reflected in the random sample of first-year teachers and provision had to be made for this specialized component of our educational effort. The anticipation proved to be true.

Every effort was made to assign each first-year teacher to a clinical professor who had some special knowledge and/or experience in the first-year teacher's area. Thus it was hoped that all first-year teachers would have appropriate specialized help available from the clinical professors, the State Department of Education consultants, or the local education agency personnel whenever it was needed.

In addition, clinical professors were expected to assist in the development of research/evaluation instruments, the analysis of data, and the writing of the report.

Two UAB faculty members were assigned to the research element of the program. The primary responsibility for instrument development, administration of such instruments and other tests, scoring of such measures, and data analysis rested with them.

It should, however, be noted that all UAB professional personnel working with this program were involved in the planning process, in the development of instruments, in orientation sessions held in the local education agencies, and in the writing of the report.

The Support Team in Operation

Initation of Activities

There was, of course, no problem connected with support services provided by those people in the local education agencies. It was necessary, however, to plan carefully for the entry of heretofore "outside" agencies as they moved to provide special assistance for the 100 first-year teachers selected to receive this support-team assistance. The Task Force planned carefully to execute the entry of clinical professors and State Department consultants in the most propitious manner. It must be remembered that the late funding date of the program made it impossible for UAB to be fully staffed before October 5 and for the State Department to be fully staffed before November 1. These late and different dates precluded the simultaneous entry of clinical professors and State Department consultants.

During the period in late August and early September, the local education agency coordinators made it possible for the UAB coordinator to meet with all first-year teachers and concerned local education agency personnel to discuss the First-Year Teacher Pilot Program. At this time, the UAB coordinator gathered basic data from the first-year teachers who had been employed by tnat date and administered the attitude instrument based on the semantic differential technique.

When all clinical professors had been employed in October, the local education agencies held orientation sessions for the initiation of activities. The State Department coordinator and the UAB coordinator met with first-year teachers in each local education agency; principals, supervisors, and other central office personnel also participated. At each of these orientation sessions, a different clinical professor was in attendance to participate in orientation and to meet those with whom he would be working. Following these sessions, the local education coordinators went with each of the clinical professors to meet their assigned first-year teachers and their principals at the respective schools. This meeting was not for the purpose of assisting first-year teachers but for the purpose of getting acquainted and establishing the rapport vital to this undertaking.

In November, the local education agency coordinators took State Department consultants to meet their assigned first-year teachers and their principals at the respective schools. Again, this was for the purpose of introduction and the beginning of the establishment of rapport.

After the UAB clinical professors and the State Department consultants had met the first-year teachers to whom they were assigned, they began the task of carrying out the objectives of the program: providing individualized professional assistance to first-year teachers with respect to the assessment of the kinds of assistance needed and the meeting of those needs, the identification and evaluation of teaching methods and techniques appropriate for particular learning situations, the development of individualized professional plans where this was indicated, and the analysis of the teacher's professional growth process.

Activities

University of Alabama in Birmingham. Each of the UAB clinical professors worked with 16-19 first-year teachers. An effort was made to assign no more than 3-4 clinical professors to each local education agency; in one case, only 2 clinical professors were assigned. This was deemed to be advantageous; it was hoped that fewer new people going into the local education agency would expedite the matter of people's getting to know each other. One clinical professor was assigned to 5 counties; this was necessary because this professor specialized in special education and was working with all of the special education teachers in this region. The clinical professors used an instrument for self-assessment of needs as well as direct observation to help teachers to determine their most immediate needs.

Because situations varied, the methods used to meet the needs of the first-year teachers varied. In some cases, demonstration teaching was in order; in other cases, the clinical professor worked in the classroom with the first-year teacher in a participatory manner - i.e., as a kind of "team teacher".

Where the schedule allowed, the clinical professor worked with three first-year teachers at a common preparation period. This type of procedure permitted a seminar situation in which films were viewed and group discussion took place. In some cases, clinical professors assisted with the organization of clubs and in setting up new programs which were desired. One of the clinical professor's tasks was to assist the beginning teacher to analyze his individual growth. As a means of working in this area, the clinical professor sometimes videotaped a

portion of a teacher's lesson. Afterwards, the teacher and the clinical professor viewed this tape together and discussed it.

Local Education Agencies. LEA personnel served as "on-site" professional resource persons in assisting the beginning teacher to become acquainted with the school and the community - i.e., to understand LEA policies and procedures and community expectations. In addition, LEA personnel assisted beginning teachers in developing or obtaining instructional materials and in obtaining the services of other consultants. Local education agency personnel assisted first-year teachers with understanding the needs of children and helped to develop skills necessary to the teaching/learning process. In general, LEA personnel participated as members of the support team as the situation required.

State Department of Education. State Department consultants served as chairmen or coordinators of the various support teams. Each consultant visited each of his assigned beginning teachers to discuss and review problems and progress and to render any professional assistance that was requested or indicated. In addition, State Department consultants scheduled all team meetings.

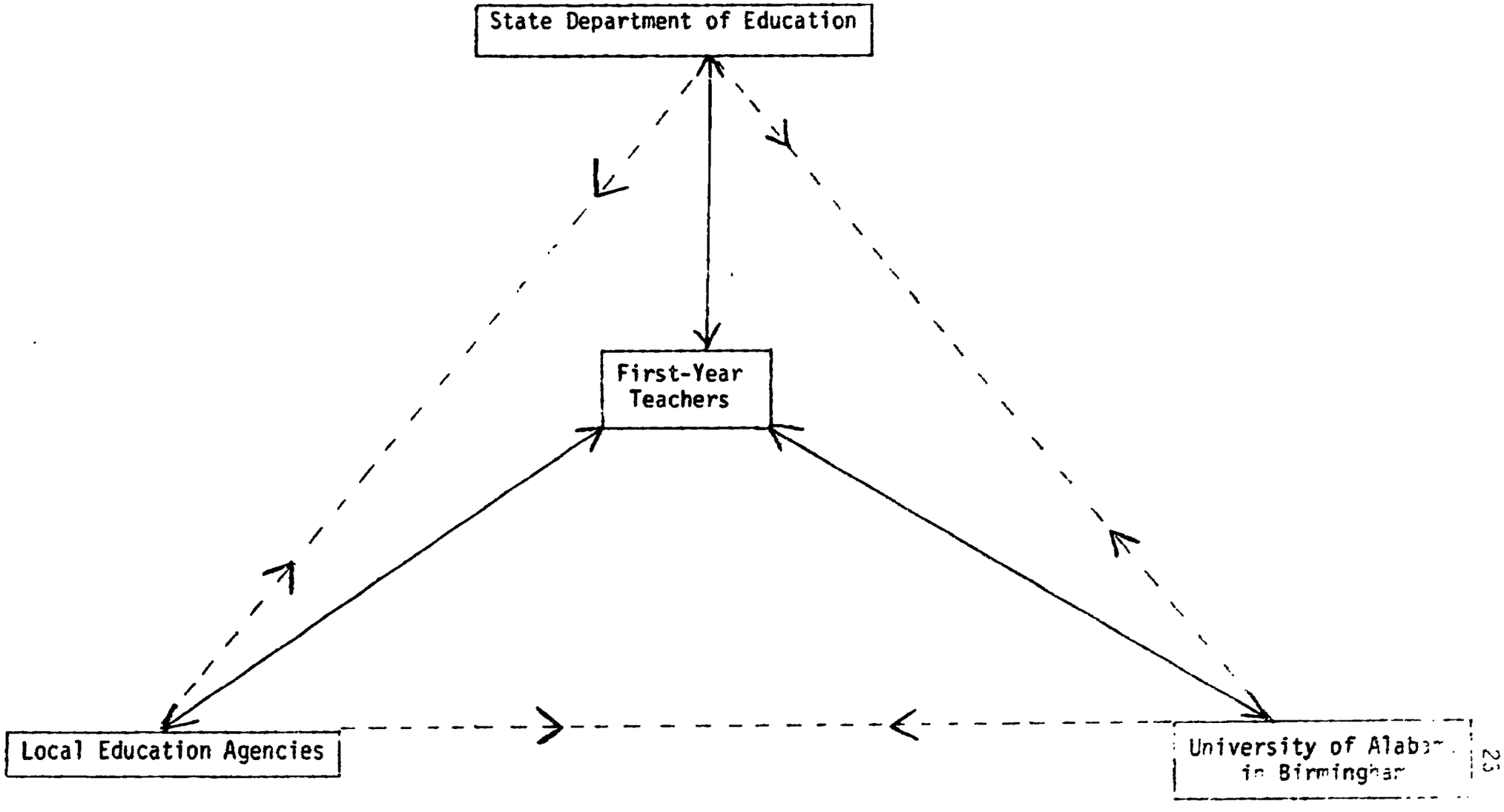
The UAB Consortium had one meeting for all participants in the seven counties. This meeting was a film festival during which participants viewed films concerned with teaching techniques. After the films were seen, participants met in small groups to discuss the films and other matters of mutual interest.

