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AUTHOR Cruickshank, Donald R.
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ABSTRACT

The proposals from 27 of 34 applicants for Phase II of the USOE Comprehensive Elementary Teacher Education Model (CETEM) program were reviewed to determine 1) what kinds of institutions participated, 2) how responsive applicants were to guidelines, 3) which Phase I programs Phase II applicants found most useful, 4) what were some major and common features of Phase II programs, 5) how applicants felt about Phase II competition. It was found that applicants were mostly state colleges and universities; that applicants varied considerably in how they responded to guidelines but taken together they were strongest in describing programatic features; that the Phase I work of Michigan State, Syracuse, Massachusetts, and Florida State was most useful; that there was agreement on a host of teacher education program features; and that applicants felt Phase II competition was exhilarating but that whether there was fair competition or not was dubious. Conclusions drawn include that Phase II applicants did provide a blueprint for teacher education requiring dissemination and support and that USOE must plan more efficiently and communicate more effectively. (Author/RT)

FINAL REPORT

Research Foundation Project No. 2865(b)

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BLUEPRINTS FOR TEACHER EDUCATION: A REVIEW OF PHASE II PROPOSALS FOR THE USOE COMPREHENSIVE ELEMENTARY TEACHER EDUCATION (CETEM) PROGRAM

Donald R. Cruickshank
The Ohio State University
Columbus, Ohio
October 1, 1970

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U.S. Department of Health,
Education, and Welfare

Office of Education
National Center for Educational
Research and Development

TABLE OF CONTENTS

Chapter | Page

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

INTRODUCTION

The Comprehensive Elementary Teacher Education Model (CETEM) Program in Perspective. Phase I and Phase II.

Phase I. On October 16, 1967 the United States Office of Education, through its National Center for Educational Research and Development (formerly the Bureau of Research), issued a request for proposals (RFP) to develop educational specifications for program models for the preparation of elementary teachers. Thus Phase I of the Comprehensive Elementary Teacher Education Model (CETEM) program was born. On or before January 1, 1968 the deadline for submitting proposals, eighty proposals were received. Subsequent review by an ad hoc advisory panel of field readers reduced the eighty to nine[1] which were awarded financial support.

Two valid criticisms were made of the Phase I program. First, proposal developers felt there was too little time provided between receipt of the RFP and guidelines and the deadline for submission (roughly two and one-half months less the usual hold-ups of routing proposals on a university campus and Christmas holiday). Secondly, the period from contract award until date of submission of the final Phase I report (March 1 to October 31, 1968) was considered to be insufficient to accomplish the task of developing specifications in any logical or empirical manner. Some applicants, too, were confused over whether the task was to develop specifications for a teacher education program or to develop the program itself. Consequently real differences exist among the purposes and therefore the products contained in the nine Phase I final reports.

Before Phase I proposals were received in Washington, plans were underway for a second phase intended to support a limited number of institutions which would develop and implement one or more of the Phase I program models. On October 31, 1968 an RFP was mailed to

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[1]Florida State University, University of Georgia, University of Massachusetts, Michigan State University, Northwest Regional Educational Laboratory, Ohio Consortium, University of Pittsburgh, Syracuse University, Teachers College Columbia University. All Phase I final reports are available in hard cover from the Superintendent of Documents, U.S. Government Printing Office, Washington, D. C., 20402. They also are available both in hard cover and microfiche from The Educational Resources Information Center, National Cash Register Company, 4936 Fairmont Avenue, Bethesda, Maryland 20014.

university presidents announcing this competition. In the announcement (see Appendix A for complete data mailed), Dr. Norman Boyan noted a sharp change in strategy inserting an intermediate step. Two reasons were given for the change.

> It now appears that we would be wise not to initiate the development work for another year. There are two reasons for this decision. First, we are uncertain at this time of adequate funds for such major development activities. Second, additional management, planning, and cost data are necessary to justify a request for adequate funds. As a result we propose to use FY 69 funds for a comprehensive planning period.

The Revised Phase II Task. Consequently Phase II required the applicant to adopt a program model for use based upon a review and analysis of Phase I products. Once the applicant's program model was chosen and developed, the second order of business was to determine how feasible implementation would be financially. In Washington's words, the task of an applicant for Phase II was

> . . . to describe . . . a model teacher training program based upon the specifications designed by one or more of the groups engaged in Phase I. The remainder of the proposal then becomes the design for a feasibility study of developing, implementing, and operating . . . (Appendix A, page 3)

More specifically Phase II guidelines called upon the applicant to

(1) Describe procedures to be used to obtain a systematic analysis of what American society will be like in the mid-1970's.

(2) Describe the model institutional setting,

(3) Describe the Phase I design or designs to be developed and implemented, and

(4) Provide a rationale for selection of the program design, designs or components in three (3) above

At this point in proposal writing applicants would have described a teacher education program to be developed and implemented in a model teacher training institution--one considered to be relevant to American society in the mid-1970's.

Recall that "the remainder of the proposal" asked for the "design for a feasibility study of developing, implementing, and

operating" the program. In other words, not only must the applicant establish the teacher education program he wished to follow but, in addition, he had to provide a plan to be used to determine the human, material, and financial resources required to design, develop, and implement the new program.

The guidelines suggested some components of a teacher education system, each of which would require attention to feasibility. They are described in the guidelines from pages seven through ten and paraphrased include:

(1) A list of teacher competencies sought expressed in behavioral terms

(2) A description of learning activities whereby teacher trainees can attain the desired competencies

(3) A description of instruments to be used to measure competency attainment

(4) A plan for revising and improving the program

(5) A plan for orienting and providing inservice assistance to the teacher education and other faculties

(6) Procedures for selecting and retaining trainees

(7) Evidence of availability of resources to do the job, and

(8) Evidence of reciprocal commitments with state and local agencies

Phase II maintained the original eligibility requirements that an applicant must graduate at least one hundred elementary majors each year. This requirement caused a swell of criticism from smaller institutions. Consequently a consortium of so-called "developing institutions" was provided with opportunities to engage in a study of the nine Phase I products. A second carry-over mandate to applicants urged them in planning to use outside resources including institutions of higher education, regional educational laboratories, and profit and nonprofit research and development groups.

In order to provide for interaction between potential applicants and USOE concerning the task, pre-proposal conferences were held in Denver and Washington, D.C. in mid-November.[2]

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[2]See announcement in Appendix A.

CHAPTER II

PURPOSE OF THE STUDY

The major purpose of the study was to analyze the proposals submitted under Phase II of the CETEM program described in the Introduction. Such analysis was intended to reveal, among other things, what teacher education institutions responded to the RFP, how responsive applicants were to the guidelines, which Phase I program models and components seemed to be attractive, common and unique features of programs generated, and how applicants felt about the Phase II competition. Over-all it was the wish of the National Center for Educational Research and Development to produce a document which would summarize and preserve the efforts of the many institutions responsive to the request for proposals.

CHAPTER III

PROCEDURES

Procedures for the study paralleled its purposes. Each purpose is presented with steps followed toward its accomplishment.

Objective 1. To gain permission to review Phase II CETEM proposals and to assess who the applicants were.

Procedure. On September 4, 1969 a letter was addressed to each of the thirty-four applicants requesting permission to review his proposal in terms of the reviewer's contract with USOE. Accordingly, proposals were to be reviewed to determine (1) how responsive they seemed to be to Phase II guidelines, (2) common elements among the proposals, (3) unique elements, and finally to describe component parts in several proposals, if appropriate. In addition, the applicant was asked to provide abstracts or summaries of his work and to note comments and feelings he had regarding Phase II competition. That letter and a follow-up letter dated January 5, 1970 procured permission to review twenty-seven of thirty-four Phase II proposals submitted.

Objective 2. To determine how responsive applicants seemed to be to the guidelines.

Procedure. Guidelines were read and it was determined that applicants were to provide the following data in what could be considered a two-part proposal. Part one of the proposal was to contain (1) a description of procedures to be used to obtain a systematic analysis of what American society will be like in the mid-1970's, (2) a description of the model institution and the institutional setting, (3) a description of the Phase I design or designs to be developed and implemented and finally (4) a rationale for selection of the design (program model or components therein) required in three above. The Phase II guidelines called for a second set of data. Generally applicants were to provide a description of techniques to be used to allocate and control the resources which would be necessary to carry through a program of development, implementation and sustained operation. Scheduling would include activities such as design, planning development, field testing, phasing in and evaluation of each component. Some of the subsystems or system components mentioned which might be necessary included (1) a set of behavioral specifications, (2) a set of learner activities needed for mastery of the requisite behaviors, (3) attention to training teachers to help disadvantaged children succeed, (4) a set of evaluation devices and techniques, (5) a plan for revising and improving all aspects of the

proposed program, (6) a plan for preparing the institution for the implementation of the new program, (7) a set of procedures for recruiting, selecting and retaining trainees, (8) evidence of the applicant institution's commitment of resources including administrative support, and (9) evidence of reciprocal commitments with state and local agencies. Further, applicants were to describe procedures whereby cost estimates would be obtained for the development, implementation and operation of all the above components or subsystems in both parts of the proposal.

In order to assess how well applicants responded to the guidelines each of the twenty-seven proposals was read and data were simplified and abstracted under six arbitrary headings as follows:

1. Description of the model institution
2. The program model(s) selected
3. Rationale for selecting the program model(s)
4. Features of the program model
5. Description of design, development, evaluation and so forth of the program model.
6. Description of society in the mid-'70s.

Objective 3. To determine which Phase I programs and components seemed to be most attractive.

Procedure. As the twenty-seven proposals were studied a matrix was completed which indicates Phase I programs used as major or minor sources for each applicant.

Objective 4. To determine common program features contained in Phase II proposals.

Procedure. As the twenty-seven proposals were read a list of program features was begun and added to determine those which were recurrent.

Objective 5. To determine unique program features contained in Phase II proposals.

Procedure. As the twenty-seven proposals were read effort was made to determine something unique about each program.

Objective 6. To determine how applicants felt about Phase II competition.

Procedure. Comments sent by consenting institutions were read and abstracted.

CHAPTER IV

RESULTS AND DISCUSSION

Objective 1. To gain permission to review the Phase II CETEM proposals and to assess who the applicants were.

Twenty-seven of thirty-four applicants permitted review of their proposals. Of the remaining seven, two did not wish the contents to be made public--one because it planned to submit the proposal to a private foundation. The rest did not respond in some cases probably because the principal investigator had taken a position at another institution. The list of applicants submitting, total campus enrollment of each, and yearly production of elementary teachers is found in Table 1.

Thirty of the proposals came from state colleges and universities, three were products of private institutions, while one was from a city university. In contrast eighty applicants for Phase I were distributed as follows: fifty-six from state colleges and universities, fourteen from private institutions, two from state education departments, two from regional laboratories, one from a union, and four from profit and nonprofit corporations.[3]

The discrepancy between the seventy-nine proposals enumerated and eighty submitted is not accounted for. The comparative data suggest that Phase II competition was engaged in almost exclusively by public institutions preparing teachers. Furthermore, fewer than half the number entered Phase II as entered Phase I--thirty-four as opposed to eighty.

Of the eighty submitting Phase I proposals only fourteen stayed with it and entered competition for Phase II. Excluding the eight Phase I winners who persisted (Teachers College, Columbia did not) only six of seventy-one Phase I losers took another turn at bat.[4] Persistence paid off for only one--The University of Wisconsin. Pittsburgh was the only Phase I winner turned loser.

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[3]William E. Engbretson, Analysis and Evaluation of Plans for Comprehensive Elementary Teacher Education Models. Final Report Project No. 8-8056 (Washington, D.C.: U.S. Office of Education, 1968), p. 5.

