This report describes the initial concerns, plans, and activities of the Research and Evaluation Committee in the Elementary Education Division of the College of Education at the University of Georgia. The division prepares teachers for children in their early childhood, elementary, or middle school years. Section one describes committee organization and purpose. Section two discusses committee rationale. Section three describes the committee's formative efforts in developing a comprehensive program evaluation model. Section four summarizes committee accomplishments during its first six months of existence. Section five discusses future plans. (Author/MJM)
INITIAL REPORT OF THE COMMITTEE ON PROGRAM RESEARCH AND EVALUATION

BEST COPY AVAILABLE
April 1975

Horace C. Hawn, Ph.D., Chairman
John R. Cryan, Ph.D.
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Elementary Education Division
College of Education
University of Georgia
Athens, Georgia 30602
This report is addressed to persons interested in the evaluation of teacher education programs. It describes the concerns, plans and activities which evolved during the first six months in the initiation of the Research and Evaluation Committee in the Elementary Education Division of the College of Education at the University of Georgia. This Division prepares teachers for children in their early childhood, elementary, or middle school years.

This report contains five sections. Section One describes how the committee is organized and tells what it regards to be its purposes and principles. Section Two provides what the Committee sees to be its rationale. Here, one also finds some of the basic assumptions made by the Committee and their lists of research questions considered appropriate for investigation. Section Three presents a description of the Committee’s formative efforts in developing a comprehensive program evaluation model. Section Four summarizes what the Committee accomplished during its first six months of existence, and Section Five tells what the Committee hopes to accomplish in the future.

**Purposes and Principles**

The task of the Program Research and Evaluation Committee is to investigate the effectiveness of the teacher education programs of the Division. Because its major concern is to provide effective education for children and youth, the focus of the Committee is upon evaluative investigations designed to improve the educational programs for teachers of these children.

The Committee was formed during the fall of 1974 as a result of a growing concern among the staff members of the Division. At that time, as is still the case, there was diversity; and literature searches failed to reveal a sound basis for utilizing any one approach to teacher education in
preference to another.

Three professors, who were selected to pursue program research and evaluation activities for the Division, assumed their responsibilities with the understanding that whatever they were to undertake would be with the knowledge and endorsement of the Division staff as a collective unit.

As regards resources for operation, the Committee was provided a part-time typist and clerical assistant to help keep records and, on occasion, score routine type answer sheets, an office in which to store confidential test data, a set of investigation devices (tests, inventories, etc.) which they had requested, and allowances for use of computer services. No released time was given to any of these professors for this work.

Because extra costs are frequently questioned by persons venturing into program evaluation activities, the following is a summary of the extra costs (beyond resources normally provided to staff) for the first six months of operation:

<table>
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<tr>
<th>Item</th>
<th>Cost</th>
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<tbody>
<tr>
<td>Faculty extra compensation</td>
<td>none</td>
</tr>
<tr>
<td>Tests, inventories, etc.</td>
<td>$239.10</td>
</tr>
<tr>
<td>Clerical assistance (% time of 1 person for 6 months)</td>
<td>$634.50</td>
</tr>
<tr>
<td>Computer services</td>
<td>none</td>
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One of the first concerns of the Committee was to establish some operational guidelines. They were and have remained a continuing concern. Today they are called operational principles. In Committee terms, operational principles are the guidelines or rules by which decisions are made. They are what the Committee believes to be the "right ways" to carry out their activities.
At present time, there is only a working list of statements to represent many hours of concerned interaction. The Committee regards these as tentative and incomplete. They are, however, the decision making tools which will govern each day's operations until they are changed. The following is the current list:

1. When investigating the effectiveness of an education program, all feasible approaches should be pursued. However, should resources be limited, those approaches which in the best judgement of those charged with the responsibility of the investigation should be undertaken.

2. An investigation into the effectiveness of a teacher education program must be longitudinal. It is only through a long range study that the results of the program's activities can be adequately observed.

3. The Committee's activities must represent the collective interests of the Division. That is, the Committee will not proceed by serving its own interests, those of an individual, or a select group within the Division.

4. Program research designed to determine the extent to which the teacher preparation programs of the Division (or the various dimensions of them) effect the professional performance of graduates will be given priority.