Interfacing of Agencies

Figure 8 is a graphic depiction of the general interfacing of the three agencies involved in this common task of assisting first-year teachers in the experimental group. In order to grasp the complexity of

FIGURE 8

INTERFACING OF THE AGENCIES



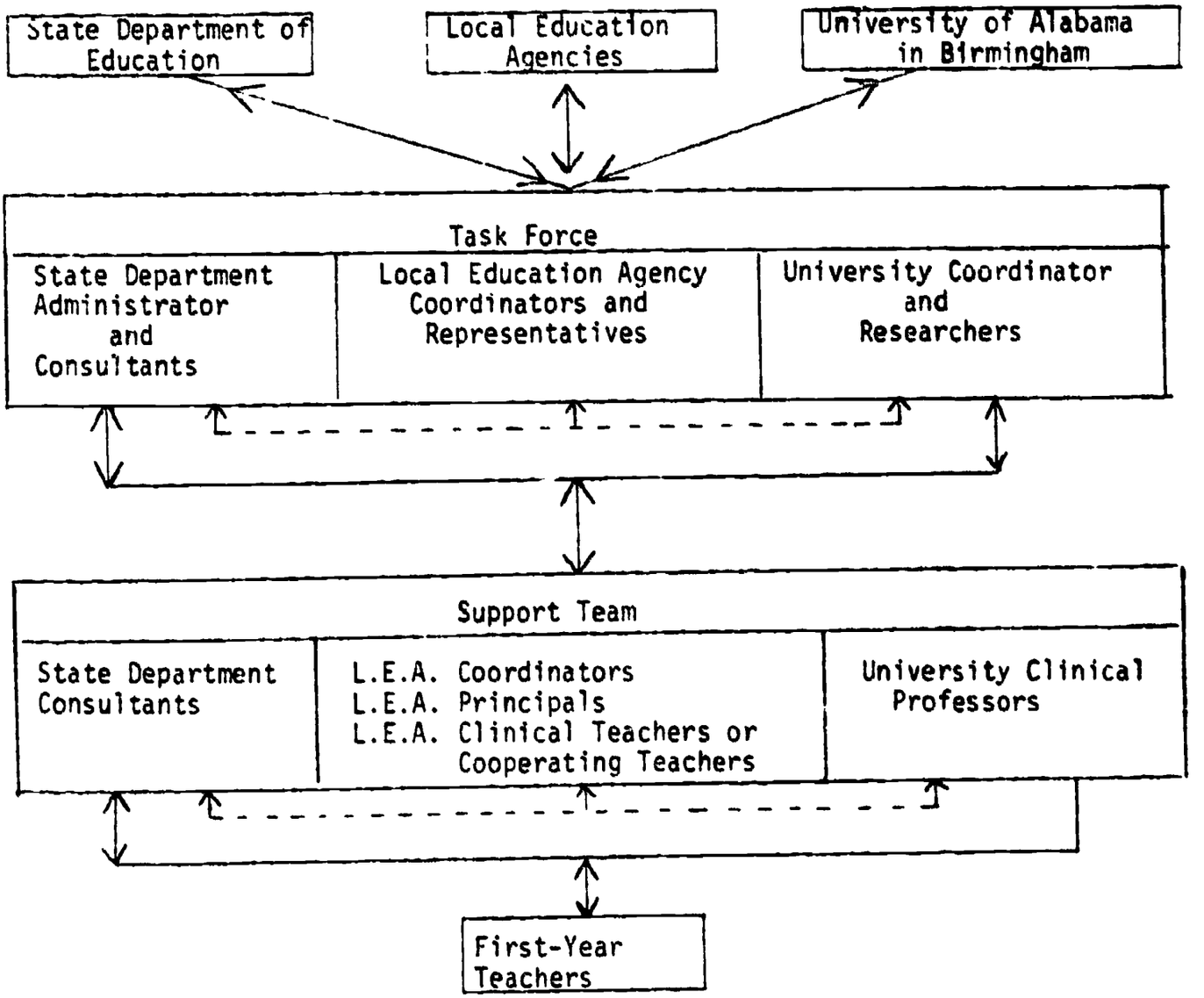
the undertaking, it is necessary to examine Figure 9. The State Department of Education, the local education agencies, and the University of Alabama in Birmingham have met in the Task Force to determine policy and procedures. It has been in the Task Force that all forms and instruments (with the exception of the ETS/UAB instrument) have been examined. No forms or instruments have been utilized, no decisions affecting any phase of the operation of the program were made, and no objectives of the program have been finalized without the discussion and consent of this body. This joint effort has been found to be vital in the implementation of this program.

Without the operation of this body, many unnecessary obstacles could have appeared. The matter of pretesting and posttesting was an example. Some counties utilize only the testing program which is under the aegis of the State Department of Education; other counties conduct more extensive testing programs at their own expense. It was in the case of the latter counties that problems could have occurred if this information had not been made available in the Task Force meetings. Because such additional testing programs were explained, the consortium was able to avoid a duplication of testing programs, a duplication which would have been detrimental to students and a waste of money.

The Task Force has made possible decision-making which can take into account the strengths and problems of the three agencies so that alternative plans have been formulated when reality has required such action. The Task Force, an essential mechanism for communication, also has served as a liaison between the parent bodies it represents and the support teams and the first-year teachers.

FIGURE 9

INTERFACING OF THE AGENCIES IN DETAIL



The members of the support team have contacted each other in different ways. In all counties, there have been formal team meetings which have been held periodically. The interim between team meetings has called for additional communication. Usually this has been handled in an informal manner, with clinical professors and State Department consultants conferring with local education agency personnel as it has been deemed necessary/appropriate.

Research Component

The research component of the program involved answering two basic questions:

(1) How do we develop a support system for first-year teachers?

(2) What difference does the support system make and to whom does it make a difference?

More specifically, this research component sought to achieve seven purposes:

(1) 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 they might be avoided in the future,

(5) to determine the most effective people/time organizational and utilization patterns,

(6) to relate results of the First-Year Teacher Pilot Program to preparation programs and to the certification process,

(7) 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 research conducted required conceptual models which would encompass process and product. Accordingly, a model (Figure 10) was designed to make possible a study of the process of building a support system and to provide information regarding each participant's response to and perception of the program procedures and activities. Figure 10 shows two researchers receiving information from each participant; this was done by interview (on a one-to-one basis) in January, 1974, and again in the last week of April and the first week of May, 1974. The original plan called for three interview sessions with each participant so that necessary changes could be made in light of the data obtained. The late date of funding and, therefore, the delayed date of putting the program into operation made this type of cyclical (three-interview) study impossible. Nevertheless, data pertaining to process were obtained from the two interviews conducted.

Figure 11, the product research model, is the conceptual model for studying the effectiveness of the First-Year Teacher Pilot Program. As indicated by the model, the study was designed to examine several facets of the impact of the program on a group of 100 teachers who received assistance of the support team as compared to 100 teachers who received no special assistance. Both groups were chosen by random sampling.

Two particular constraints affected the choice of the first-year teachers in the two groups. First, the teachers chosen were selected so that experimental and control groups would be in different schools.