[4]Drake, Houston, Illinois, Texas, Wisconsin, and Western Washington State.

TABLE I

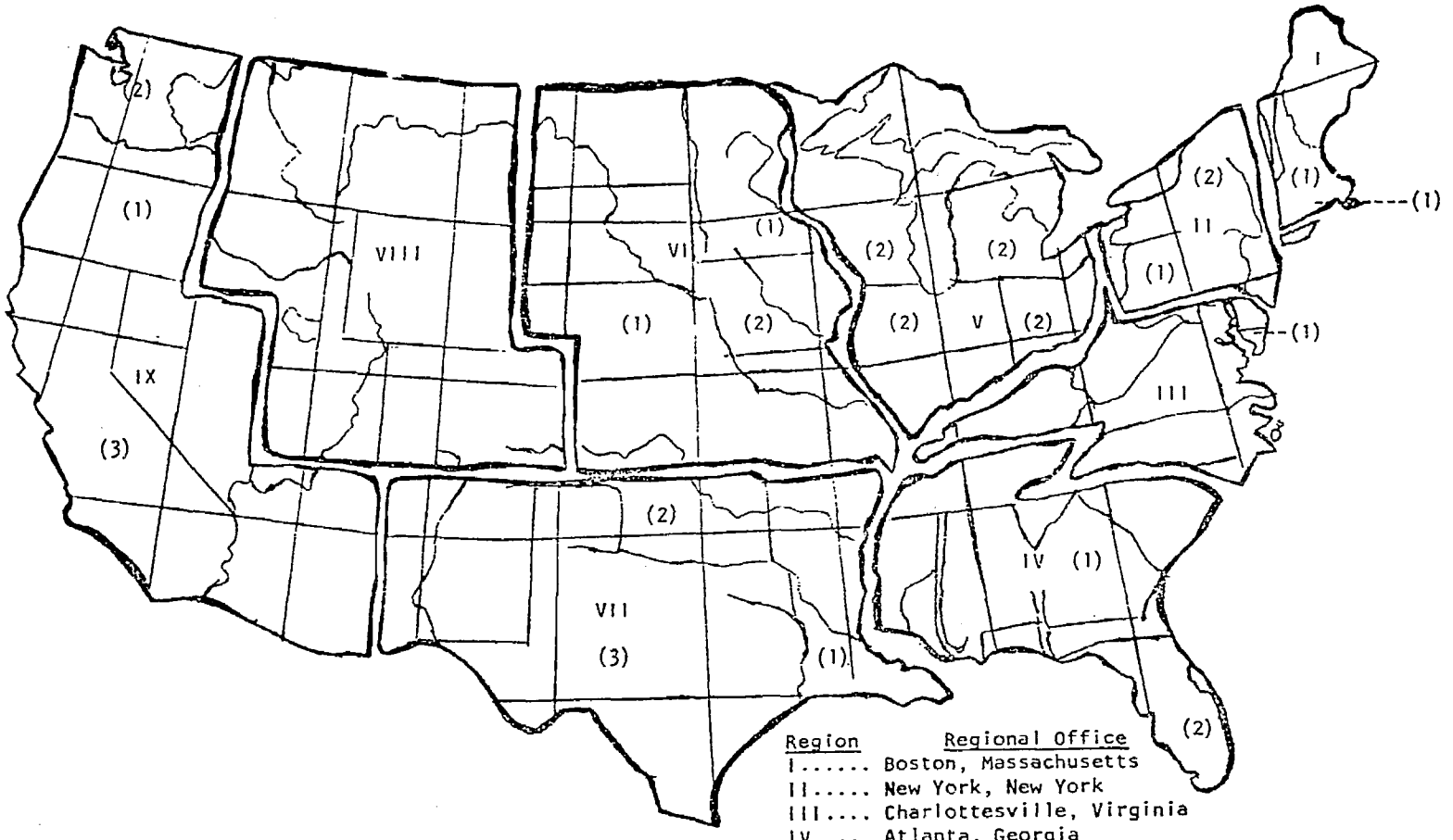
THIRTY-FOUR APPLICANTS FOR CETEM PHASE II
RANKED ACCORDING TO YEARLY PRODUCTION
OF ELEMENTARY EDUCATION MAJORS

	Institution	Number of Elementary Teachers Graduated	Total Campus Enrollment
1.	Michigan State University	866	42,053
2.	San Jose State College	686	26,975
3.	California State College at Los Angeles	460	22,287
4.	University of Michigan	448	37,284
5.	Illinois State University	411	11,440
6.	Florida State University	359	15,595
7.	University of Texas at Austin	336	32,519
8.	Western Washington State University	334	6,757
9.	Rhode Island College	319	4,687
10.	University of Houston	319	21,770
11.	Drake University	307	7,576
12.	University of Georgia	303	20,470
13.	New York University	300	34,582
14.	Wisconsin State University, Oshkosh	298	9,444
15.	Oregon College of Education	287	2,787
16.	University of Maryland	276	45,276
17.	University of Massachusetts	226	17,773
18.	California State College at Hayward	223	7,855
19.	University of Illinois	220	47,974
20.	University of Cincinnati	201	27,264
21.	Washington State University	189	11,609
22.	Purdue University	169	34,263
23.	University of Oklahoma	161	21,085
24.	Oklahoma State University	155	20,518
25.	University of Toledo	145	12,698
26.	Northwestern State College of Louisiana	132	6,333
27.	Syracuse University	130	23,425
28.	University of Wisconsin	126	57,052
29.	University of Pittsburgh	118	25,060
30.	Southern Methodist University	113	9,322
31.	Chadron State College	109	1,936
32.	Florida A & M University	109	4,088
33.	Iowa State University	102	16,925
34.	Minnesota State Colleges	not available	

Contrasting the two sets of applicants again, in Phase I almost seventy-five per cent of proposals came from institutions with fewer than 20,000 students. On the other hand, less than forty-five per cent of Phase II applicants were from "smaller" institutions. Evidently smaller schools did not deem it wise to participate further.

Proposals for Phase II were submitted from twenty-one states with the most, nine, from USOE Region V--the upper midwest. Figure 1 presents the geographical distribution of applicants.

Objective 2. To determine how responsive applicants seemed to be to Phase II guidelines. Following is an institution by institution listing briefly noting selected data available according to the category system devised by the reviewer after study of the guidelines. (See Procedures page 6.) Clearly the categories used are merely representative of the kinds of data requested in the guidelines. (The pages referred to in this section are pages in the Applicant's Phase II proposal.)



Federal Regions		
I-2	IV-3	VII-6
II-3	V-8	VIII
III-1	VI-4	IX-6

Region	Regional Office
I.....	Boston, Massachusetts
II.....	New York, New York
III....	Charlottesville, Virginia
IV.....	Atlanta, Georgia
V.....	Chicago, Illinois
VI.....	Kansas City, Missouri
VII....	Dallas, Texas
VIII...	Denver, Colorado
IX.....	San Francisco, California

Figure 1. Distribution of 34 Phase II Proposals from 21 States

California State College at Hayward. Greta G. Morine

1. Description of the institution. One of nineteen California State Colleges. Enrollment in 1968 was 8,500 of which 1,991 were in the Education Division. Certification in California requires a year of graduate study.[5] Approximately two-thirds of education majors enrolled in graduate programs.

2. Program model selected. Teachers College, Columbia University strengthened by additional elements from Northwest Regional Laboratory and Michigan State programs and supplemented by ideas from professional literature.

3. Rationale for selecting the program model. The TC program model was selected as the primary departure since it seemed to respond best to five problems in higher education as follows:

   a. Alienation

   b. Increased demands by public schools and others to be involved in decision-making in teacher education

   c. Developing independence and self-direction in prospective teachers

   d. Resistance to change

   e. Selecting the most appropriate curricula within the knowledge explosion

   In addition, only the Teachers College program was consistent with California's fifth year pattern of teacher education.

4. Features of the program model. CSCH emphasizes the four teacher roles of TC's program, that is, teacher as institution builder, interactor, innovator, and scholar. However, the applicant modified almost each of these roles as follows:

   a. Interactive Teaching Component. Greater emphasis on specifying needed teacher competencies. Greater emphasis on specifying behavior acceptable as evidence of teacher competency. Emphasis on bringing about desirable behavior change in children. (All suggested to CSCH by the Northwest Lab program.) Introduction of

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[5]The Fisher Bill, which took effect in 1963, virtually eliminates undergraduate teacher education. Prospective teachers now obtain a baccalaureate degree in a "teaching major" such as English, social studies, or science and then embark on a fifth year of professional education study leading to a credential.

behavior modification schemes into the curriculum. Encouraging transductive thought characteristic of the intuitive level of cognitive development. (See proposal, page 33.) Helping students to identify styles of teaching through an exploration of literary models presented by Stuart, Keller, Warner, Shaw, and de Saint-Exupery. (See proposal, page 34.) Presenting beginning teacher education students with either a behavioristic or humanistic view of teaching using literary models alluded to above or utilizing observational systems.

b. Teacher-Scholar Component. Addition of a computerized information storage and retrieval system. Study of developmental theories, study of systems for analyzing teaching behavior.

c. Institution Building Component. Instruction in the techniques of producing curriculum materials.

Further, three modifications are made which cut across the four TC components. These involve the use of modules, systems analysis, and goal-oriented encounter and sensitivity training sessions. (See proposal, pages 40-42.) Thus the curriculum available to the inquiry groups is to be more identifiable and more structured. Here CSCH draws upon expertise in module development demonstrated by Michigan State University. (See their Phase I Final Report.) In fact, CSCH indicates it will use many Michigan State developed modules. The following charts are used in the CSCH proposal to show modifications of the TC model so that it fits a quarter system of scheduling. Underlined portions are additions or changes to the TC program.

5. Description of design, development, evaluation of the program. The feasibility study is constituted in four phases as follows:

a. Developing instructional materials

b. Conducting training and retraining programs

c. Evaluating the effectiveness of the training and retraining programs

d. Consulting with specialists on the design and development of the program model

Cost estimates are to be determined in three steps:

THE CONTACT LABORATORY

PHASE	TYPE	PURPOSE	PROBABLE TIME
Phase One	Experiencing the School.	A ten-week apprenticeship to a public school.	Senior year or summer quarter
Phase Two	Small-group and Tutorial Teaching (Preferably in Candidate-Operated Program).	Ten weeks of experimenting with teaching strategies.	fall quarter
Phase Three	Unit Experimentation in Inquiry School.	Group Experiments in teaching units taking ten weeks.	winter quarter
Phase Four	Experience in Curriculum Modes in Inquiry School.	Observation-participation experience in a variety of ways of teaching.	spring quarter
Phase Five	Carrying on an Educational Program. (This may involve outdoor education.)	Inquiry groups develop and carry on a Candidate-Operated School Program.	summer quarter
Phase Six	Internship.	Paid teaching, preferably in terms derived from Inquiry Groups.	full school year

PHASES OF COMPONENTS
BY
PHASES OF CONTACT LABORATORY

THE INTERACTIVE TEACHING COMPONENT

Contact Laboratory Phase	Sub-Component: Instructional Decision-Making	Models of Teaching	Flexibility & Training	Structuring the Classroom
I Experiencing the School	"The Teaching Game"	Read Literary, Models of Teaching	Study "coping" behavior, identify behavior styles	Study Microethnography of Classroom
	Tasks in the Simulated School	Study and Master Maneuvers	Communication Tasks	Master Structuring Maneuvers
II Tutorial-Small Group Teaching	Study Specialty Related Strategies	Study and Master Strategies	Practice in Tutorial; Experiment with Behavior Modification	Experiment with Teaching Strategies
	Practice in Tutorial Situations	Create and Test Strategies	Situations	Diagnose and Apply
III Unit Experiment	Apply to Unit	Apply to Unit	Apply to Unit	Apply to Unit