5. Members of this Division will have priority in the use of the data for performing research studies when their studies relate directly to the program evaluation concerns of the Division.

6. The data collected will not secretly, publicly, or in any other manner be released to any individual until Division approval has been obtained.
This rule applies to persons who are sponsoring doctorate candidates, persons focusing directly on the Division's key evaluation problems, persons doing related research, and administrators or supervisors within or outside of the Division, and/or Computer Center.

7. All research data on individuals gathered from the investigation will be kept strictly confidential, and so coded that no one working with the data can easily match individuals personally with their responses.

8. All investigations will place the individuals' welfare above the interests on research. For example no psychological test which might have a negative effect upon a subject will be administered, and any subject who takes a test will have an opportunity to discuss the performance on that test with a specialist.

9. None of the research and evaluation efforts of this Committee will be conducted in the public schools until clearance has been obtained through proper public school channels.

Rationale, Assumptions, and Research Questions

For nearly one hundred years of its existence, teacher preparation has been based upon the "meager and inadequate knowledge acquired largely from the practical experience of teachers, general psychological principles, and studies in philosophy and the social sciences.* More recently, educators have been seeking knowledge regarding teacher behavior, the elements of that behavior, and its effects upon pupil learning.

Teacher education represents a long and complicated series of operations. Each of these operations (themselves representing extremely complex sets of steps) has yet to be completely identified or researched.

The Committee owes its existence to the following concerns of the Division: "How effective are our teacher education programs in doing what they propose to do? What difference does it make in the long run where the learning outcomes of children in school are concerned?" We share our conception of the problem with Smith in that programs for teacher education must provide training in skills, teaching of pedagogical concepts and principles, developing relevant attitudes, and teaching the various subject matters of instruction.* To Smith's list we add another: developing understanding of children in school through early and continuous field experiences.

Where should the research begin? First, it must begin with a research design which enables the identification and measurement of the program component previously mentioned. Second, the design must facilitate assessment of their complex interaction. Finally, the design must reveal the relationship between the total program and its effect upon pupil learning. This will require a longitudinal research and evaluation effort. The design will be characterized both as inductive-correlational and incomplete-factorial.

The study will focus upon variables thought to contribute most directly to effective teaching. Some of those considered are:

1. preservice teacher characteristics/attributes
2. preservice teacher education program
   a. courses (content, sequence, instructor)
   b. field experiences (setting, timing)

3. inservice teacher behavior
4. learner characteristics of inservice teacher pupils
5. school environment/setting of inservice teachers
6. inservice teacher experience (e.g. longevity, staff development, etc.)

It is not the purpose of this paper to present a research-based rationale for investigation of the relationship of each of these variables to effective teaching. That rationale will be the subject of a forthcoming paper.

The Committee made the following assumptions:

1. There are many different approaches to program evaluation. Each may contribute valuable information concerning the effectiveness of a program.
2. There are many different yet effective approaches to teacher education, and any one might be more effective for one type of student than another. Thus, an evaluative investigation isn't likely to discover the single most effective approach.
3. Investigators must expect teacher education programs to be constantly changing as they are being evaluated.
4. We can describe entering characteristics and changes in characteristics of our preservice teachers.
5. There are differences among the program content/process options available to preservice teachers in early childhood, elementary, and middle school teacher education; and they can be described.
6. These differences may relate to or result in:
   a. differential preparation of preservice teachers
   b. differential success of preservice teachers in meeting objectives and acquiring the specified skills, and
c. differential success of preservice teachers after they become certified teachers in promoting significant learning outcomes for children.

The following research questions were tentative posed by the Committee. They are regarded only as useful for determining which of many avenues of approaches would be most profitable.

1. To what extent are our preservice teachers proficient in demonstrating the program objectives?

2. To what extent do the various components of our teacher education program satisfy the criteria which reflect the program we eventually hope to have?