FIGURE 10

FACILITATION AND EVALUATION OF PROCESS

PROCESS RESEARCH MODEL

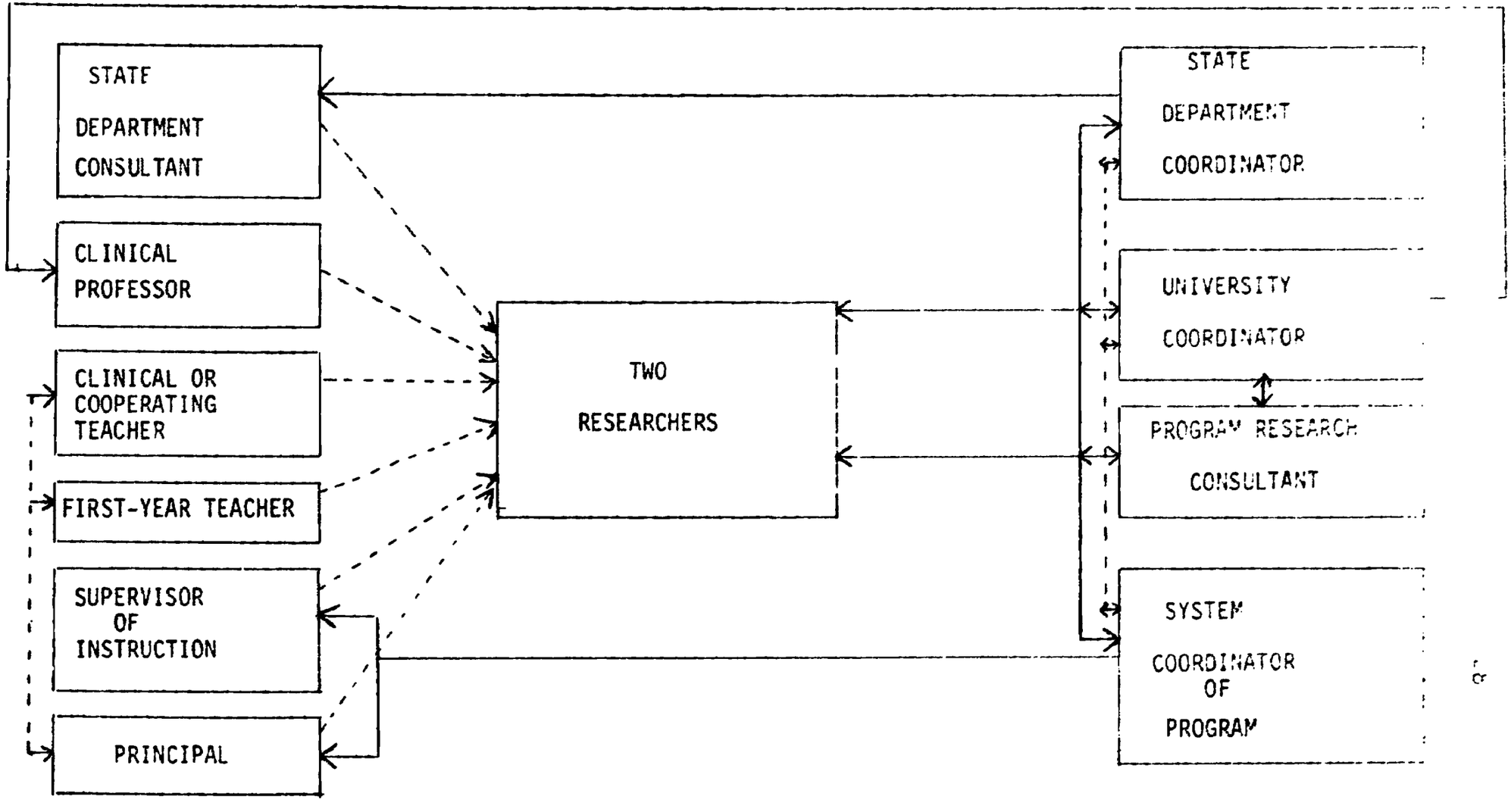
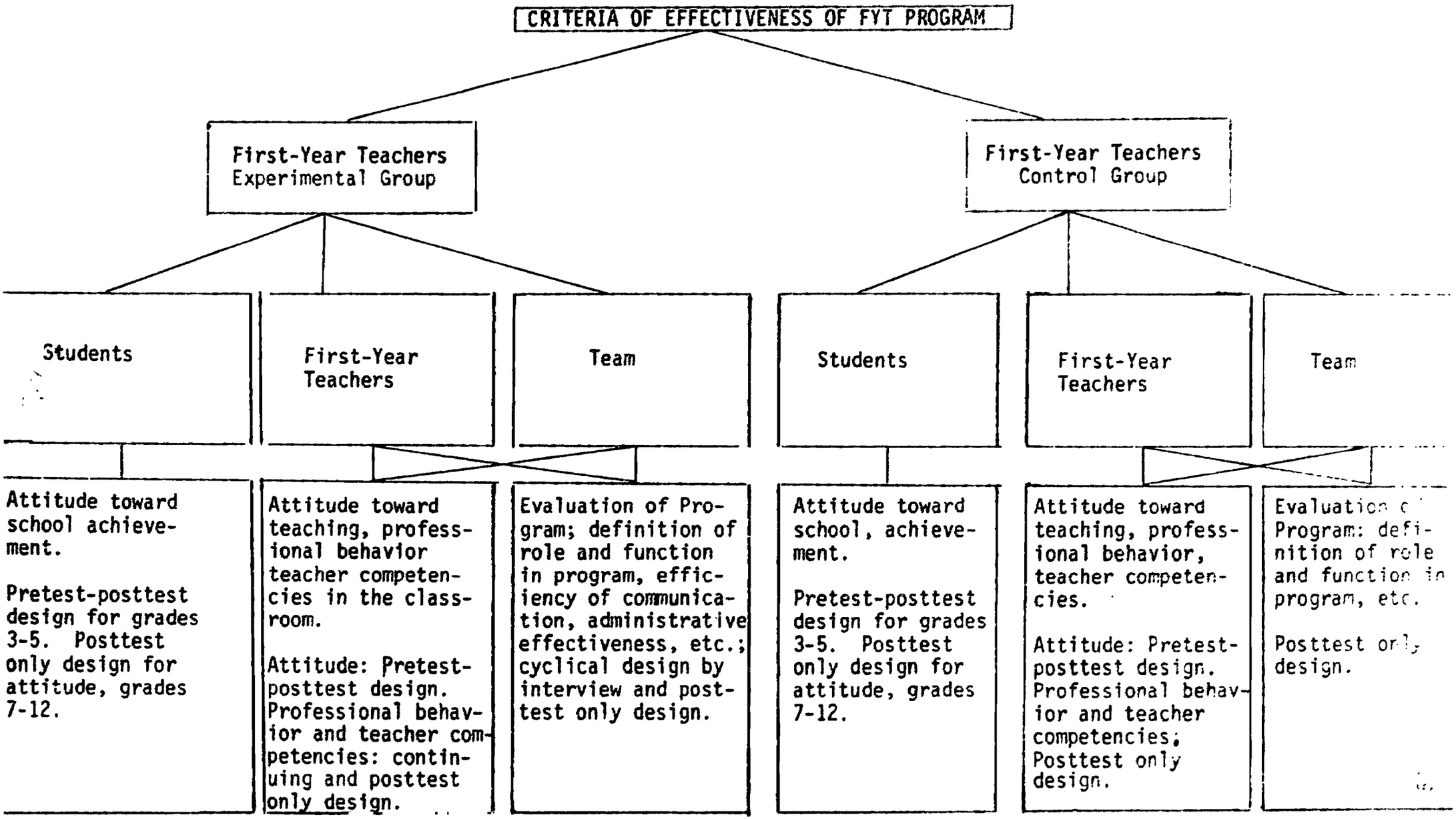


FIGURE 11

PRODUCT RESEARCH MODEL



Although it was recognized that an experimental teacher and a control teacher might be residents of the same neighborhood, this selection procedure was the only means available to eliminate the seepage which would almost certainly occur if the teachers taught in contiguous classrooms.

Secondly, the number of experimental teachers in each county school system was determined by a formula necessitated by financial factors. The consortium was required to work with 100 first-year teachers. The sum of $1000.00 was allotted by the State to each local education agency for each teacher who would receive the special assistance of a support team. This sum was to finance the program in that agency. It was decided that each local education agency would have at least 10 experimental teachers, thus assuring each agency of a minimum of $10,000. Since there were seven local education agencies involved and each would have a minimum of 10 first-year teachers, there remained 30 teachers to be divided among the seven local agencies. It was decided that in addition to the 10 minimum number of teachers, each local education agency would have a proportion of the 30 remaining teachers. County G, for example, had 7.2% of the total number of first-year teachers in the seven-county region; therefore, County G would have 7.2% of the thirty remaining teachers. In this manner, the total number of teachers for each local education agency was calculated.

This formula was accepted by the Task Force. Indeed, all policies and procedures as well as forms which were designed for use in the program were examined by the Task Force before they were used during the year. At the time of examination, Task Force members had the opportunity to suggest modifications and they did so.

The evaluation of the effectiveness of product was concerned with attitude and achievement of students and with attitude and behavioral competency of teachers, judged by observation and tests.

The research design differed with respect to elementary and secondary schools. This was a necessary decision because of the late date of funding of the program. This late funding date made it impossible for UAB to become fully staffed before October; therefore, the clinical professors entered the schools in the latter part of October. Pretests were administered by clinical professors and the UAB coordinator during the month of November. The decision to wait until November was based on the belief that the clinical professors should have met the first-year teachers before entering the classroom to administer the tests. Earlier, the Task Force had decided that clinical professors should administer the tests to insure objectivity. Because of the time element and the desire to have some pretest and posttest data, the decision was made to conduct a micro-study of grades 3-5 during this first pilot year. Students of both control and experimental teacher groups in these grades were given the California Achievement Test and the Cowles Pupil Opinion Instrument.

The testing done in the secondary schools involved attitude only. The School Morale Scale developed by Wrightsman, Nelson and Taranto was administered to one randomly chosen class of each of the first-year teachers in the experimental and the control groups. This was done on a posttest only design basis, with the tests being administered in the latter part of April and the first week of May.

The results of these tests were kept as classified data because the purpose was not to evaluate individual teachers but to examine the effect, if any, of the support system on the attitudes of students.

The teachers' attitudes toward teaching were examined on a pretest-posttest basis by means of an instrument which utilized the semantic differential technique.

Teacher competency was studied by means of an especially constructed direct observation form and a pencil-and-paper test devised for this purpose. Because of the late funding date and the absence of any time for planning, these instruments were of necessity developmental in nature.

Teacher competency was examined in terms of four categories: (1) planning and instruction, (2) interaction skills, (3) managerial task performance, and (4) professional behavior. In order to study teacher competency in these areas, it was necessary to develop five different instruments - instruments which could be used by professional personnel with varying degrees of technical sophistication and experience. A second consideration was that matter of feasibility which is vital when three agencies are uniting to perform a task.

In the light of these considerations, decisions had to be made regarding two essential factors: (1) would all three agencies utilize all of the instruments, and (2) would use of certain of the instruments be restricted to one or more of the various agencies? Experience during the year and the development of the instruments indicated to the Task Force that the professional behavior and managerial task components would be more appropriately handled by the local education agencies. On the other

hand, it was decided that those competencies pertaining to planning, instruction, and interaction skills could be handled by all three agencies, thus providing a common core of competencies to which all three agencies could direct their attention. Four instruments which require some form of observation were developed; three of them were used this year - Forms L, M, and N. Forms L and M were used by local education agency personnel to study first-year teachers' professional behavior and managerial task competencies respectively. Form N was used by personnel of all three agencies to examine instruction competencies of teachers. The fourth, a classroom observation instrument, will require some training before use; therefore, it is necessary to wait until next year to use it. Plans for intensive staff development have been made, and it is expected that this instrument will be in widespread use in 1974-75.

There was one instrument which was a pencil-and-paper test designed to supplement and/or corroborate the observation instruments. This instrument was developed in cooperation with Educational Testing Service which supplied the bulk of the items from their file; these items were supplemented and edited by the UAB staff of this project. The instrument was used for the first time in May, 1974, to supplement observation data. Careful analysis of the results will make possible the revision of the instrument so that it will be more nearly what is needed during the 1974-75 school year.

The research design required information regarding the kind of support techniques and their effectiveness with respect to both experimental and control teacher groups. An instrument in the form of a

questionnaire to which both groups could respond was devised so that we could have data to determine whether, indeed, the joint support system was supplying a kind of support which differed from and/or was more useful to first-year teachers than the usual type of assistance available. This instrument was administered at the end of the year.