THE INTERACTIVE TEACHING COMPONENT

IV Inquiry School	Analyze Strategies of Inquiry Teams	Analyze Strategies of Inquiry Teams	Analyze Teachers	Analyze Structuring in Inquiry Teams
V Operating Remedial-Enrichment School	Apply Strategies	Apply and Test Strategies	Apply and Test Self (Continue Training as appropriate)	Apply and Test Self (Continue Training as appropriate)
VI Internship	Apply Strategies	Create and Test Strategies	Apply and Test Self (Continue Training as appropriate	Apply and Test Self (Continue Training as appropriate)

PHASES OF COMPONENTS
BY
PHASES OF CONTACT LABORATORY
INSTITUTION BUILDING, INNOVATOR, SCHOLAR

Contact Laboratory Phase	Institution Building	Innovator	Scholar	
			Study of Teaching	Study of Learner
I	Analyze Social, Technical, and Curricular Systems of School	Experience and Analyze Bureaucratic Structure		
	Tasks in Simulated School	Analyze Bureaucratic as Non-Bureaucratic Behavior	Study Two Conceptual Systems (Joyce, Morine)	Study Developmental Theories, using an inductive teaching strategy
II	Study Curricular Specialty-Alternative	Develop Experiments in Reference Group	Study Own Teaching; make use of Computer for Information Storage & Retrieval	Apply to Students
III	Develop and Test Unit (Learn Techniques of Producing Curriculum Materials)	Develop Experiments in Reference Group	Study Own Teaching; make use of Computer for Information Storage & Retrieval	Apply to Students

IV	Study Strategies of Inquiry School	Reference Group Establishes Ties to Inquiry School Faculty	Study In Inquiry School	Continue to Make Use
V	Plan and Carry out Remedial-Enrichment School (Learn Techniques of Producing Curriculum Materials)	Reference Group Plans and Carries Out Remedial-Enrichment School	Carry Out Experiments in R-E School	of Computer for Information Storage and
VI	Apply Strategies in Teams	Reference Group Members placed in Teams	With team members, continue study	Retrieval

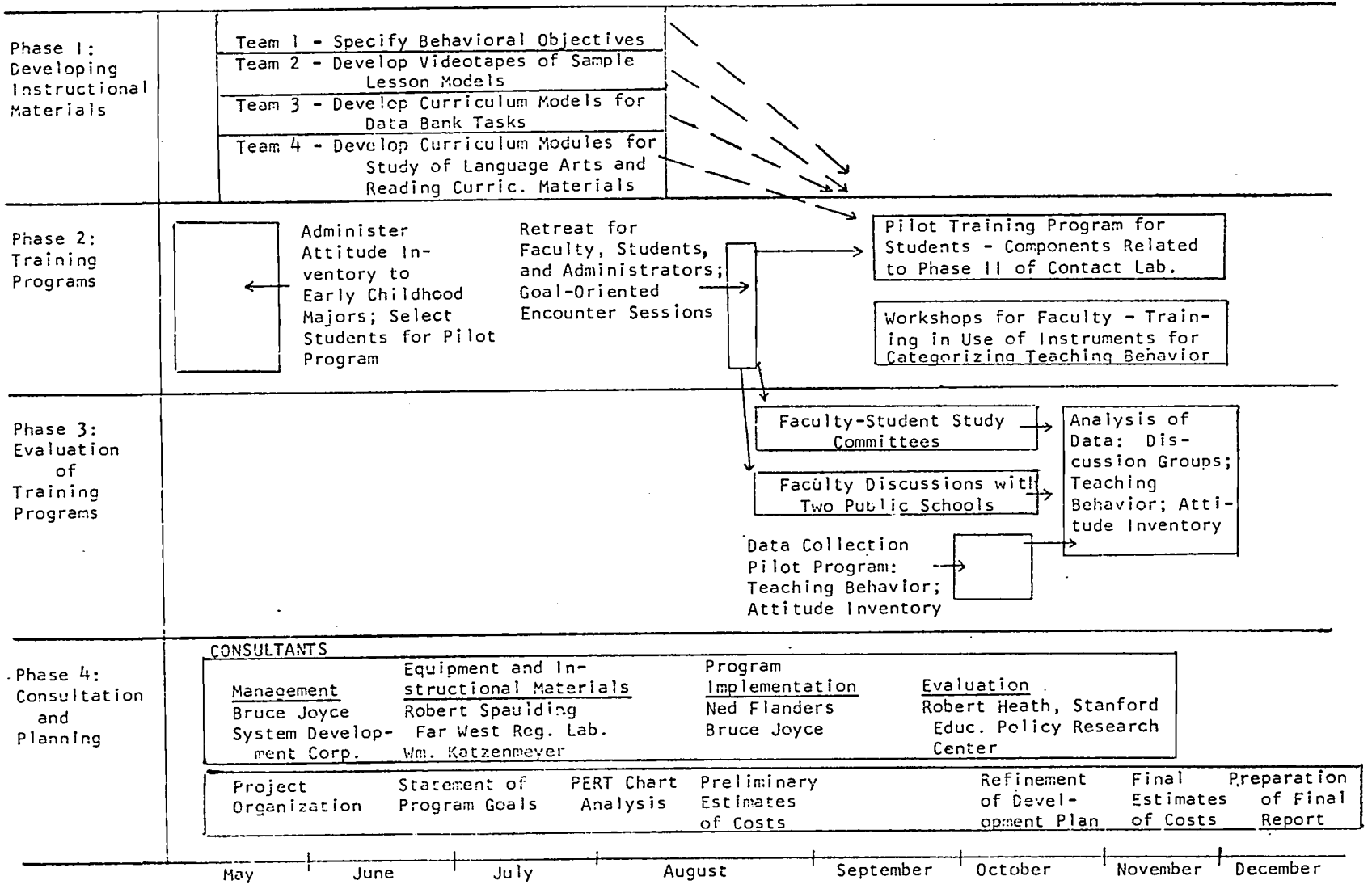
a. A precise statement of program goals will be produced by chief investigators consulting with faculty and specialists.

b. Using program goals as a basis, a network (PERT) analysis reflecting stages of development and implementation will be developed.

c. An estimate of costs is to be produced.

Outputs of these activities are to include salaries and wages, fixed expenses, equipment costs, shared costs, cost by program phase, cost per student and so forth. (For a complete description of goals and activities, see proposal, pages 44-64.) The following chart graphically portrays the four R and D phases and representative activities in each.

6. Description of society in the mid-70's. No projections are made as part of the proposal. The intention is to obtain projections from the Stanford Educational Policy Center.


Phase 1: Developing Instructional Materials
Team 1 - Specify Behavioral Objectives
Team 2 - Develop Videotapes of Sample Lesson Models
Team 3 - Develop Curriculum Models for Data Bank Tasks
Team 4 - Develop Curriculum Modules for Study of Language Arts and Reading Curric. Materials
Phase 2: Training Programs
Administer Attitude Inventory to Early Childhood Majors; Select Students for Pilot Program
Retreat for Faculty, Students, and Administrators; Goal-Oriented Encounter Sessions
Pilot Training Program for Students - Components Related to Phase II of Contact Lab.
Workshops for Faculty - Training in Use of Instruments for Categorizing Teaching Behavior
Phase 3: Evaluation of Training Programs
Faculty-Student Study Committees
Faculty Discussions with Two Public Schools
Analysis of Data: Discussion Groups; Teaching Behavior; Attitude Inventory
Data Collection Pilot Program: Teaching Behavior; Attitude Inventory
Phase 4: Consultation and Planning
CONSULTANTS
Management
Bruce Joyce
System Development Corp.
Equipment and Instructional Materials
Robert Spaulding
Far West Reg. Lab.
Wm. Katzenmeyer
Program Implementation
Ned Flanders
Bruce Joyce
Evaluation
Robert Heath, Stanford Educ. Policy Research Center
Project Organization
Statement of Program Goals
PERT Chart Analysis
Preliminary Estimates of Costs
Refinement of Development Plan
Final Estimates of Costs
Preparation of Final Report
May
June
July
August
September
October
November
December

Drake University. Sidney J. Drumheller and Frank W. Broadbent

1. Description of the institution. Scant demographic information is given. Indication that College of Education enjoys "a cooperative association" with other colleges in the preparation of teachers. Also the College enjoys a "favorable position with the university administration." A new college building is being planned.

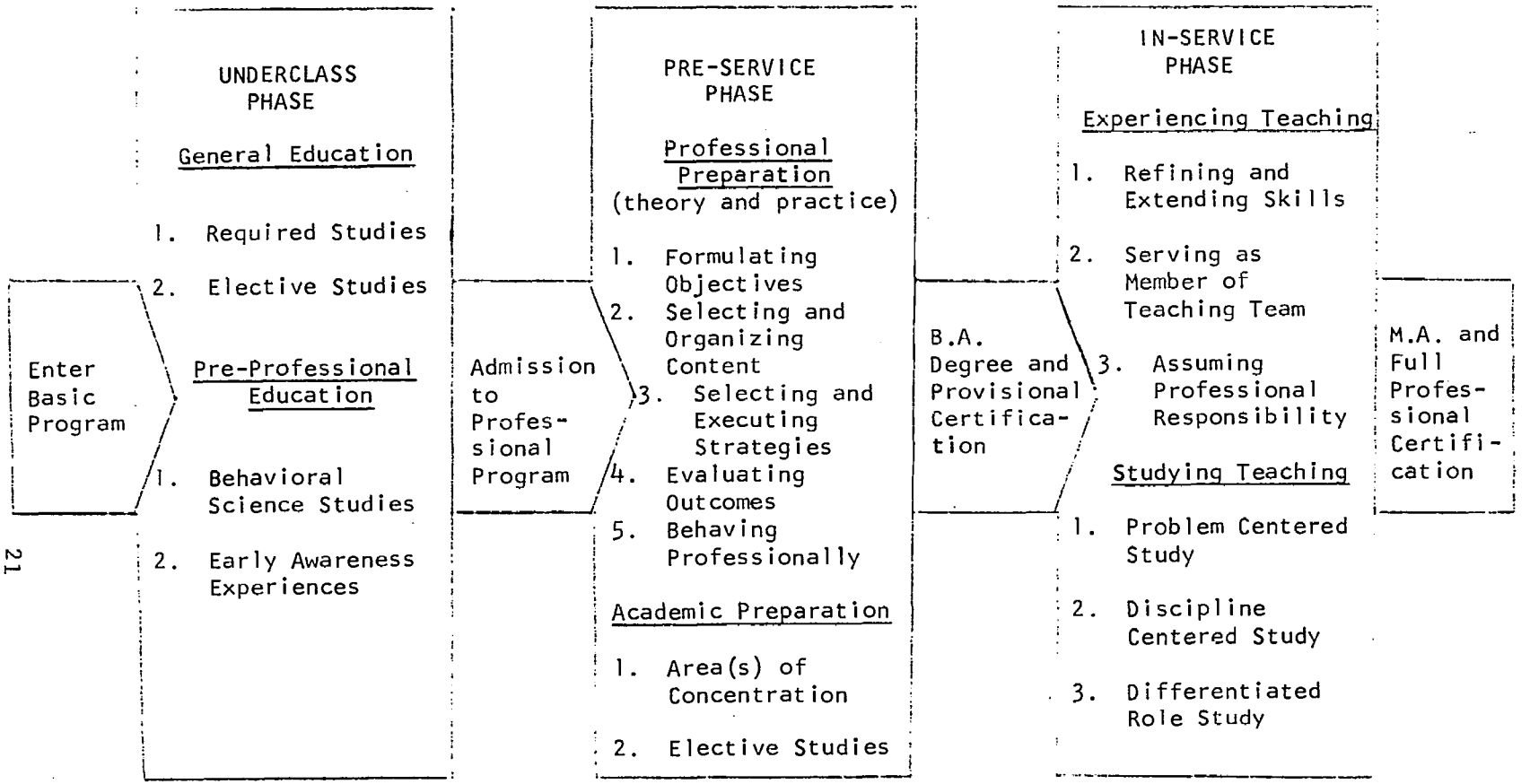
2. Program model selected. Drake elects generally to follow the three stage vertical organization and the curriculum described by Florida State.