3. How effective are our preservice teachers in demonstrating generic teaching competence?

4. Under what conditions are generic teaching competencies most effectively acquired?

5. Under what conditions are knowledge, skills, and processes essential to teaching most effectively acquired?

6. What human characteristics seem to make a difference in the effectiveness of preservice and/or inservice teachers?

7. Under what conditions are human characteristics thought to be conducive to good teaching most effectively acquired?

8. How well do our graduates effect desirable changes in pupil behavior?

9. How effective are our graduate inservice teachers in helping their pupils acquire the objectives of the schools in which they are teaching?
Comprehensive Research and Evaluation Model

The Committee identified five tasks in developing a comprehensive research and evaluation model. (See Appendix A) The first task was to separate into areas of investigation the basic questions under study: How effective are our teacher education programs in doing what they propose to do? What difference does it make in the long run where the learning outcomes of children in school are concerned? A systematic process of conducting a long range investigation into the effectiveness of the teacher education programs tentatively suggests the need to identify these areas of investigation:

1. Personal characteristics of preservice teachers
2. Components of programs in professional sequences
3. Settings in which field and campus experiences occur
4. Procedures for monitoring progress of preservice teachers
5. Procedures for program improvement
6. Performance of pupils taught by preservice teachers
7. Long range effect of teacher education programs on graduates

Research questions were then asked for each of the areas of investigation. These questions were suggested in part by the earlier list (See Page 7) The present list suggests the kinds of research that might be undertaken in the study. The Committee agreed with Combs that, "Measuring what we know how to measure is no satisfactory substitute for measuring what we need to measure."* The research questions thus gave a sharper focus to what needs to be measured.

Each of these research questions suggested the need for particular sets of data. These data sets were stated explicitly for each area of investigation.

As a fourth task instruments were identified to obtain the data required in each area of investigation. A review of research revealed several instruments as reliable and valid. Other instruments were developed.

The final task was to formulate a schedule of research activities that would contribute to a systematic development of a research and evaluation model. These tasks are presented graphically in Appendix A.

Progress to Date

During Fall Quarter, 1974, a testing program was started for all students who were entering the Division of Elementary, Early Childhood, and Middle School Education for undergraduate study. The entry tests included the following instruments:

1. **California Test of Mental Maturity, S Form Level 5**, was selected to obtain a measure of mental ability. It has been shown to be reliable for persons of college age.

2. **Value Survey, Form D**, developed by Milton Rokeach was used to elicit information about terminal and instrumental values.

3. **Sixteen Personality Factor Test**, developed by George Cattell, was used to describe some of personal attributes of prospective teachers.

4. **Personal Beliefs Inventory**, developed by Bob Burton Brown, provides data about student beliefs. John Dewey's philosophy is used as a referent.

5. **Teacher Practices Inventory**, developed by Bob Burton Brown, provides data about student belief on teaching practices. John Dewey's philosophy is used as a referent.

6. **Dogmatism Scale, Form E**, was developed by Milton Rokeach as a measure of a person's belief-disbelief system. The scores infer degrees of openness or authoritarianism.

7. Semantic differential was invented by Osgood to measure how persons feel about certain concepts in terms of three dimensions: potency, activity, and evaluative. Ten concepts, particularly relevant to preservice teachers, were selected by the Committee.

8. **A Basic Information Form** was developed by the Committee to obtain information about preservice teachers which was considered important to program evaluation.
The instruments were administered in two separate testing sessions to 107 students during Fall Quarter, 1974, and 22 students during Winter Quarter, 1975. These students included freshmen, sophomores, and juniors. These data were processed with basic computer programs to obtain mean scores, standard deviations, ranges, and frequency counts. A report of the testing program and the processed data was made by the Committee to the Division staff during two regularly faculty meetings in January and February, 1975.

During Winter Quarter, 1975, interviews were conducted with seven field center coordinators. The interviews followed a structured outline but allowed for open-ended responses by the coordinators. Audio-tapes of the interviews were made for study by the Committee in their effort to develop a process for describing each of the field center operations on a quarterly basis. These programs varied from introductory experiences in the schools to student teaching - from competency based to traditional programs.