CHAPTER III

INSTRUMENTATION AND ANALYSIS OF DATA

As already stated, this year's work on the pilot program began on short notice. Consequently, the selection and use of evaluative measures must be viewed primarily as steps in refinement of procedures for use in 1974-75. It would be a mistake to try to reach definitive conclusions this first time around. The discussion of instrumentation and analysis of data in this chapter must therefore be read as an account of a year's experience in "putting it all together" for a more adequate test of an innovation in teacher education that has yet to be fully evaluated. Even this coming year's activity will constitute a significant pioneer effort at evaluating a promising concept in teacher development. Nevertheless, significant indications from this year's work will be noted in the process of this first "interim" report.

The evaluation of the effectiveness of the First-Year Teacher Pilot Program was concerned with attitudes and achievement of students and with attitudes and behavioral competency of teachers, judged both by observation and by test. The instruments used are described in detail in this chapter. Also contained in the chapter is an analysis of the data which were obtained. Brief descriptions of many of the instruments, along with sample items, are contained in Appendix A. The final report, to be published in 1975, will contain complete documentation of all instruments.

Development and Validation of the Instruments

Cowles Pupil Opinion Instrument

In order to determine whether elementary school students of experimental and control group teachers viewed themselves differently at the end of the

year and as a result of the year's experiences, the Pupil Opinion Instrument was administered to all third, fourth, and fifth grade students on a pretest-posttest basis. Classes of all first-year teachers were tested in order that control teachers not be identified (19 control teachers, 25 experimental teachers).

The Pupil Opinion Instrument is a well established measure designed by Dr. Milly Cowles to determine the feelings of children about their relationships to other pupils in the classroom and about their school success and achievement. Dr. Cowles had determine the test-retest reliability to be .77, quite satisfactory for an instrument being used for group comparisons. Moreover, content validity was established by judgements of a panel of twelve (12) experts in measurement of child development.

School Morale Scale

The School Morale (SM) Scale was administered near the end of the school year to the secondary school students of both experimental and control teachers (N = 75) in order to see if there was any difference in the way secondary students assigned to control teachers and experimental teachers saw themselves, their school and their school settings.

The School Morale Scale is a 84-item Likert-type scale which measures seven aspects of a student's morale about school. Subscale alpha reliability coefficients range from .42 to .78, and subscale intercorrelations range from .29 to .68. Overall scores were computed and "overall attitude" was obtained for each student. This single value seemed most worth obtaining since the subscale dealing with general school morale correlated substantially (.41 to .68) with all other subscales.

California Achievement Test

The California Achievement Test was administered to all third, fourth, and fifth grade students (N = 27 teachers) on a pretest-posttest basis to obtain evidence of whether the support team efforts had made any difference in the achievement of elementary students. The California Achievement Test is a widely used standardized achievement battery with KR-20 reliability ranging from .91 to .96 in grades 2-6.

Secondary School Achievement Testing

Because instruction at the secondary school level is departmentalized and many secondary teachers do not teach academic subjects, it was not feasible to administer a common standardized test to enough students to affort statistical comparisons between the students of experimental and control teachers. It is planned in 1974-75 to test large enough numbers of classroom groups on a pretest-posttest basis to warrant generalizations at least for some of the major areas of academic instruction.

Peabody Individual Achievement Test

The Peabody Individual Achievement Test (for special education students, N = 10 teachers) was administered on a pretest-posttest basis in order to determine whether the support team had made any difference in the achievement of special education students. The Peabody Individual Achievement Test is a standardized instrument with 5 subscales. Test-retest reliability ranges from .64 to .89.

Forms L, M, and N

Forms "L" and "M" grew out of the need to know how well first-year teachers were dealing with the development of professional competencies (Form L) and proficiency in managerial tasks (Form M). The competencies

which local supervisors (usually principals) were asked to judge at the end of the year grew out of concerns voiced by superintendents in the formative days of the program.

Form "N" was developed to obtain judgements of competency in several teacher behaviors. This form was competed by personnel from each of the three agencies involved in the program. Aside from providing data which can assist the support team in its work with first-year teachers, data from this form can provide insights into how personnel from different backgrounds perceive the same general teacher behavior. Form N was designed by UAB program personnel and was used twice by the clinical professors and once by State Department consultants for each experimental teacher (N = 97). The form was used once by principals at the end of the year for both experimental and control teachers (N = 134).

The two uses of Form N by the clinical professors are reasonably well correlated. (r = .75). Correlation coefficients of Form N with other competency measuring instruments (Forms L and M) may be found in Appendix C. Of particular interest are the highly significant correlations (r = .34 to .70) between Forms L, M, and N when used by principals. Although L, M, and N cannot be considered alternate forms of the same instrument, these high correlations at least lend support to their validity as measures of important competencies.

ETS/UAB Instrument

A combined effort (UAB staff and Educational Testing Service) produced a 125-item supplementary paper-and-pencil test of teacher competency which was administered to both experimental and control teachers (N = 125)

near the end of the school year. An effort was made to include questions which would test the first-year teachers' knowledge of and commitment to competencies thought to be advantageous to a classroom teacher.

It is interesting to note the correlation (r = .33) between the ETS/UAB Instrument and Form N when used by the clinical professors. Further efforts to improve the validity and reliability of the ETS/UAB Instrument will involve both the UAB researchers and the personnel of the Educational Testing Service. The KR-20 reliability coefficient for total score on the ETS/UAB Instrument was .89.

Semantic Differential Instrument

The Semantic Differential Instrument was administered to all first-year teachers in the fall and to experimental and control teachers (N =128) near the end of the school year. This technique was used to ascertain the attitudes during the year of control teachers (without help) and experimental teachers who were assisted by the support team.

The semantic differential was applied to 12 different topics or ideas, e.g., "discipline", each of which was rated on 12 seven point scales (Appendix A). Responses were given a numerical value ranging from 1 point (least desirable response) to 7 points (most desirable response). Total scores and mean scores were computed for each topic. These topic means were then compared to the total test mean as a check on the internal validity of the instrument. That is to say, it is of interest to know which items are consistent with the instrument as a whole. These correlations, as well as inter-item correlations, are displayed in Appendix C. Seventy-seven of the seventy-eight correlations are highly

significant. Correlations of the value of the separate topics with total values range from .53 to .80.

Of particular interest are the significant positive correlations for elementary teachers' attitudes (semantic differential posttest) and the posttests for both the Cowles Pupil Opinion Instrument and the California Test. This can be interpreted as meaning that, at least at the elementary level, teacher attitude is directly related to student attitude and also to student achievement.

Form F-1 (Assistance Report)

Form "F-1" was designed to allow all members of the support team to systematically record their reactions to the first-year teacher in terms of perceived problem areas, assistance offered, areas of weakness, climate in which assistance was received, and general considerations.

Form F-2T (Team Report)

Form "F-2T" allowed the team members to systematically indicate the areas in which the first-year teacher needed assistance. In addition, the form permitted an evaluation of the teacher's attitude and each member's estimation of the teacher's competency at that particular time; an option was left open for any member to cast a dissenting vote on the composite judgement.

Needs Assessment Questionnaire

The needs assessment questionnaire was administered near the beginning of the support effort and was used to allow first-year teachers to indicate areas in which they felt deficient. First-year teachers

were told to choose responses which they felt most nearly stated their position. In an earlier orientation session, first-year teachers had been asked to list areas where they felt they were weak and areas where they felt they would need little or no help.

Toward the end of the school year when the ETS/UAB Instrument and the posttest of the Semantic Differential Instrument were administered, the first-year control teachers were also asked to respond to a ten-part questionnaire (since they had not been visited by clinical professors, State Department personnel, or local education agency personnel who made reports on experimental teachers to the research department of this program). The questionnaire was administered in order to get from control teachers their perceptions about their pre-service instruction, areas where they perceived most assistance was needed, and future plans. In addition, the same questionnaire was administered to experimental teachers as a check on whether they responded to a questionnaire in a manner similar to that in which they answered oral questions from UAB interviewers.

Interviews

Two interviews were conducted during the year for the purpose of providing information for use by those support team members in the field. The interviewer asked systematic questions of the first-year teachers, co-operating teachers, principals, county coordinators, State Department consultants, clinical professors and the UAB coordinator. Each of the two sets of data was compiled into a report for the consortium in addition to being made available to the UAB staff.

It should be noted that many of the instruments used were designed

and developed specifically for the First-Year Teacher Pilot Program. A great deal was learned concerning the utility of each instrument, and it is clear that most of the instruments need considerable revision. After soliciting advice and ideas from State Department and local education agency personnel, the UAB research staff will modify and revise all instruments as deemed necessary. Further validation efforts will continue throughout the second year of the First-Year Teacher Pilot Program. As previously mentioned, Educational Testing Service is expected to assist considerably in the further validation of the ETS/UAB Instrument.

Evaluation and Assessment

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

1. Were student attitudes significantly different between control and experimental teachers?
2. 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?

Analysis of the Data

Technical data concerning the statistical analysis of the questions

may be found in Appendix B.

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, i.e., the influence attributable to these variables was "taken out" by the use of the statistical techniques 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 again the initial differences were "taken out". No significant difference was found between control and experimental teachers.

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, and the first-year teacher research

personnel developed three competency measuring instruments (Forms L, M, and N) to measure proficiency in professional behavior, managerial tasks, and classroom management, respectively.

On the basis of the ETS/UAB Instrument alone, no significant difference in competency was found between control and experimental teachers.

Using the Fisher Z - transformation (see Appendix C), significance tests were done between control and experimental teachers on correlations between

(a) student and teacher attitudes
(b) student achievement and teacher attitude
(c) student attitude and teacher competency
(d) student achievement and teacher competency

A significant difference ($p < .05$) was evident in only two of the tests made. These were:

(1) student attitude (Pupil Opinion) and teacher competency (ETS/UAB)
(2) student attitude (SM Scale) and teacher attitude (semantic differential).