   To develop the curriculum in modular form, Drake notes it will rely upon procedures developed by the Northwest Lab. Little, if any, explication of these procedures is made. Instead, use of the "Drumheller Module Design Model" seems to have been substituted.

3. Rationale for selecting the program model. The Florida State model is seen to permit "much latitude and freedom wherein medium-sized institutions can create a teacher education program which capitalizes on their strength." Drake, as such an institution, considers its great strength to be a commitment to academic excellence within the broad spectrum of the liberal arts. Drake feels the FSU model is consistent with that philosophy. It also agrees with FSU's notion of what society will be like in the future.

4. Features of the program model. Several features of FSU model are incorporated, including admission and screening procedures, use of enabling objectives, and emphasis on laboratory experiences for practice. In addition, Drake mentions the value of the Northwest Lab emphasis upon sensitivity training and action research techniques. Finally Drake proposes that its instructional modules will focus on the development of several behaviors at once, in keeping with the Syracuse and Northwest Lab philosophies. Although a general route through the program is suggested, alternate routes are available for those who plan to teach in inner-city or rural schools. Modules will provide also for differences in learning styles, past experience, and other variables. Consistent with many CETEM programs, Drake calls for use of pretests and alternative learning routes.

5. Description of design, development, evaluation of the program. Although a model is provided (see proposal, page 16) which identifies the range of instructional modules to be designed and developed, it is not explained sufficiently.


UNDERCLASS PHASE
General Education
1. Required Studies
2. Elective Studies
Pre-Professional Education
1. Behavioral Science Studies
2. Early Awareness Experiences
Enter Basic Program
Admission to Profes-sional Program
PRE-SERVICE PHASE
Professional Preparation
(theory and practice)
1. Formulating Objectives
2. Selecting and Organizing Content
3. Selecting and Executing Strategies
4. Evaluating Outcomes
5. Behaving Professionally
Academic Preparation
1. Area(s) of Concentration
2. Elective Studies
B.A. Degree and Provisional Certifica-tion
IN-SERVICE PHASE
Experiencing Teaching
1. Refining and Extending Skills
2. Serving as Member of Teaching Team
3. Assuming Professional Responsibility
Studying Teaching
1. Problem Centered Study
2. Discipline Centered Study
3. Differentiated Role Study
M.A. and Full Profes-sional Certifi-cation

However, several objectives "which suggest behavior complexes" are specified as follows:

a. The teacher will identify student characteristics relevant to the learning process.

b. The teacher will select educational objectives which are appropriate to the needs of the learner and demands of society.

c. The teacher will identify and use appropriate strategies.

d. The teacher will identify and utilize appropriate evaluative procedures in appraising pupil progress toward objectives.

e. The teacher will identify and use ancillary agencies as a supplement to classroom resources in the nurturing of desirable behaviors.

Variables to be considered in developing the above "major behavior complexes" through modules include learner drives, cognitive styles, developmental level, ability, and past experience. Thirty to fifty modules are envisioned. Drake plans to develop the modules using the Drumheller Module Design Model which specifies how a complex of classroom behaviors can be transformed into behavioral objectives in terms of a modified Bloom's taxonomy. Utilizing this approach to development, the writers infer that individual and relatively independent contracting can be done in order to produce the instructional materials. No mention is made of how the new program is to be evaluated although vague reference is made to field testing. Trainee progress is to be monitored and made available via computer printouts.

6. Description of society in the mid-70's. FSU's projections of society are utilized with minor modification. For example, Drake sees itself serving a unique region with a different conception of urbanization than Florida State's. Furthermore, Drake sees the teacher having a larger role in the future community.

Florida State University. Norman R. Dodl

1. Description of the institution. One of seven state university campuses. Current enrollment 16,700. College of Education second in size of FSU colleges. FSU largest producer of teachers in the Southeast.

2. Program model selected. Its own.

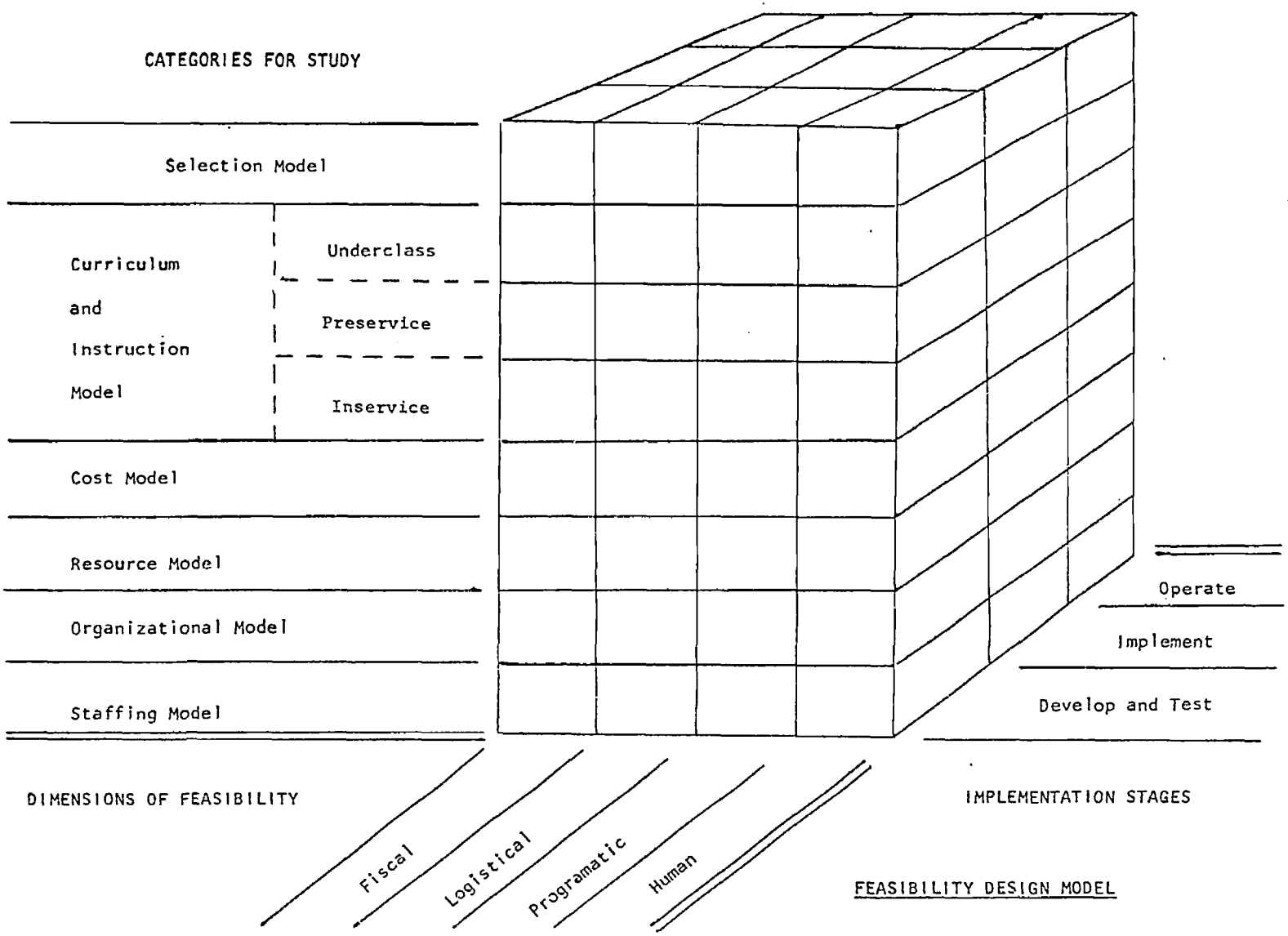
3. Rationale for selecting the program model. FSU selected its own model for obvious reasons--it developed the model and was familiar with it. Also FSU designers consider their program to be consistent with major themes presented in other program models and new directions in elementary education.

4. Features of the program model. Broad goals of the FSU program are to develop desired teacher behaviors. Specifically, the intention is to prepare teachers to formulate objectives, organize content, use appropriate instructional strategies, evaluate instructional outcomes, and serve as professional leaders.

   Over-all the FSU program is divided into three phases encompassing approximately six years of study. (For a detailed analysis of the phases and related program features, see the chart on page 21 accompanying the analysis of the Drake University proposal. For a complete description of the program features, see the FSU Phase I Final Report.)

5. Description of the design, development, evaluation of the program. FSU intends to assess several dimensions of feasibility--fiscal, logistical, programatic, and human. The following chart presents these dimensions, in relationship to system and program components. A subcontractor will be asked to design the system which will provide information regarding the cost to develop, test, and implement all facets of the program. In addition, a major group of activities is to be undertaken to identify human factors which must be considered when changes in training tactics are proposed. The new program, for example, demands major role and attitude changes, a higher level of professionalism, and new skills. The applicants believe it is incumbent upon them to determine the effects of such retraining demands. Logistical and programatic feasibility are to be measured using a simulation model of program management.

6. Description of society in the mid-70's. The applicants briefly mention the Phase I Final Report chapter "Predictions for the Decade Ahead" and then summarize, stating that there will be accelerated social change and intensified demands on education. Consequently, applicants "anticipate a radically different elementary school."



FEASIBILITY DESIGN MODEL

Iowa State University of Science and Technology. Jess R. Beard

1. Description of the institution. Land Grant institution enrolling 18,000 students. Prepares about 600 elementary education majors yearly.

2. Program model selected. Adheres more closely to Michigan State program with most of the other programs represented in some way. Appendixes A and B indicate all components of the ISU program and their genesis.

3. Rationale for selecting the program model. Applicant notes the program proposed "is highly responsive to the understandings and values of the task force preparing the proposal and to the character of Iowa State University."

4. Features of the program model. Prepares teachers N-8 for all settings and all forms of school and classroom organization. Program contains seven major components:

    a. Talent Development (To develop multiple talents for personal and professional enrichment)

    b. General Education (Introduction to various disciplines)

    c. Human Learning (Understanding self and others, human development, and educational psychology)

    d. Scholarly Modes of Knowledge (Modes and styles of inquiry)

    e. Professional Use of Knowledge (Modes and styles of inquiry)

    f. Decisions and Teaching (Attention to teaching as a career, as a decision-action process, etc.)

    g. Area of Concentration (Disadvantaged, learning disabilities, early childhood, academic concentration)

Other program aspects include support systems and institutional relationships. Special emphasis seems to be placed on Talent Development, identification and training for teacher competencies, and clinical teaching, including simulations and integration of experiences.

5. Description of design, development, evaluation of the program. The applicant provides for a Development and a Support system. The following chart lists the systems and their parts.

   The first or Development System consists of a Planning Board to develop policies and goals, a Program Development System responsible for developing in module form and delivering all but clinical experiences, a Clinical Experiences System to provide for and analyze laboratory work, and an Advisory Board to make recommendations regarding the entire project.