Projected Activities

The following is a list of activities planned during Spring Quarter, 1975:

1. continuation of testing program for all students entering the Division;
2. relating test results to any students who are interested (This will include a presentation of individual test scores and group mean scores but will not include any attempt to interpret the test results in terms of any personal meaning or predicted success in any of the teacher education programs. The manner that this will be conducted has not been determined at this time);
3. examination of course outlines submitted to Division Chairman in Summer, 1974, in an effort to determine characteristics of the teacher
education programs as they are planned by coordinators, professors, and instructors who work with preservice teachers;
4. begin a study of taped interviews of field center coordinators; and
5. begin analysis of test data.
APPENDIX A

Comprehensive Research and Evaluation Model
<table>
<thead>
<tr>
<th>AREAS OF INVESTIGATION</th>
<th>RESEARCH QUESTIONS</th>
<th>DATA SETS</th>
<th>EVALUATION INSTRUMENTS</th>
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<tbody>
<tr>
<td>PERSONAL CHARACTERISTICS OF PRESERVICE TEACHERS</td>
<td>What human characteristics other than those specified in our program objectives (such as professional teaching competencies) and the subject matter, skill and value indicators associated with them) seem to make a difference in the effectiveness of prospectiveness of prospective teachers and/or teachers in service? (i.e., intelligence, personality, learning style, sex, values, attitudes, etc.) Under what conditions are the various human characteristics conducive to good teaching, not mentioned in our program objectives, most effectively acquired?</td>
<td>ATTRIBUTES OF PROSPECTIVE TEACHERS UPON ENTERING ATTRIBUTES OF PROSPECTIVE TEACHERS UPON GRADUATION</td>
<td>BASIC INFORMATION FORM CALIFORNIA TEST OF MENTAL MATUREITY VALUE SURVEY - ROETHACH SEMANTIC DIFFERENTIAL - 16 CONCEPTS 16 PERSONALITY FACTOR TEST PERSONAL ORIENTATION QUESTIONNAIRE ROETHACH DOMINANCE SCALE - FORM I PERSONAL BELIEFS INVENTORY - BIG TEACHER PRACTICES INVENTORY</td>
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<td>COMPONENTS OF PROGRAMS IN PROFESSIONAL SEQUENCES</td>
<td>To what extent do the various components of our teacher education program satisfy the criteria which reflects the desired program we eventually hope to have?</td>
<td>CHARACTERISTICS OF ALL COMPONENTS OF THE TEACHER EDUCATION PROGRAMS AS PLANNED BY COORDINATORS, PROFESSORS, AND INSTRUCTORS CHARACTERISTICS OF ALL COMPONENTS OF THE TEACHER EDUCATION PROGRAMS AS EXPERIENCED BY PROSPECTIVE TEACHERS</td>
<td>CRITERIA FOR VALIDATING COMPONENTS OF A TEACHER EDUCATION PROGRAM MODEL OPEN-ENDED INTERVIEWS WITH COORDINATORS OF ALL FIELD ORIENTED PROGRAMS</td>
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<tr>
<td>SETTINGS IN WHICH FIELD AND CAMPUS EXPERIENCES OCCUR</td>
<td>Under what conditions are the learnings basic to our program objectives most effectively acquired?</td>
<td>CHARACTERISTICS OF THE SETTING IN WHICH CAMPUS EXPERIENCES OCCUR CHARACTERISTICS OF THE SETTING IN WHICH FIELD EXPERIENCES OCCUR</td>
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TENTATIVE AREAS OF INVESTIGATION SET BY THE COMMITTEE FOR PROGRAM EVALUATION - DIVISION OF ELEMENTARY AND EARLY CHILDHOOD EDUCATION