By way of interpretation, it can be said that a more direct relationship, exists 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), we can infer that teacher competency as measured for the control group may be adversely influencing student attitude.

Similarly, it can be said that a more direct relationship exists between 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 (-0.4365).

It is strange, indeed, that in the control group, student attitude is negatively influenced by teacher attitude. It appears that without the assistance of the support team, those teacher attitudes that are deemed desirable seem to be inappropriate.

Correlations between most measured variables are displayed in the matrices in Appendix C. Of particular interest are the experimental/control group correlations between teacher competency as perceived by their principals (Forms L, M, and N) and teacher competency as measured by the ETS/UAB Instrument. Note that none of the correlations is significantly different from zero. Further note that the correlation of teacher competency as measured by the ETS/UAB Instrument is significant (see Table 1).

TABLE 1

Correlation of Perceived Teacher Competency with ETS/UAB Score

	Experimental			Control		
	Form L	Form M	Form N	Form L	Form M	Form N
Principal	.12	.20	.25	.02	.16	.16
Clinical Professor	—	—	.33**	—	—	—

** $p < .01$

The following incidental results were also found:

1. When the use of a cooperating teacher was treated as an independent variable, it was found that principals' perceptions of teacher competency (Forms L and M) were

significantly different. Principals in systems using cooperating teachers rated their first-year teachers significantly higher in competency.

2. Teacher attitude (semantic differential) varies significantly among the seven school districts. ($p < .05$)

3. Teacher competency (ETS/UAB Instrument) varies among the seven school districts in a degree that approaches significance. ($p < .07$)

4. Student attitude (School Morale Scale) varies significantly among the seven school districts. ($p < .02$)

5. Tests for significance between experimental and control teachers were done on each individual item in the Semantic Differential Instrument. Only two items showed a significant difference. These were item 3 ("Discipline") and item 4 ("Commitment to Concept of Education as Subject Matter Coverage"). Control teachers rated these items significantly higher than teachers in the experimental group. Hence, this year it would appear that control teachers were more authoritarian and more committed to strict adherence to structure within their classrooms. In addition, the control teachers tended to view education as more rigid coverage of subject matter than did experimental teachers.

6. Although the correlations are not significant, it appears that teacher attitude (semantic differential) and teacher competency (ETS/UAB Instrument) are negatively related in the control group. Also, teacher competency (ETS/UAB Instrument) appears negatively related to student achievement in the control group while the same variables are positively related in the experimental group. The differences in correlations between teacher attitudes and competency and student attitudes and achievement prompt speculation because of their compatibility with the view that first-year teacher aid via clinical professors, State Department personnel, and cooperating teachers promote a view of teaching as involving development of a more cooperative, less academically competitive classroom atmosphere. It will be one focus of the second year's study to attempt to clarify the meaning and implications of these relations.

Chapter IV

ADDITIONAL FINDINGS FROM PROCESS DATA

In order to determine the people/time organizational and utilization patterns which seem to function most effectively in the assistance of the first-year teachers, it was necessary to obtain data pertaining to four seminal factors: (1) the most common needs of first-year teachers, (2) the nature of assistance rendered by the support team, (3) the kinds of assistance which were perceived to be most useful, and (4) potential or experienced problem areas.

Both formative and summative data were available from the support team in the form of assistance reports (the F-1 forms) which were completed by personnel from the three agencies. Additional information was obtained from interviews which all participants granted to researchers at midyear and again at the end of the school year.

Perceived Needs

First-year teachers had continuing opportunity to discuss their needs with the support team personnel. In addition, they had opportunity to report this information on forms which were provided at three points during the year. During Institute meetings held by the various local education agencies, first-year teachers completed basic data forms (Form A-1) which asked them specifically to note those areas in which they felt secure, i.e., in which they thought they needed no help, and those areas in which they felt a need for assistance. Of the teachers responding to these questions, 78% perceived their most significant need to be one of the five shown in Table 2. Later during the year,

they completed a Self-Assessment of Needs form. At the end of the year, they were asked to respond to the First-Year Teacher Questionnaire which contained items pertaining to their perceptions of needs.

TABLE 2

Beginning Teachers' Perception of Needs
(Form A-1 Data)

	Need	%
1.	Effective Utilization of Available Media and Materials	25%
2.	Planning (long and short range)	14%
3.	Record Keeping	14%
4.	Discipline	13%
5.	Provision for Individual Differences	12%
		78%

Finally, data concerning competencies necessary for a first-year teacher's success was obtained from the Task Force itself and from a statewide survey of Alabama educators. The instrument used in the statewide survey was a highly generalized list of competencies which had been originally drawn up by the Task Force. This list was sent to five percent of Alabama's educators (public school teachers and administrators) who were randomly selected from records of the State Department of Education. This instrument was returned by 789 teachers and 81 administrators who had been asked to provide anonymous responses regarding the importance of the competencies listed and to write in the space provided any other competencies which they deemed important.

The results of the search for consensus regarding teacher competencies can be clearly seen in Table 3.

TABLE 3

Statewide Questionnaire

Competencies or Needs	Teachers	Administrators
1. Utilization of Available Media and Material	92.1%	90.0%
2. Planning (long & short term)	94.1%	90.0%
3. Record Keeping	94 %	91 %
4. Discipline	82 %	83 %
5. Provision for Individual Differences)	87.6%	87.6%

Based on responses in interviews, cooperating teachers felt that nearly half (46%) of the first-year teachers needed help in disciplining their classes, and approximately one-fifth (19%) needed help in record keeping. Principals agreed that half of the first-year teachers need help in discipline but saw no great need for assistance in record keeping; however, principals perceived a great need (47%) for assistance to first-year teachers in planning for instruction.

State Department of Education consultants (interview) were in agreement with principals that the major need of first-year teachers is in planning for their teaching day. UAB professors (interview) generally agreed that planning is the area where first-year teachers need most help and encouragement.

First-year teachers themselves (interview) did not perceive their needs in exactly the same light as did the outside observers. Beginning teachers saw most of their problems stemming from 1) lack of materials, 2) lack of support in disciplinary problems, and 3) lack of assistance with records and register. None mentioned planning as the area where needs were greatest; the need for assistance in planning appeared only in the basic data forms completed at the beginning of the year. First-year teachers saw all of these needs best dealt with on the local level by LEA personnel. With respect to UAB support, first-year teachers said that they had greatest needs in methods and techniques.

In summary, LEA support personnel saw problems (needs) to be in planning and discipline. State Department of Education and UAB professors saw the major need to be in effective planning. And, first-year teachers themselves reported that they needed more materials, help in planning and techniques, and support in disciplinary problems. Finally, the statewide sample of teachers and administrators showed that the competencies or needs considered to be most important were 1) record keeping, 2) planning, 3) utilization of available resources, and 4) provisions for individual differences.

Assistance

The percentage of entries made by support team personnel on assistance reports for the year is shown in Table 4. Each entry indicates a topic of concern which was considerable. These data came from F-1 forms.

TABLE 4

Assistance Given to First-Year Teachers (from F-1 Forms)

	SDE (488)	LEA (644)	UAB (1448)
1. Materials	14%	18.6%	12%
2. Planning	20%	14%	14%
3. Evaluation	5%	4%	7%
4. Discipline	10%	12%	8%
5. Motivation	9%	7%	7%
6. Objectives	4%	2%	6%
7. Teaching Skills	23%	15%	16%
8. Register	0%	5%	0%
9. Individualizing Instruction	6.4%	8%	11%
10. Student/Teacher Relations	4%	5%	4%
11. Professional Behavior	6%	2.5%	1%
12. Other	4%	7%	14%
	100%	100%	100%

A more capsulized form of the F-1 data is shown in Table 5 in which the top five concerns are reported by all three agencies (local education agencies, State Department of Education, and UAB) together.

TABLE 5

Assistance Report Data

1. Teaching Skills	17%
2. Planning	15%
3. Materials	13%
4. Discipline	10%
5. Individualizing Instruction	9%
	64%*

*Notice that these 5 items capture almost 2/3 of supervisory concern.

At team meetings when all support agencies were represented, the most prevalent topics of concern were planning (22%), teaching skills (15%) and materials (14%). This information was taken from F-2T forms, the forms devised for Team Meeting reports.

In conclusion, it is clear that most of the support team effort went into assistance in 1) mastering teaching skills, 2) planning, 3) providing materials, 4) discipline, and 5) individualizing instruction.

Assistance Perceived as Most Useful

Pre-Service

First-year teachers were asked to evaluate their pre-service teacher training at two different times in two different ways: personal interviews and questionnaires. In both cases, responses came after the teachers had had adequate opportunity to determine what competencies were needed for them to function appropriately in a classroom setting.

When questioned in an informal interview situation, 57% said their undergraduate preparations (education cources and experience) had been of a good deal of help (see Table 6).

TABLE 6

Value of Pre-Service Training
(From Interviews)

Response	Number	Percent
"Very helpful" to "of some help"	49	57%
Courses Most Helpful		
A. Student Teaching	14	74%
B. Methods	14	17%
C. Psychology	7	9%

The remaining 43% said the pre-service preparation had been of little or no value. Of the courses taken in pre-service, student teaching was viewed as most helpful by three-fourths of the first-year teachers. (Table 6). Methods courses and psychology made up the bulk of the remainder of useful experiences cited. Almost all (96%) first-year teachers said they thought more pre-service clinical in-schoolroom activities were needed.

When the same questions were asked in a questionnaire, the responses were only slightly different. The major difference existed in the number of first-year teachers who said the pre-service training was of assistance; via questionnaire, 88% said their undergraduate training was of a good deal of help and only 12% said it was of little or no value. In terms of recommendation for changes in undergraduate programs, about two-thirds (63%) said that more clinical experiences were needed.