   The second or Support System encompasses four subsystems. The Guidance Subsystem is to guide the trainee into, through, and out of the program. A Measurement and Evaluation Subsystem is conceived in order to make decisions about the teacher education program based upon reliable valid data rather than upon personal experience, tradition, or authoritative opinion. A rather elaborate set of the subsystem responsibilities is found on page 59 of the proposal. The third subsystem of the Support System is called Resource Management and is charged with the training, deployment, and management of "staff, clinical and other resources." Finally the Information Retrieval Subsystem is to collect and provide data for the other subsystems.

6. Description of society in the mid-70's. The applicant suggests engaging students, faculty, and consultants in a seven-phase study to determine conditions of society in the new decade. Results are to be used to build a program to meet the needs of the "emerging society."

Systems and Subsystems	Basic Source
Development Systems	Michigan State
A. Planning Board	
B. Program Development System	
C. Clinical Experience System	
D. Advisory Board	
Support Subsystems	
A. Guidance	
B. Measurement and Evaluation	Michigan State and Syracuse
C. Resource Management	Michigan State and Florida State
D. Information Retrieval	Michigan State

Michigan State University. W. Robert Houston

1. Description of the institution. According to the American Association of Colleges for Teacher Education, MSU leads the nation in production of elementary teachers.

2. Program model selected. Its own.

3. Rationale for selecting the program model. The Behavioral Science Teacher Education Program (BSTEP) was developed as part of CETEM Phase I and involved seven MSU colleges and over 150 professionals from diverse organizations. After generating such commitment, selection of the MSU program seemed logical.

4. Features of the program model. BSTEP is designed to achieve four major goals as follows:

   a. To provide the future teacher with broad experience in general education, including the humanities, sciences, and social sciences

   b. To introduce research and clinical experience into the decision-making process to facilitate and improve education

   c. To utilize a new kind of laboratory and clinical base

   d. To prepare a new kind of teacher for the nation's schools, one who:

      (1) Engages in teaching as a clinical experience

      (2) Understands human learning

      (3) Assumes the role of a responsible change agent

   Key features of the program include emphasis upon the behavioral sciences ("those systems of inquiry which constitute reliable sources of information about human behavior") and upon clinical behavior style ("consists of six phases: describing, analyzing, hypothesizing, prescribing, treating, and observing consequences")

   The program model, which begins with the freshman year and continues into the initial years of teaching, oversimplified includes:

   a. General-Liberal Education, broad core of general-liberal education

b. Human Learning, study of human learning

c. Professional Use of Knowledge, analytical study of the act of teaching

d. Scholarly Modes of Knowledge, review of fields of knowledge in terms of their structure and concepts

e. Clinical Experiences, intern teaching as part of an instructional team

Components within each of the above areas are presented on the following chart.

For a more complete description of components, read the proposal, Appendix B, pages 3-15.

5. Description of design, development, evaluation of the program. Task forces are suggested to work on five jobs:

a. General administration of the program

b. Program development (determination of type, kind and number of modules)

c. Information retrieval (of computer stored data about student progress, etc.)

d. Research, evaluation and cost benefit analysis (to observe, measure, and assess all parts of the program)

e. Other organizational structure (selection and retention of students, instructional materials support system, faculty orientation, and inservice education)

These areas of concern are fully described in the proposal, pages 15-24. Therein questions are posed for each of the five task force groups and procedures are suggested for them to follow. Again as in the other proposals, systems analysis techniques, including PERT and PPBS, are employed.

6. Description of society in the mid-70's. MSU feels that a projection of the mid-70's is inadequate and suggests rather that longer range views are required. Instead of making such a prediction the applicant, according to the guidelines, described a procedure whereby such data will be obtained. Appendix A, pages 1-7, denotes that schema.

Component

General-Liberal Education
Humanities I
Humanities II
Humanities III
Social Science I
Social Science II
Social Science III
Natural Science
Mathematics
Modes of Inquiry Seminar

Scholarly Modes of Knowledge
Linguistics
Communication
Literature for Children
Fine Arts
Social Science
Science
Mathematics

Professional Use of Knowledge
Reading
Language Arts
Social Studies
Science
Mathematics

Human Learning
Growth and Development
Psychological Orientation
Social-Philosophical Foundations

Clinical
Tutorial
Career Decision Seminar
Pre-internship Practicum
Internship

New York University. Alfred Ellison

1. Description of the institution. Mention is made of the institution's involvement in improving urban life and of special programs staffed by School of Education personnel. Also resources are described including libraries, computer capability, and audio-visual conveniences.

2. Program model selected. University of Massachusetts supplemented by elements from the Syracuse and Florida State programs.

3. Rationale for selecting the program model. Of the nine programs available, the Massachusetts model was found to be most consistent with the following series of assumptions and objectives developed by NYU personnel:

   a. Teacher education requires continuous assessment of the product, the process, and relevance of the program to needs of a changing society.

   b. It is necessary to continuously analyze changing objectives and roles in education. (Instructional personnel were seen as initiators, anticipators, and reflectors of social change. Differentiated roles were mentioned for school personnel.)

   c. Competency-based, action-oriented performance criteria are needed to define roles of various educational personnel.

   d. Alternative routes to the attainment of performance criteria should be available.

   e. Preservice and inservice education should be contiguous.

4. Features of the program model. The essence of the NYU program is preparation of educational personnel for differentiated instructional roles. (A position paper on the topic is found on pages 65-74 of the proposal.) Liberal arts and professional education programs are described which are assumed to support this goal. Student and teacher educator involvement in liberal arts is seen to serve several functions: first, to provide for the attainment of subject matter competencies; second, to provide subject specialization; third, to foster increased cooperation in the preparation of school personnel. The professional education program suggests a preservice-inservice continuum providing multiple entry and exit points based upon desired competencies. Mention is made of provision for early experience so they "could test their professional commitments."

Other features of the Professional Program include utilization of performance criteria with competencies to be defined by tasks required of and projected for teachers, provision for individualization in styles and rate of learning (See pages 110-118), use of an Educational Resource Center, per the Ohio Consortium program (See pages 119-121), and field-based learning in "Associated Schools," perhaps like FSU's portal school notion (See pages 105-109). Certain "areas of competency" from the Massachusetts program are delineated on pages 20, 100-104 of the proposal; namely, Cornerstone Criteria (Teaching Strategies, Human Relations, Professionalism), Content Criteria (Science, Language Arts, Mathematics, Social Studies, Foreign Language, Aesthetics), and Service Criteria (Evaluation, Media, Technology).

5. Description of design, development, evaluation of the program. The feasibility study is to begin with the formation of an Executive Committee. Subsequently, personnel will be assigned to examine each of the program's components and to perform needed tasks related to each as follows:

   a. Tasks related to validating performance criteria and differentiated roles

   b. Tasks related to operation of the program, e.g., recruitment, development of instructional alternatives, determining feasibility of establishing Associated Schools, determining viability of establishing an Educational Resource Center, and so forth (See pages 32-44 of the proposal for further elaboration.)

   Each component area also will be examined in terms of costs for faculty, staff, plant, and materials for administration, operation, and evaluation of the program.

6. Description of society in the mid-70's. NYU predicts the following:

   a. Increased population and urbanization

   b. Dramatic increase in knowledge in natural sciences with resultant increase in technology

   c. Personal confusion and social discontent

   d. Need for increased understanding among peoples

   Appendix A, pages 128-140, contains a position paper "Documentation of Social Trends." See also pages 5-7.

Northwestern State College of Louisiana. Ronald T. Dennis

1. Description of the institution. Located in a city of about 18,000 in a region of the state characterized by low income. Median per family income below $3,000.

2. Program model selected. Pittsburgh.

3. Rationale for selecting the program model. The Pittsburgh program was "more in keeping with what should be the philosophy, aims, beliefs, and objectives of those responsible for teacher education."

4. Features of the program model. The teacher education program suggested is individualized, interdisciplinary in nature, and competence oriented. Its curricula adhere closely to Pittsburgh's in all respects; thus, five components are described.

   a. Academic Knowledge (in Liberal Arts, Behavioral Science, Social Science)

   b. Professional Education

   c. Teacher Competencies

   d. Guidance

   e. Clinical Setting

   A description of teacher competencies required in each component is found in the proposal, pages 8-27. The sequence of the learning activities is discussed on pages 27-31.

   The Teacher Competency component cited in (c.) above is aimed toward the development of nine core teacher behaviors noted in the Pittsburgh program. These are ability to:

   a. Specify learning goals

   b. Assess pupil achievement of the learning goals

   c. Diagnose learner characteristics

   d. Plan long-term and short-term learning programs with pupils

   e. Guide pupils in their learning tasks

   f. Direct off-task pupil behavior

g. 'Evaluate the learner

h. Employ teamwork with colleagues

i. Enhance development

5. Description of design, development, evaluation of the program. The feasibility study begins with all personnel concerned with teacher education at Northwestern State College and in cooperation with public schools studying the goals of the Pittsburgh program. As a consequence of study and discussion, additions and revisions will be made. Contiguous with the planning and development of components, plans are suggested whereby the faculty will become skillful in the same areas of competence required of students. Evaluation will assess each component. Resultant data will be used as input for program change. Reference to evaluation of "program, procedures, implementation and end results" is found on pages 42-48.

6. Description of society in mid-70's. Not provided.

Oklahoma State University. Russell L. Dobson

1. Description of the institution. None provided.

2. Program model selected. OSU used components from the Massachusetts, Syracuse, and Michigan State programs.

3. Rationale for selecting the program models. They were termed "worthy of implementation."

4. Features of the program model. OSU found greatest utility in the following components from the three programs as follows:

   a. From Massachusetts

      (1) "Concept" Criteria (probably means Cornerstone Criteria)

         (a) Human Relations
         (b) Behavioral Skills

      (2) Content Criteria

         (a) Science
         (b) Language Arts
         (c) Math
         (d) Aesthetics
         (e) Social Studies
         (f) Foreign Language
         (g) Preschool

      (3) Service Criteria

      (4) In addition OSU acknowledges borrowing other notions from Massachusetts

         (a) Differentiated Staffing
         (b) Multiple entrance and exit points
         (c) Multiple program alternatives

   b. From Syracuse (which seems to have had greatest influence)

      (1) Organizational structure (over-all)

      (2) Support systems

   c. From Michigan State

      (1) Clinical experience

      (2) Contact laboratories

      (3) Modules

The program is designed as a four to five year experience with the first year in liberal studies. Exploratory professional experiences begin the second year as liberal studies continue. The third year continues professional study and experience and, in that time, students determine their professional goal. The final year is spent in professional study and intern teaching. The components from the three programs utilized emerge as seven OSU program components strikingly similar to Syracuse's. They are explained on pages 14-21 and are identified as:

a. Liberal Education

b. Elementary Methods and Curriculum (extensive use to be made of Michigan State's modules)

c. Child Development

d. Teaching Theory and Practice

e. Professional Sensitivity Training

f. Social-Cultural Foundations

g. Self-Directed Component

5. Description of design, development, evaluation of the program. The Program Executive Director is the major decision-maker. It is his responsibility to see that development and operation are carried out. His staff includes directors of Liberal Education, Academic Counselor, C and I, Human Relations, the Teaching Center and Student Teaching. Program Control and Support Systems are available to facilitate implementation and will provide for information acquisition and management and monitoring the internal operation. (See proposal, pages 25-30.)

   Information gathered by the Analysis and/or Control Subsystems will provide evaluative data. (See proposal, pages 48-57.) The ultimate criterion for program success will be how well the program's graduates succeed with pupils. Cost analysis will be made using a "systems" approach. (See pages 60-64.)