<table>
<thead>
<tr>
<th>RESEARCH QUESTIONS</th>
<th>DATA SETS</th>
<th>EVALUATION INSTRUMENTS</th>
<th>EVALUATION SCHEDULE</th>
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<tr>
<td>What human characteristics other than those specified in our program objectives (such as professional teaching competencies) and the subject matter, skills and value indicators associated with them) seem to make a difference in the effectiveness of prospectiveness of prospective teachers and/or teachers in service? (i.e., intelligence, personality, learning style, sex, values, attitudes, etc.) Under what conditions are the various human characteristics conducive to good teaching, not mentioned in our program objectives, most effectively acquired?</td>
<td>ATTRIBUTES OF PROSPECTIVE TEACHERS UPON ENTERING</td>
<td>BASIC INFORMATION FORM</td>
<td>ENTRY INTO DIVISION</td>
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<td></td>
<td>ATTRIBUTES OF PROSPECTIVE TEACHER UPON GRADUATION</td>
<td>CALIFORNIA TEST OF MENTAL MATURITY</td>
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<td>VALUE SURVEY - ROEACH</td>
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<td>SEMANTIC DIFFERENTIAL - 10 CONCEPTS</td>
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<td>16 PERSONALITY FACTOR TEST</td>
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<td>PERSONAL ORIENTATION QUESTIONNAIRE</td>
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<td>ROEACH DOMINANCE SCALE - FORM E</td>
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<td>PERSONAL BELIEFS INVENTORY - BROWN</td>
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<td>TEACHER PRACTICES INVENTORY - BROWN</td>
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<td>To what extent do the various components of our teacher education program satisfy the criteria which reflects the desired program we eventually hope to have?</td>
<td>CHARACTERISTICS OF ALL COMPONENTS OF THE TEACHER EDUCATION PROGRAMS AS PLANNED BY COORDINATORS, PROFESSORS, AND INSTRUCTORS</td>
<td>CRITERIA FOR VALIDATING COMPONENTS OF A TEACHER EDUCATION PROGRAM MODEL</td>
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<td>CHARACTERISTICS OF ALL COMPONENTS OF THE TEACHER EDUCATION PROGRAMS AS EXPERIENCED BY PROSPECTIVE TEACHERS</td>
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<tr>
<td>Under what conditions are the learnings basic to our program objectives most effectively acquired?</td>
<td>CHARACTERISTICS OF THE SETTINGS IN WHICH CAMPUS EXPERIENCES OCCUR</td>
<td>OPEN-ENDED INTERVIEWS WITH COORDINATORS OF ALL FIELD ORIENTED PROGRAMS</td>
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<td>CHARACTERISTICS OF THE SETTING IN WHICH FIELD EXPERIENCES OCCUR</td>
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<thead>
<tr>
<th>Procedures for Monitoring Progress or Preservice Teachers</th>
<th>Procedures for Program Improvement</th>
<th>Performance of Pupils Taught by Preservice Teachers</th>
<th>Long Range Effect of Teacher Education Programs on Graduates</th>
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<tr>
<td>How effective are our prospective teachers in demonstrating the generic teaching competencies in special areas associated with their preferred teaching assignment? (By special areas in elementary education is meant skills, subjects, and arts usually taught in elementary schools.) How effectively (rate of progress, quality of performance, etc.) do our prospective teachers progress in acquiring professional teaching competence?</td>
<td>To what extent is there a notable difference between what our students actually acquire through our teacher education programs, and what we want our teacher education program to help them acquire? (This suggests a number of other questions.)</td>
<td>How effective are our teacher education program graduates in helping their pupils acquire the learning objectives established by the common schools in which they are teaching? Once they are certified and assume a responsible teaching position, how well do our graduates effect desirable changes in pupil behavior?</td>
<td>To what extent are our prospective teachers, upon graduation, proficient in demonstrating the program objectives which form the basis for our teacher education program? (Here the program objectives could be professional teaching competencies.)</td>
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<td>Progess of Prospective Teachers in Terms of Quality of Performance</td>
<td>Progess of Prospective Teachers in Terms of Program Sequence</td>
<td>Rate of Progress for Prospective Teachers</td>
<td>Competencies Expected of Professional Teachers</td>
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<tr>
<td>Synthesis of Evaluation for All Participants in the Programs</td>
<td>Progress of Pupils Taught by Prospective Teachers</td>
<td>Progress of Pupils Taught by Graduates of Our Teacher Education Programs</td>
<td>Best Copy, Available</td>
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<td>Questions</td>
<td>Progress of Prospective Teachers in Terms of Quality of Performance</td>
<td>Progress of Prospective Teachers in Terms of Program Sequence</td>
<td>Rate of Progress for Prospective Teachers</td>
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<td>What extent is there a notable difference between what our students usually acquire through our teacher education programs, and what we want our other education program to help them acquire? (This suggests a number of other questions.)</td>
<td>Synthesis of Evaluation for All Participants in the Programs</td>
<td>QUARTERLY</td>
<td>QUARTERLY</td>
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<tr>
<td>Are our teacher education program graduates in helping their pupils acquire the learning objectives established in the common schools in which they are teaching? As they are certified and assume a responsible teaching position, how well do they graduates effect desirable change in pupil behavior?</td>
<td>Progress of Pupils Taught by Prospective Teachers</td>
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