In conclusion, according to two methods of determining the first-year teachers' feelings about pre-service training, it is clear that they consider the current curriculum to be somewhat useful but that more clinical experiences are needed.

In-Service

Using the data gathering techniques developed earlier, it is clear that at least two of the agencies (UAB and local education agencies) saw the most useful assistance in quite a different light. For instance, cooperating teachers (72%) said when interviewed that they have helped the first-year teacher most. Their help came in the form of providing materials, help in record keeping, and discipline. A small number of cooperating teachers (18%) thought UAB had been of most help to young teachers in methods, skills, and encouragement. Principals, on the other hand (by a small margin of

48% to 41% in interviews)thought that the UAB effort had been more helpful because of the first-year teachers' need in methods, skills and techniques which are areas where UAB competence is greatest. However, in general, the local education agencies felt that their input had been of greatest assistance to first-year teachers.

Based on interview data, the UAB professors saw their role as most helpful during the first year. The State Department of Education reported that general morale building was most important and, since the cooperating teacher (or other local education agency personnel) was closer in space and time, it was reasonable to assume that the local education agency was the most significant agency in the first-year teachers' first-year experience.

In the questionnaire, 73% of the first-year teachers reported that another teacher (usually the cooperating teacher if one were assigned) had helped most, and that help took the form of 1) assistance in disciplinary matters, 2) finding materials, and 3) maintaining accurate records. The remainder said that the supervisory staff (UAB clinical professors) had been most helpful. In the final interview (see Table 7), 56% of the first-year teachers said that another teacher (or other local education agency personnel) had been most helpful and 41% said that UAB had been most helpful.

TABLE 7

First-Year Teachers' Perceptions of Support Team Effort Which Proved Most Useful

Agency/Activity	Number	Percent
UAB Clinical Professors (methods, skills, encouragement)	26	41%
State Department of Education (Materials, encouragement, methods, when State Department of Education was mentioned	2	3%

The contrast between experimental and control teachers' perceptions of needs, assistance requested, and assistance received is shown in Table 8. This can be interpreted to mean that experimental teachers were more conscious of problems, more cognizant of where help could be found, and more willing to accept assistance.

TABLE 8

Perceived Needs, Assistance Requested, and Assistance Received

	Needed		Requested		Received	
	control	experimental	control	experimental	control	experimental
Instructional Techniques	22	31	21	33	33	50
Classroom Management	29	39	26	33	24	36
Records	39	37	32	40	35	53
Discipline	27	45	19	37	22	38
Total	117	148	98	143	114	177

Problem Areas

One objective during the First-Year Teacher Program was to identify potential problem areas so that they may be avoided in the future.

Using the interview schedule data from both the first and second administrations of the instrument, along with the questionnaire data, five potential problem areas were identified:

1. Perceived Need for Support and/or Assistance
2. Time
3. Communication, Coordination, and Roles
4. Perceived Need for Pre-Service Training
5. Conflict and Threat

It should be noted that some corrective measures were undertaken throughout the program to alleviate some of the potential problems indicated in this report. In addition, some of the items indicated in the data sources may reveal high positive responses; however, it is felt that the problems are of such a nature that some corrective measures against their developing into larger problems should be undertaken.

A description of the information attained from the data sources is indicated in the remaining portion of this section.

Perceived Need for Support and/or Assistance

A cursory inspection of the data sources seems to reveal two areas of major concern for support and assistance: (1) cooperating teachers and (2) principals. Based on this information, the assignment of a cocperating teacher to each first-year teacher appears to be most advantageous since first-year teachers perceive veteran teachers to be most helpful to them; thus, it would seem that such assistance by veteran teachers should be identified and isolated. With respect to assistance rendered to the first-year

teacher by principals, there seems to exist a discrepancy between the help given to first-year teachers as perceived by the teachers as compared to that perceived by the principals. More specifically, there appears to be relatively little instructional assistance given to the first-year teacher by the principal.

Time

The need seems to exist in three areas with respect to accessibility of personnel in giving support and/or assistance to the first-year teachers: (1) cooperating teachers, (2) LEA coordinators, and (3) principals.

There appears to be a need for more time for cooperating teachers to spend with the first-year teachers. This is especially true during the first part of the year. The most common suggestion for change concerned the need for a corresponding free period for the first-year teachers and the cooperating teachers.

There may be a need for coordinators' assignments to be reviewed in order that coordinators be afforded more time to devote to the teachers participating in the program.

There is some indication that principals need more time to spend observing the teaching-learning process in the classroom.

Each week the clinical professors spent an average of 12 hours in travel time to and from schools, 4 hours in preparation for work with first-year teachers, 2½ hours in contact with local education agency personnel, and 2 hours in team meetings. These figures relate only to 4 days a week; the fifth day was spent at UAB attending faculty meetings, committee

meetings, and staff meetings of the First-Year Teacher Pilot Program staff. It was in these meetings, which lasted several hours, that clinical professors planned.

Communication, Coordination, and Roles

According to the data sources previously indicated, the lack of adequate communication, coordination, and definition of roles seems to exist throughout the program. There is some indication that a system for improved communication with principals needs to be devised with respect to their roles in the program and their communication with cooperating teachers, first-year teachers, and clinical professors regarding the assistance being given the first-year teachers and the progress reports on the teachers.

From the data recorded on the Assistance Reports (Form F-1), there appears to be a need to provide for a more distinct delineation of roles among the support team members in order to eliminate duplication of efforts in providing assistance to first-year teachers. Specifically, there seems to be a need for direct communication between the cooperating teachers and the various assisting agencies concerning the program and the cooperating teachers' roles in it. In addition, it appears that a more concerted effort should be made to insure the attendance of representatives of each local education agency each time the Task Force meets.

Some evidence exists that communication and coordination are lacking in the areas of scheduling for interview dates, for fitting student testing dates with State Testing Program dates, and for providing time for teacher testing dates. This appears to be a problem which could be alleviated by intensive orientation for local education agency personnel.

Additional evidence suggests that a need exists for better communication and coordination of effort for first-year teachers to participate fully in the research phase of the program, i.e., to respond to the various instruments necessary to the fulfilling of the obligation to conduct research.

In addition, it is evident that a system needs to be devised to account for materials left with first-year teachers or checked out by clinical professors.

There is some evidence that the team meetings need some re-organization.

Perceived Need for Pre-Service Training

For the purpose of making some recommendations concerning teacher training, the first-year teachers responded to several questions regarding such training.

It is apparent from the first-year teachers' perceptions that some revision is needed in the areas of pre-service education courses, clinical experiences, and psychology in order that such knowledge will be of greater value in the classroom situation. The teachers indicated that they needed more clinical and in-schoolroom contact and experience before their student teaching experience.

Conflict and Threat

In order that better communication and coordination of efforts may exist among the various support agencies, there seems to be some need to alleviate the threat to first-year teachers posed by the several support agencies. There is strong evidence from the interview data that the teachers feel threatened, particularly by principals.

Apparently the ways in which the program is disruptive to the routine of the schools, as indicated by principals, need to be identified and specified. Also, there is apparent need to determine the reasons for apprehensiveness on the part of first year teachers toward such personnel as clinical professors and/or State Department consultants visiting their classrooms, as indicated by their cooperating teachers.

CHAPTER V

CONCLUSIONS AND PROJECTIONS

The operation of the First-Year Teacher Pilot Program during the 1973-74 school year has provided the information and experience necessary for more solid footing for the second year of this program. A very important facet of this year's program has been the blending of the efforts of the State Department of Education, local education agencies, and this institution of higher education (UAB). The collective thinking of personnel of the three agencies represented in the Task Force affords a unique basis for decision-making. Although no panacea for all problems of education is at hand, there is developing a broader understanding of problems and new approaches which may help to provide some solutions or, at least, alternative plans of action.

The tentative conclusions derived from this study form the basis of future plans for this program. Of necessity, these conclusions fall in the realm of process for the most part. Because of the late date of funding for this program, the support team did not go into operation until November of 1973. It was necessary to end operations on May 10, 1974, so that the local education agencies could end the school year without disruption of any type from other agencies. Considering the comparatively short time of full-scale activity and the fact that instruments were being developed as the program progressed, the findings and conclusions should be considered as tentative. This 1973-74 year has been, in reality, a learning year, i.e., a year for gearing for 1974-75. This interim report, then,

deals with what we have found to date and with plans for the future in light of these findings.

As stated in Chapter III, a significantly more direct relationship was found to exist between student attitude (Pupil Opinion Instrument) and teacher competency (ETS/UAB Instrument) in the experimental group than in the control group. Further, a significantly more direct relationship existed between student attitude (SM Scale) and teacher attitude (Semantic Differential Instrument) in the experimental group than in the control group. From these results, it may be suspected that student attitude is adversely influenced by both teacher attitude and teacher competency for control group teachers. Clarification of this possible inference is to be sought in 1974-75.

It was also found that principals in systems using cooperating teachers rated their first-year teachers significantly higher in competency (Forms L and M) than did principals in systems not using a cooperating teacher. Significant evidence was found to suggest that control teachers tended to be more authoritatian and committed to strict adherence to structure within their classrooms than did teachers in the experimental group. Also, control teachers tended to view the purpose of education more in the light of a rigid coverage of subject matter than did experimental teachers. These findings may be interpreted to mean that the support team's contact with and assistance to first-year teachers ameliorated the tendency toward authoritarianism. Again, clarification of these inferences is to be sought in 1974-75.

People/time organizational and utilization patterns emerged as areas of concern. It appears that first-year teachers perceive an on-site teacher

to be most helpful to them in terms of finding materials, keeping records, and handling classroom management problems.