6. Description of society in the mid-70's. Trends which will affect schools are mentioned. Among them are greater involvement of federal government in education, development of closer relationships among those responsible for preparing and utilizing teachers, increased interest in the humanities and more concern for affective experience, more inservice education for teachers, and increased teacher specialization.

Oregon College of Education. Acting for the former Northwest Regional Laboratory Consortium. H. Del Schalock

1. Description of the institution. OCE places special emphasis on the preparation of teachers and on research in teacher education. Currently enrolls 3,200 students, 90 per cent of them in teacher training. Six other colleges and universities will work with OCE in this project.

2. Program model selected. OCE, having been a major contributor to the Northwest Regional Laboratory Model, chose that program with certain revisions based upon notions presented in the work of Massachusetts, Pittsburgh, Michigan State, Florida State, and Teachers College.

3. Rationale for selecting the program model. In addition to contributing to the Northwest program, OCE selected it because it:

   a. Embodies principles of education to which Oregon is committed.

   b. Blends the use of systems design with commitment to the worth of the individual.

   c. Is internally consistent in its reflection of these two commitments.

   d. Is exhaustive in treatment of support and management functions.

   e. Requires that cost effectiveness and cost benefit data be provided.

4. Features of the program model. ComField, the acronym for the program, is described as "a competency based program that is systematically designed, personalized, and field centered." ComField has four distinguishing features:

   a. It requires the demonstration of competence in the performance of teaching tasks

   b. It requires the development of procedures to ensure that the program is personally relevant

   c. It requires a genuine partnership with schools

   d. It requires a new form of management system

   These features are explained in detail in the proposal, pages 12-16.

As noted earlier, revisions of the ComField Model were made as a consequence of studying the other eight CETEM Phase I Final Reports. They include:

a. Greater emphasis on personalization

b. Recognition that the kinds of pupil outcomes toward which teachers must work must be made explicit

c. Restructuring of the laboratory and practicum experience to require that competence be demonstrated in the laboratory only in selected tasks

Certain"extensions or clarifications" also are noted in:

a. Admission policy and practice

b. Rationale and procedures for sequencing content

c. Relation to the issue of specialization

d. Clarification of functions of the practicum supervisor

e. Clarification of relationships between colleges and schools in terms of program operation

f. Explication of the inservice program and so forth

Features of other program models which OCE will draw upon include Massachusetts' sophisticated systems application, Pittsburgh's focus on individualization of instruction, Michigan State's general education component, and Teachers College's concept of personalization of instruction.

5. Description of design, development, evaluation of program. Feasibility tasks to be carried out on the OCE campus include:

a. Development of educational projections for the 1970's

b. Development of operational program specifications

c. Development of plans for managing development, implementation, and operation of the program

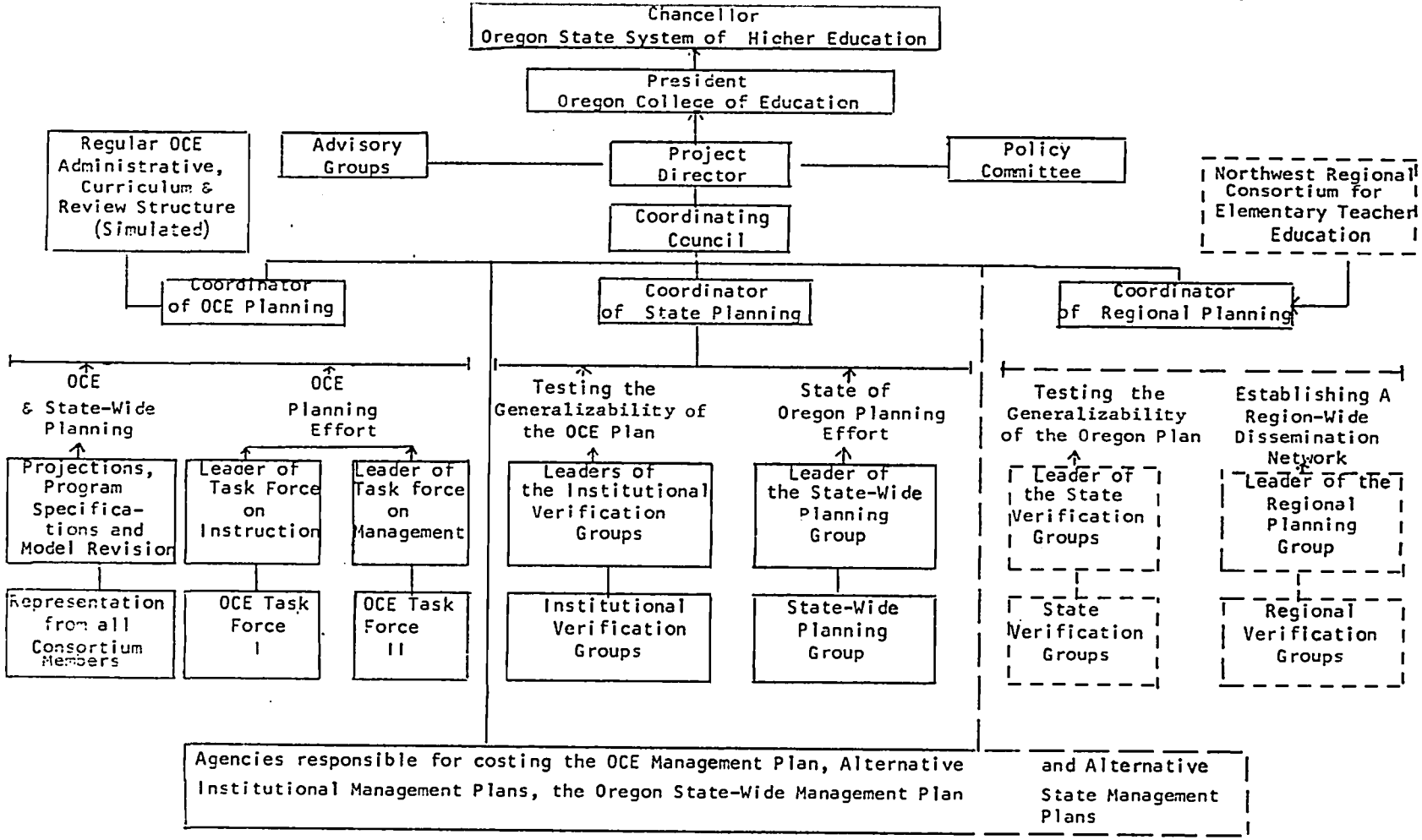
d. Derivation of cost estimates

Activities to be undertaken in each task area are presented and discussed in the proposal, pages 29-41. Other tasks are to be conducted on a statewide and regional basis. They include testing the generalized ability of the OCE management plans and cost estimates at six other institutions, deriving cost estimates for alternative (revised) management plans, establishing a statewide plan for implementation and operation of the program, deriving cost estimates, and so forth. Refer to pages 42-52 of the proposal for complete task descriptions.

Coordination of the various program tasks is given to the "Coordinating Council" responsible, in addition to coordination, for broad operational decisions, conflict resolution, and program interpretation. A policy committee will have responsibility for reviewing all project activity and making broad policy decisions. The administrative structure for project management is seen on the chart following.

Appendix D is an overview of procedures involved in design, development, and operation of the program.

6. Description of society in the mid-70's. OCE sought outside help from the Stanford Research Institute to obtain such projects. Such data were not completed in time for inclusion in the Phase II proposal. See proposal, Appendix D, for SRI's position.



- - - - - - Denotes regional activities

A schematic of the administrative structure to be used in managing the project.

San Jose State College. Warren Kallenbach

1. Description of the institution. Graduates over 1,000 elementary education majors yearly. Fifty-one faculty in the Department of Elementary Education. College has been designated regional computer center fo the Northern California State Colleges.

2. Program model selected. Michigan State.

3. Rationale for selecting the program model. Not explicit.

4. Features of the program model. Although not specified, they can be assumed to be identical to MSU's.

5. Description of design, development, evaluation of the program. None is given. However, descriptions of several ongoing programs are provided, including use of micro-teaching and minicourses, the Elementary Intern Teaching Program, the Individualized Professional Education Program (similar to TC's inquiry group approach), Project ADEPT, Teacher Corps, Operation SHARE, and so forth.

   No discussion is provided concerning the goals of the feasibility study or how it is to be conducted.

6. Description of society in mid-70's. Not provided.

Southern Methodist University. Donald R. Cox

1. Description of the institution. Approximately 10,000 students enrolled including Dallas Branch.

2. Program model selected. Ohio Consortium and University of Pittsburgh.

3. Rationale for selecting the program models. The two programs "are most applicable to desired changes in existing elementary programs at SMU." The Ohio plan was particularly appealing since little reference in it is given to course work. Rather the basic approach to training teachers is through a "multi-activity type program." At the same time, the Pittsburgh plan was attractive because of its stress on individualization.

4. Features of the program model. Union of the aspects of the Ohio and Pittsburgh plans into the SMU program results in the following alterations and additions to SMU's curricula:

   a. The contexts, Contemporary Learning-Teaching Processes and Societal Factors, will be incorporated into existing courses.

   b. Two courses, Educational Technology and Research, will be added.

   c. Specifications for the context of Instructional Organization will be assimilated into elements of several ongoing programs.

   The revised SMU program sequence is presented on the following chart.

5. Description of design, development, evaluation of the program. Part II of the proposal presents some feasibility considerations, two in particular. Both center upon gaining support and involvement for the SMU program. The target groups are public school and university personnel. Multiphase plans are projected to achieve understanding and cooperation. (See pages 9-15.) The chart following somewhat reveals how SMU plans to alter its program while at the same time introducing the multiunit school.

   Evaluation of the program is planned, using procedures enumerated with Ohio Consortium program based on the CIPP Evaluation Model. Cost estimates for program components will be made by categories listed on page 16.

PROFESSIONAL SEQUENCE IN THE NEW PROGRAM

Level	Existing Course	New Course or Incorporated Context
Junior*	Education 50--Development of Learning →	Contemporary Learning-Teaching Processes
	Education 56--Children's Literature	
	Education 51--Reading	
	Education 52--Language Arts	Educational Technology
	Observations in 51-52 →	Clinical Experience in Multiunit School
Senior	Education 53--Social Studies	
	Education 55--Mathematics	
	Education 54--Science	
	Education 63-64--Student Teaching →	Instructional Organization, Clinical Experience
	Education 99--Philosophy →	Societal Factors
		Research
Internship		Instructional Organization, Clinical Experience

_____ Ohio Plan [ ] Pittsburgh Plan

*At the beginning of Junior Level, students may select the Early Childhood Education Block, which bears the same course titles as the regular program, but with content designed for the specialty, and resulting in certification in both regular elementary and early childhood education.

STEPS	FOR UNIVERSITY PROGRAM	AND MULTIUNIT SCHOOL
SUMMER 1969--PLANNING AND DEVELOPMENT		
1	Analyses of Contexts	Orientation of Public School Administration
2	Training for Individualized	Selection of Site, Faculty
3	Application of Individualized Instruction to Courses	Inservice Education of Faculty
4	Orientation to Multiunit Concept	Special Instruction (Individualized Approach)
FALL 1969--PLANNING AND DEVELOPMENT		
1	Phasing-In	Orientation of Community
2	Field Testing	Phasing-In
3	Feedback for Revisions	Field Testing
4	Evaluation	Evaluation
JOINT EVALUATION		

6. Description of society in the mid-70's. A committee and procedures are mentioned for identifying and assessing educational trends which would affect the SMU program. Methods include a continuous surveillance of the literature, use of various interdisciplinary specialists, use of questionnaires and other survey techniques, analysis of mass media-programming, application of hierarchical frames of reference, and frequent reviews of research.