The clinical professors are deemed to be most helpful in the area of skills and techniques, i.e., in methodology. It should be noted that, on the average, clinical professors spent 12 hours in traveling to and from schools and 13 hours in actual contact with first-year teachers each week. This indicates a need for a more economical use of time. In addition, there is the fact that on-site support team members are considered extremely valuable.

It is concluded that it is essential to provide a more economical use of time and to work more closely with the cooperating teachers and other support team personnel. In order to do this, this consortium is developing a teacher center to be housed at UAB.

It is hoped that the teacher center will serve five purposes:

1. To enhance the work of the clinical professor, local education agency personnel, and State Department of Education personnel because all participants will know precisely those generic skills to which the clinical professor is directing his attention, and, thereby, eliminate duplication and conflict with respect to all assistance efforts;

2. To enable the clinical professors to work intensively and for longer periods with first-year teachers in a setting which will be free from the demands of everyday classroom routine;

3. To provide the experienced cooperating teachers and other participating personnel with inservice education programs which are competency based and which could become individualized inservice programs;

4. To put to trial a program which could have value for experienced teachers who may be working with student teachers in the future;

5. To provide a trial period to determine whether this is a viable organizational pattern.

The activities to which clinical professors will direct their attention are directly related to needs as seen by first-year teachers, Alabama public school educators, the State Department of Education and UAB participants, and those skills which Rosenshine and Furst (1971) believe to be of sufficient value to warrant study. The following list of skills is a composite derived from these persons:

1. planning
2. set induction in class
3. stimulus variation in class
4. closure in class
5. fluency in questioning
6. probing
7. methods of evaluation
8. interpretation of standardized test scores
9. operation and utilization of various types of audio-visual aids
10. the understanding and utilization of systematic observation in the classroom
11. the building of modules
12. other more specific competencies to be determined by need

It is believed that the teacher center will provide a place for intensive efforts with respect to these competencies and a time for a closer interaction among participants of the various agencies. It is hoped that the consequent follow-up of these activities in the classroom with first-year teachers will be congruent insofar as the three agencies are concerned.

The development of the teacher center plus a carefully planned, intensive orientation of all participants will, hopefully, help to eliminate problems of communication adn coordination in an effective and economical manner. As a consequence, a more effective and economical support system which will be of assistance to more people may be the result.

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REFERENCES

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APPENDIX A

Descriptions of Instruments and Sample Items

Descriptions of Instruments and Sample Items

This appendix contains very brief descriptions, usually only one or two sentences, and sample items or questions from many of the instruments used during the First-Year Teacher Pilot Program.

Due to copyright restrictions, certain of the instruments such as standardized achievement tests, etc., have been omitted.

Furthermore, since the first year of the program was developmental in nature, it is recognized that many of the instruments will need considerable revision. Thus, this interim report contains only sample items rather than complete documentation of the instruments.

The Pupil Opinion Instrument

The Pupil Opinion Instrument, designed by Dr. Milly Cowles, consists of 21 items. Each item is a series of three statements, and pupils are asked to choose the statement which suits them best. The following is a sample item from the Pupil Opinion Instrument:

1. _____ I like to do very little of the work we do in this classroom
   _____ I like to do most of the work we do in this classroom.
   _____ I like to do some of the work we do in this classroom.

The School Morale Scale

The School Morale Scale, developed by Wrightsman, Nelson, and Taranto, is a list of 84 statements about the school, fellow students, the teachers, etc. Students are asked to respond to each statement with and "A" if they agree and "D" if they disagree.

The following are sample statements from the School Morale Scale:

DESCRIPTIONS OF INSTRUMENTS AND SAMPLE ITEMS - CONTINUED

_____ 1. All my teachers know me be name.

_____ 2. This school building is old and run-down.

The Peabody Individual Achievement Test

Although sample items from the Peabody Individual Achievement Test cannot be given due to copyright restrictions, the instrument can be described as having five subtests: Mathematics, Reading Comprehension, Reading Recognition, Spelling, and General Information. The two reading subtests and the mathematics subtest were the only ones used in the First-Year Teacher Pilot Program.

Form L

Form L, designed by UAB, is a rating instrument consisting of nine different professional competencies on which the teacher is rated. The rater has a choice of five responses which may be indicated with a simple check mark: strong positive evidence, some positive evidence, no evidence, some negative evidence, and strong negative evidence. The following is an illustration of the type of competency measured by the instrument.

SUBJECT MATTER PREPARATION

The teacher show indications of adequate subject matter preparation.

Form M

Form M is similar to Form L in that the response alternatives are identical; however, Form M is an attempt to rate teacher competency

DESCRIPTIONS OF INSTRUMENTS AND SAMPLE ITEMS - CONTINUED

in managerial tasks and clerical activities rather than in professional competencies. The teacher is rated on each of eleven different tasks. The following is an example of one of those tasks:

> The classroom is orderly and neat. Students appear to take pride in this classroom.

Form N

Form N, another instrument developed by UAB, is designed to rate teachers on 24 different kinds of behavioral competencies. The rating scale is "+" (These competencies were observed, "-" (These competencies were not observed when opportunity existed), and "0" (Evidence was not expected on this visit).

Two sample items from Form N are listed below:

1. Plans indicate the use of some available school resources _____
2. Student responses are frequently praised _____

The Semantic Differential Instrument

The Semantic Differential Instrument utilizes the well-established technique of responding to a concept at some point along a continuum between two bipolar adjectives. The continuum is divided into 7 subintervals and responses are weighted on a scale from one point (least desirable response) to seven points (most desirable response). Of the 12 bipolar adjective pairs used for each item or concept, 11 have been used extensively by Osgood and are reported to validly differentiate both the directions and intensity of attitude.

The following is an illustration of one of the 12 items in

DESCRIPTIONS OF INSTRUMENTS AND SAMPLE ITEMS - CONTINUED

the instrument, and two of the 12 "scales", or adjective pairs, used for each item:

School Principal

Good ___:___:___:___:___:___ Bad

Cruel ___:___:___:___:___:___ Bad

Form F-1

Form F-1, the assistance report, was designed for use by support team members to systematically record their reactions to the first year teacher in each of ten areas or categories.

Each category, in turn, is subdivided into several (5 to 11) subcategories. The support team member simply checks or circles the appropriate heading and subheading.

To illustrate, one of the 10 headings is "Subject/Area(s) Involved". Under this heading are nine subheadings which include Art, History, Mathematics, Music, Other, etc.

Form F-2T

Form F-2T, the team report, is quite similar to Form F-1 in that in consists of several headings, each having several subheadings. As an example, one of the headings, or categories, and its subheadings are shown below:

1. Subject area(s) involved

1.00 General	1.05 Physical Education
1.01 Art	1.06 Reading
1.02 History	1.07 Science
1.03 Mathematics	1.08 Spelling
1.04 Music	1.09 Other (specify)
	1.10 Not applicable

DESCRIPTIONS OF INSTRUMENTS AND SAMPLE ITEMS - CONTINUED

The Self-Assessment of Needs Instrument

The Self-Assessment of Needs Instrument is a questionnaire consisting of 50 different tasks or abilities. The teacher is asked to rate her ability to perform each of the tasks on a five-point scale:

1. I could easily do this,
2. I would have some difficulty in doing this,
3. I would have considerable difficulty in doing this, but probably could squeak through,
4. I could probably not do this,
5. It would be hopeless for me even to attempt to do this task.

Each of the 50 tasks is presented in the form "How well could I . . .". Below is an illustration of the kinds of things asked:

_____ 1. How well could I devise a laboratory activity?

First-Year Teacher Questionnaire

Another questionnaire consisting of 10 items was given to all first-year teachers in both the control and experimental groups at the end of the year.

A representative item from the questionnaire is given below:

What person has assisted you most this first year in your teaching? Rank the following people: principal, supervisor, another teacher, other. Add any others not listed.
1st _____ 2nd _____ 3rd _____ 4th _____ 5th _____

Form O

Form O is a list of 18 teacher competencies which teachers and administrators across the state of Alabama were asked to rate.

The rating scale was (1) Strongly agree
(2) Agree
(3) Have ambivalent feeling
(4) Disagree
(5) Strongly disagree.

DISCRIPTIONS OF INSTRUMENTS AND SAMPLE ITEMS - CONTINUED

Two illustrations of the list of 18 competencies are given below:

_____ 1. The teacher's provision for individual differences is apparent.

_____ 2. The teacher plans classwork in terms of long and short-term objectives and procedures.

Form A-1

Finally, Form A-1 was designed to yield "basic data" for UAB personnel. It includes information concerning college or university preparation such as "Degree(s) Earned", "Institution", etc. and also open-ended questions such as "Areas where teacher perceives assistance is needed most. Why?"

APPENDIX B

Analysis of Variance and Covariance

Analysis of Variance and Covariance

In this appendix the following abbreviations have been used:

ANOVA = Analysis of variance

ANCOVA = Analysis of covariance

SV = Source of variation

df = degrees of freedom

SS = sum of squares of deviations from means

F = Fisher's ratio of two independent estimates of population variance, "between groups" and "within groups".

p = the probability of occurance of a value under conditions of random sampling variation. The values reported here are given whenever p is less than the usual .05 standard for rejecting random sampling variation as a tenable explanation of the value reported. When p is not reported, this means that p is greater than .05 and the possibility of random sampling variation cannot be dismissed as an explanation of the value found.