Southwest Minnesota State College. Richard F. Wollen

1. Description of the institution. A relatively new college established in 1963.

2. Program model selected. SMSC draws upon eight of the nine CETEM programs but its major theme ("that teaching is an applied behavioral science") emerges from the Michigan State model.

3. Rationale for selecting the program models. The models selected support the assumption that teaching is an applied behavioral science in which the teacher uses his knowledge of subject matter and of learning process to design activities intended to bring about desired changes in pupils.

4. Features of the program model selected. Program is based on teachers in training learning how to manage the instructional cycle comprising four activities:

   a. Studying the child and his environment to specify educational objectives and to determine where the child is in relation to these objectives

   b. Selecting and sequencing subject matter appropriate to the condition of the child

   c. Applying behavioral science principles in order to organize and manage the learning environment

   d. Evaluating the child's progress, suitability of subject matter, and use of the behavioral science principles

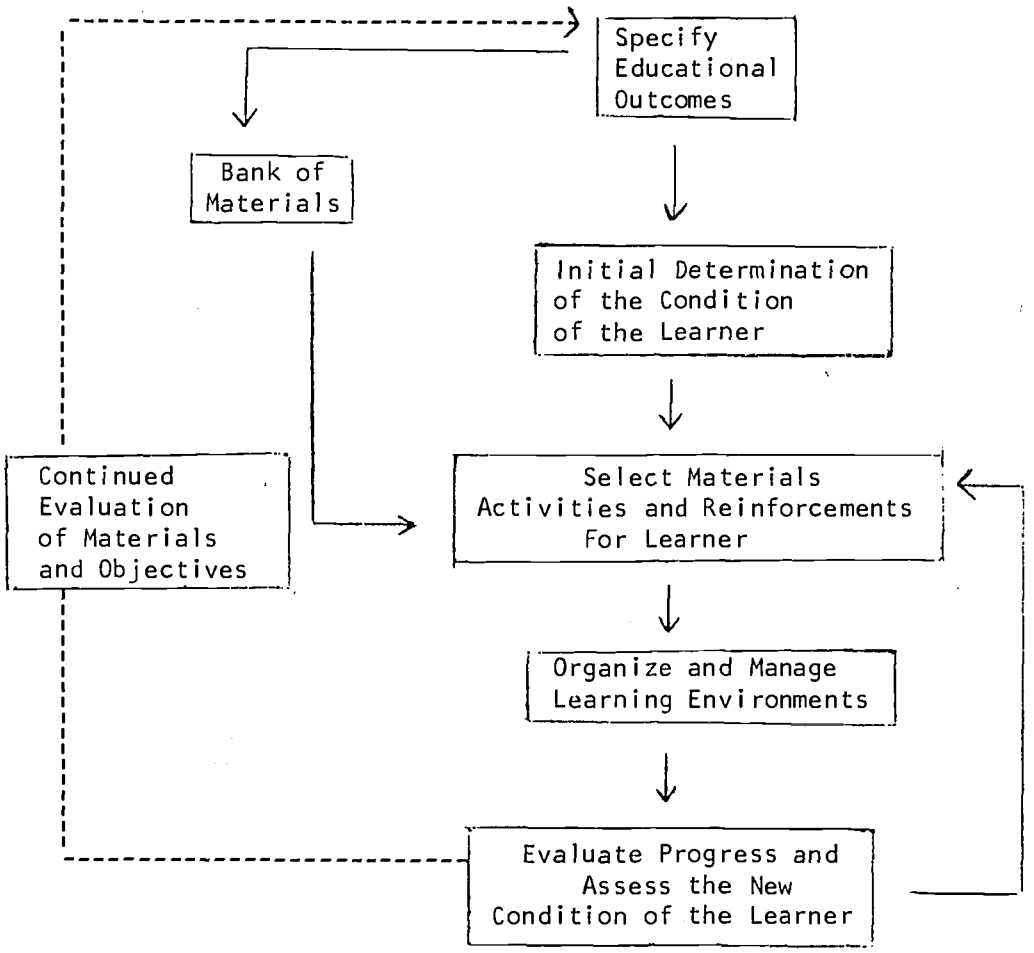
   The following chart presents the instructional management cycle.

   In order to be a successful manager, the student must attain knowledge of subject matter, technical skills of teaching, and so forth. (See pages 2-4.) The student attains these skills in four centers:

   a. Center for Educational Studies (child and community study)

   b. Center for Applied Instruction (laboratory experiences)

INSTRUCTIONAL MANAGEMENT



c. Center for Management of Educational Systems (teacher skills)

d. Center for Special Studies (general education and academic specialization)

Page 5 of the proposal shows relationships between experiences provided in the centers and the instructional cycle while pages 7-31 provide elaborate descriptions of three centers. The following chart illustrates interrelationships among program goals, centers, and student management or processing.

An individualized approach to learning is noted in discussion of selection of instructional objectives, sequence of study, and choice of materials.

5. Description of design, development, evaluation of the program. Persons responsible for program decisions (data collection, R and D cost analysis, and so forth) are drawn from Arts and Sciences Faculty, Division of Education Faculty, public school personnel, Upper Midwest Regional Educational Laboratory, and students. While all groups have an interest in all program decisions, specialization is called for. The decision-making chart on page 50 shows how decisions are to be allocated to each of the five groups.

   Cost estimates will be developed within the following frame of reference:

   a. Preparatory and initial planning

   b. Initial operation

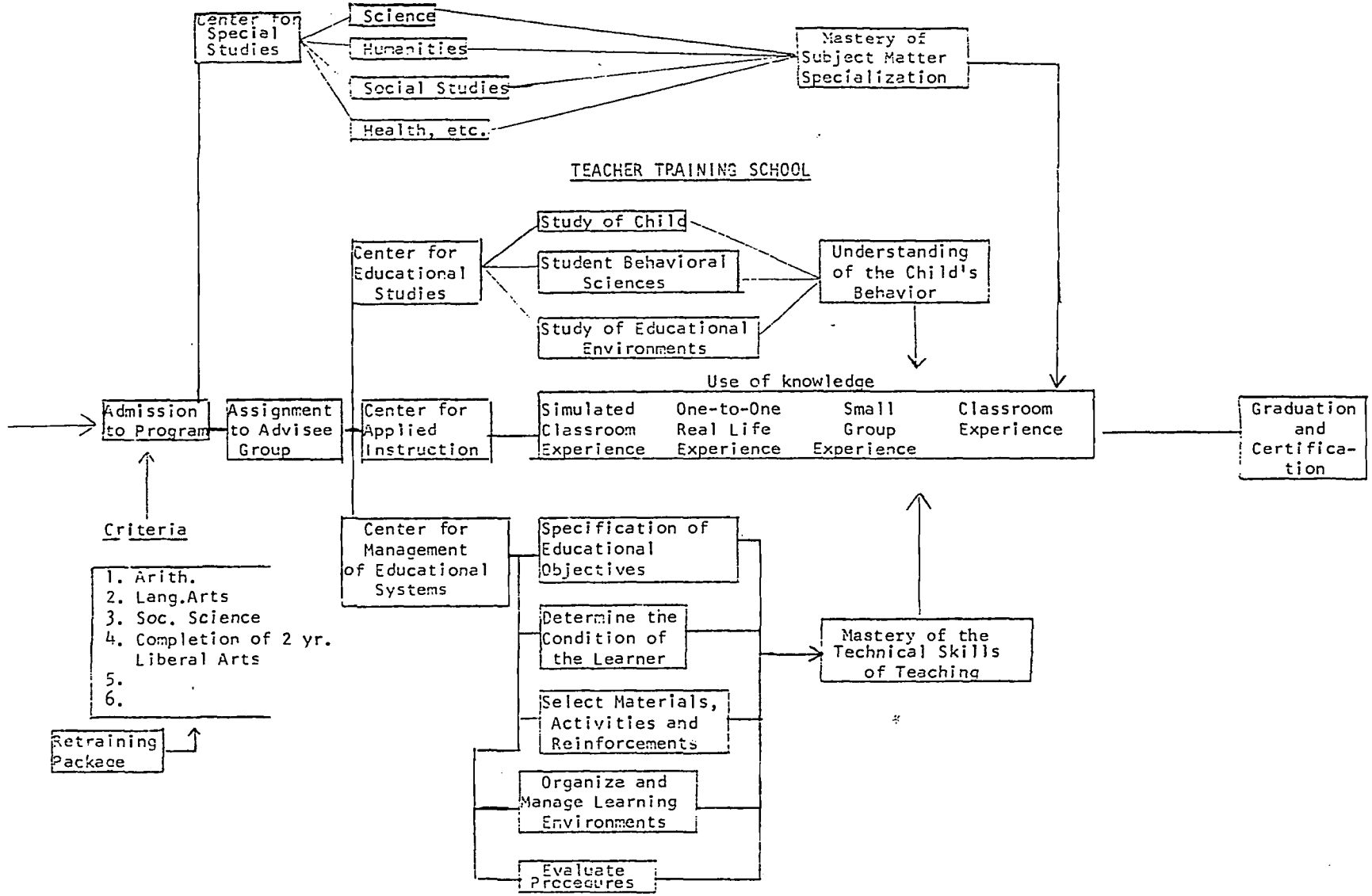
   c. Projected second and third year costs

   d. Cost estimates per student

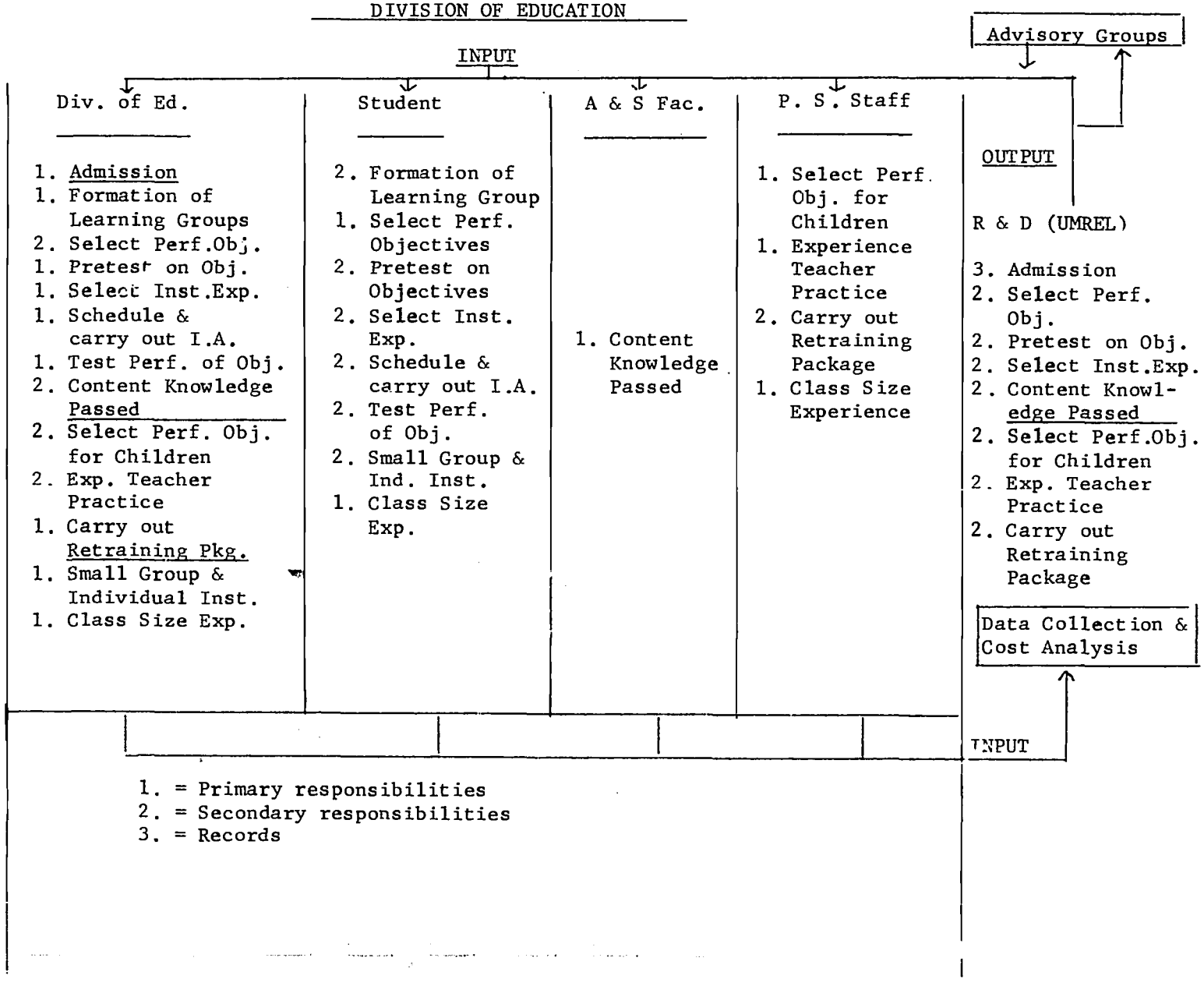
   e. Cost estimates per program

   Precisely how such data will be generated is not clear although brief reference is made to cost-benefit analysis and to the work being done by the accounting department of the college.