Analysis of Variance and Covariance

1. ANCOVA: Cowles Pupil Opinion Instrument

SV	df	SS	F
Group (Exper./Control	1	4.01	0.70
Grade level	1	4.22	0.73
Pretest	1	36.51	6.29
Error	40	235.20	

2. ANOVA: School Morale (S.M.) Scale

SV	df	SS	F
Group (E/C)	1	1.15	0.03
Error	73	3,048.40	

3. ANOVA: S.M. Scale (additional factor: district)

SV	df	SS	F	
Group (E/C)	1	1.15	0.03	
District	6	606.24	2.77	($p < .05$)
Error	67	2,442.16		

4. ANCOVA: Semantic Differential Instrument

SV	df	SS	F
Group (E/C)	1	.01	0.03
Level (elem./sec.)	1	.27	.78
Pretest	1	21.63	61.84
Error	124	43.37	

5. ANOVA: Semantic Differential (additional factor: district)

SV	df	SS	F	
Group (E/C)	1	0.01	0.03	
Level (elem./sec.)	1	0.30	0.93	
District	6	5.34	2.73	($p < .02$)
Pretest	1	21.63	67.13	
Error	118	38.02		

6. ANCOVA: California Achievement Test

SV	df	SS	F
Group (E/C)	1	231.18	1.86
Grade Level	1	977.95	7.88
Pretest	1	15,420.06	124.18
Error	23	2,855.99	

Analysis of Variance and Covariance -- Continued

7. ANCOVA: Peabody Individual Achievement Test

SV	df	SS	F
Group (E/C)	1	54.09	1.16
Pretest	1	5,281.12	113.64
Error	7	325.31	

8. ANOVA: ETS/UAB Instrument

SV	df	SS	F
Group (E/C)	1	.07	0.00
Level (elem./sec.)	1	5.99	0.03
Error	122	27,149.66	

9. ANOVA: ETS/UAB Instrument (additional factor: district)

SV	df	SS	F
Group (E/C)	1	0.01	0.00
Level (elem./sec.)	1	5.99	0.03
District	5	2,287.70	2.15
Error	117	24,861.91	

10. ANOVA: Form N (principals)

SV	df	SS	F
Group (E/C)	1	4.71	0.07
Level (elem./sec.)	1	194.87	2.98
Error	131	8,576.57	

11. ANOVA: Form M (principals' ratings analyzed by group)

SV	df	SS	F
Group (E/C)	1	6.88	0.17
Error	146	5,871.39	

12. ANOVA: Form M (principals' ratings; additional factor: cooperating teacher)

SV	df	SS	F	
Group (E/C)	1	6.88	0.18	
Cooperating Teacher	1	228.30	5.87	($p < .02$)
Error	145	5,643.02		

Analysis of Variance and Covariance -- Continued

13. ANOVA: Form L (principals' ratings analyzed by groups)

SV	df	SS	F
Group (E/C)	1	40.47	1.09
Error	148	5,508.87	

14. ANOVA: Form L (principals' ratings; additional factor: cooperating teacher)

SV	df	SS	F
Group (E/C)	1	40.47	1.17
Cooperating Teacher	1	439.80	12.75 ($p < .001$)
Error	147	5,069.03	

15. ANCOVA: Semantic Differential Instrument (Item 3: Discipline)

SV	df	SS	F
Group (E/C)	1	2.96	4.3 ($p < .05$)
Grade level	1	1.51	2.16
Pretest	1	12.01	17.17
Error	122	85.34	

16. ANCOVA: Semantaic Differential Instrument (Item 4: Commitment to Subject Matter Coverage)

SV	df	SS	F
Group (E/C)	1	4.81	4.20 ($p < .05$)
Grade level	1	0.01	0.01
Pretest	1	22.45	19.60
Error	122	139.74	

APPENDIX C

Correlations

Correlations

Significance test of correlations for independent samples:

(a) Transform r to z_r by the transformation

$$z_r = \tfrac{1}{2} \log_e (1 + r) - \tfrac{1}{2} \log_e (1 - r)$$

(b) The distribution of z_r is distributed normally with

standard error $\sqrt{\frac{1}{N - 3}}$

(c) Using the test statistic $z = \frac{zr_e - zr_c}{\sqrt{\frac{1}{N_e - 3} + \frac{1}{N_c - 3}}}$

we can compare experimental and control groups, since z is distributed normally with mean 0 and standard deviation 1 (i.e., z is a so-called "standard score")

(d) Significance is obtained when $|Z| \geq 1.96$.

INSTRUMENT CORRELATIONS

	Sem. Diff. (pretest)	Sem. Diff. (posttest)	Form N (prin.)	Form N (C.P. 1)	Form N (C.P. 2)	Form M (prin.)	Form L (prin.)	E.T.S./ U.A.B. Instr.	Pupil Opinion	S.M. Scale	C.A.T. (Pre-test)	C.A.T. (Post-Test)	P.I.A.T. (pre-test)	P.I.A.T (post-test)
Semantic Diff. (Pre-test)		.5***	.07	.20	.14	.08	.13	-.14	.21	-.02	.15	.26	-.03	.03
Semantic Diff. (Post-test)			.13	-.05	-.02	.13	.06	-.11	.35*	-.12	.19	.30	.53	.47
Form N (principal)				.36***	.44***	.61***	.34**	.21*	.12	.41**	.21	.31	.34	.37
Form N C.P. 1st observation					.75***	.29**	.27*	.33**	-.13	.27	-.11	.05	-.52	-.54
Form N C.P. 2nd observation						.32**	.34**	.25*	-.12	.26	-.10	.04	-.65	-.71
Form M (principal)							.70***	.17	.11	.29*	.11	.22	51	.46
Form L (principal)								.08	.12	.37**	.19	.34	51	.53
E.T.S. /U.A.B. Instrument									.18	.19	.03	.17	-.73*	-.68
Pupil Opinion										--	.39*	.62***	.60	.57
S.M. Scale											—	—	—	—
C.A.T. (pre-test)												.69***	—	—
C.A.T. (post-test)													—	—
PIAT (pre-test)														.97**
PIAT (post-test)														

* $p < .05$
** $p < .01$
** $p < 001$

SEMANTIC DIFFERENTIAL INSTRUMENT

Inter-Item Correlations: Control Teachers (post-test)

	Item 2	3	4	5	6	7	8	9	10	11	12	Total Test Score
Item 1	.34**	.46***	.33**	.26*	.27*	.38***	.43***	.28*	.41***	.39***	.45***	.63***
2		.26*	.22*	.34**	.13	.45***	.41***	.22*	.25*	.48***	.46***	.59***
3			.27**	.38***	.46***	.06	.56***	.37***	.36**	.22*	.51***	.62***
4				.24*	.23*	.16	.46***	.18	.26*	.16	.37***	.49***
5					.34**	.31**	.59***	.73***	.43***	.34**	.36**	.66***
6						.05	.45***	.48***	.51***	.32**	.50***	.62***
7							.23*	.12	.33**	.40***	.17	.48***
8								.52***	.69***	.59***	.63***	.84***
9									.47***	.37***	.29**	.64***
10										.49***	.49***	.74***
11											.54***	.70***
12												.75***

*p < .05
**p < .01
*** p < .001

SEMANTIC DIFFERENTIAL INSTRUMENT

Inter-Item Correlations: Experimental Teachers (post-test)

	Item 2	3	4	5	6	7	8	9	10	11	12	Total Test Score
Item 1	.11	.46***	.[illegible]	.53***	.28**	.41***	.17	.31**	.26*	.44***	.16	.59***
2		.36***	.21*	.39***	.17	.[illegible]***	.29**	.26*	.37***	.29**	.67***	.60***
3			.33**	.54***	.27*	.54***	.46***	.57***	.47***	.28**	.45***	.66***
4				.20	.31**	.20	.51***	.31**	.44***	.23*	.48***	.58***
5					.38***	.62***	.38***	.42***	.41***	.52***	.49***	.71***
6						.07	.47***	.33**	.39***	.40***	.28**	.57***
7							.42***	.49***	.42***	.25*	.36***	.61***
8								.48***	.77***	.43***	.54***	.76***
9									.59***	.48***	.26*	.67***
10										.45***	.54***	.79***
11											.24*	.64***
12												.72***

*p < .05
**p < .01
***p < .001

SEMANTIC DIFFERENTIAL INSTRUMENT

Inter-Item Correlations (post-test)

	Item 2	3	4	5	6	7	8	9	10	11	12	Total Test Score
Item 1	.21**	.45***	.25**	.38***	.25**	.39***	.30***	.29***	.35***	.41***	.30***	.57***
2		.31***	.22**	.37***	.15*	.40***	.34***	.24**	.32***	.37***	.60***	.60***
3			.33***	.46***	.36***	.25**	.51***	.43***	.41***	.25**	.49***	.65***
4				.23**	.27***	.17*	.50***	.25**	.35***	.20*	.45***	.54***
5					.36***	.44***	.48***	.58***	.42***	.43***	.41***	.69***
6						.06	.46***	.40***	.45***	.36***	.37***	.59***
7							.31***	.27***	.37***	.33***	.25**	.53***
8								.50***	.73***	.51***	.59***	.80***
9									.53***	.42***	.28***	.65***
10										.47***	.51***	.76***
11											.39***	.67***
12												.77***

*p < .05
**p < .01
***p < .001

Correlation -- Continued

By Group

	Control Group First-Year Teachers				Experimental First-Year Teachers			
	S.M. Scale	Pupil Opinion Instrument	Semantic Differential	C.A.T. Achievement	S.M. Scale	Pupil Opinion Instrument	Semantic Differential	C.A.T. Achievement
ETS/UAB Instrument	.19	-.27	-.28	-.21	.18	.55**	.00	.36
S.M. Scale			-.44*	-			.19	-
Pupil Opinion Instrument			.46	.82***			.16	.52*
Semantic Differential				.54				.34

* $p < .05$
** $p < .01$
*** $p < .001$