6. Description of society in mid-70's. Not provided.


Center for Special Studies
Science
Humanities
Social Studies
Health, etc.
Mastery of Subject Matter Specialization
TEACHER TRAINING SCHOOL
Study of Child
Center for Educational Studies
Student Behavioral Sciences
Understanding of the Child's Behavior
Study of Educational Environments
Use of knowledge
Admission to Program
Assignment to Advisee Group
Center for Applied Instruction
Simulated Classroom Experience
One-to-One Real Life Experience
Small Group Experience
Classroom Experience
Graduation and Certification
Criteria
1. Arith.
2. Lang.Arts
3. Soc. Science
4. Completion of 2 yr. Liberal Arts
5.
6.
Retraining Package
Center for Management of Educational Systems
Specification of Educational Objectives
Determine the Condition of the Learner
Select Materials, Activities and Reinforcements
Organize and Manage Learning Environments
Evaluate Procedures
Mastery of the Technical Skills of Teaching
Research and Development

DECISION-MAKING MODEL
DIVISION OF EDUCATION



Syracuse University. Wilford A. Weber

1. Description of the institution. Not contained in the proposal.

2. Program model selected. Syracuse University.

3. Rationale for selecting the program model. The applicant states, "It is natural the teacher education faculty of Syracuse University has chosen to study the feasibility of the model that they developed. This is the case not just because we are ego committed to our own efforts, but because we believe in the basic model program and the assumptions that [give] it form."

4. Features of the program model. Appendix C of the proposal provides a summary of the Syracuse model and the six principal assumptions on which it is based. A five-year program, the first two years and part of the third are given to liberal studies. The junior year is an exploratory preprofessional or introduction to teaching experiences encompassing six components:

   a. Methods and Curriculum

   b. Child Development

   c. Teaching Theory and Practice

   d. Professional Sensitivity

   e. Social and Cultural Foundations

   f. Self-directed Component. Techniques of instruction during the junior preprofessional year include simulation, microteaching, and tutoring. The senior or professional year is characterized by more indepth professional study and movement from simulated to more complex real world experience. Teaching is done in Teaching Centers in public schools. A decision on specialization is made that year. The fifth year involves pursuit of specialization and work as a resident teacher. Students may leave the program at the end of the fourth year as a generalist.

5. Design, development, evaluation of the program. Four types of feasibility will be studied.

   a. Financial

(1) Development costs

(2) Modification costs

(3) Cost per student

(4) Operating costs

b. Human

(1) Availability of manpower (professional and student)

(2) Manpower readiness

(3) Human time requirements

c. Material. Availability of hardware and software

d. Organizational. Ability of organizations involved to undertake changes on structure and function

The feasibility study will be performed by eight task forces. Each task force will be responsible for one of the following:

a. Refine the Phase I Syracuse program in keeping with recommendations of a review panel and/or notions presented in the other Phase I Final Reports. (See pages 16-25.)

b. Design alternative strategies for the development and operation of the program. (Pages 25-32)

c. Determine specific implementation and operation requirements. Resultant specifications will be the basis for cost analysis and cost effectiveness studies. (Pages 32-41)

d. Analyze cost. (Pages 41-47)

e. Design an "exportability instrument." (Pages 47-52)

f. Devise a simulation of decision-making required to adopt and implement the program. (Pages 52-56)

g. Determine final specifications as a result of cost analysis and cost effectiveness studies. (Pages 56-60)

h. Prepare the final report. (Pages 60-63)

Each of the tasks is described on the pages in parentheses above in terms of activities to be undertaken, beginning and completion dates, and organization of task force personnel.

Over-all responsibility for the feasibility study rests with the Syracuse University Center for the Study of Teaching.

6. Description of society in mid-70's. None provided.

University of Georgia. Charles E. Johnson

1. Description of the institution. Approximately 1,200 resident students majoring in early childhood and/or elementary education. College of Education staff numbers 295.

2. Program model selected. Georgia essentially will use its own program model with the following additions or alterations taken from other Phase I efforts:

   a. From Massachusetts, strategies for development of the teacher in the area of human relations, especially of the interpersonal variety. (See Appendix F-3-7.)

   b. From Florida State, the notion of the portal school. (See Appendix F-2-3.)

   c. From Ohio Consortium, attention to the role of elementary school administrative personnel. (See Appendix F-3.)

3. Rationale for selecting the program model. The basic principle used to determine criteria for the selection of the original and revised components was that "an instructional program [for teachers] must be so designed as to satisfy the ever-changing needs of society . . .in such a way as to improve the conditions of man." Consequently, a multistage process is demanded which:

   a. Projects future society

   b. Projects the role of the school in preparing pupils for such a society

   c. Derives criteria from the above analyses which can be used to select experiences under each of the components for the Georgia teacher education program

   The reader must assume this process was used for adopting alterations mentioned in 2 above. Criteria so employed are described in the proposal in Vol. I, pages 8-16 for each of the broadly conceived components of the program.

4. Features of the program model. The broadly conceived components of the Georgia program mentioned above are as follows. For selection criteria and descriptions of each, see pages in parentheses respectively.

   a. Teacher Performance Behaviors (Vol. I, 8-9; Vol. I, 17-22)

   b. Candidate Selection (Vol. 1, 9; Vol. 1, 22-25)

c. Instruction (Vol. I, 10-13; Vol. I, 25-33)

d. Program Evaluation (Vol. I, 13-14; Vol. I, 33-43)

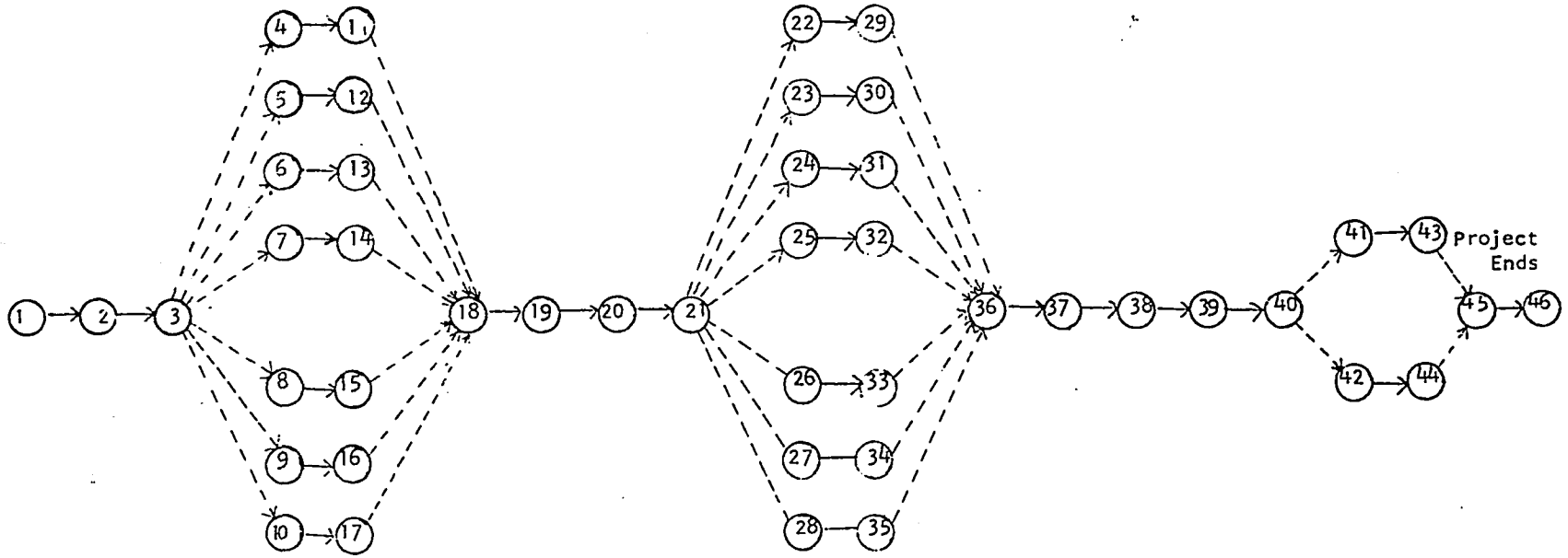
e. Staff or Institutional Orientation (Vol. I, 14-15; Vol. I, 43-44)

f. Reciprocal Commitments (Vol. I, 15-16; Vol. I, 44-45)

g. Administrative Organization (Vol. I, 16-17); Vol. I, 45-48)

Generally the Georgia program includes both preservice and inservice education and is divided into three levels--pre-professional, professional and specialist--each of which is approximately equal to two years of study. The first level provides for the beginnings of liberal education, preparation for paraprofessional service as a teaching assistant and the associate's degree. The second level "completes" the formal liberal education, provides for an area of teaching competency and meets requirements for the bachelor's degree. In the third or specialist's level, students may choose from among fifteen areas of expertise. Some 1,000 specifications for teacher performance were developed and organized into performance modules (PM's), each of which is to be mastered at one or more levels. Special features of the program described by the applicant include year-round education (Vol. I, pages 48-49), staggered school registration (page 49), use of mastery criteria (pages 49-50), and the "teach as taught effect" (page 50). Instructional procedures are individualized and emphasize clinical experience.

5. Description of design, development, evaluation of the program. The feasibility study begins with the organization, orientation, and training of the feasibility staff. Next, various teams are organized and undertake the design and development of one of the seven program components mentioned in 4 above. The resultant designs are synthesized into one comprehensive management program which, in turn, is subjected to cost analysis. During this process, the investigating teams concern themselves with time estimation, scheduling, time-cost trade-offs, resource allocation, and project control. The over-all feasibility process is presented via a PERT network on the following chart.



Event Identification

1. Begin staff organization, orientation, and training.
2. End organization, orientation, and training of staff.
3. Begin refinement of designs for development, implementation, and operation of model.
4. Begin design: behaviors component.
5. Begin design: candidate selection component.
6. Begin design: instruction.
7. Begin design: program evaluation.

(Event identifications continued on the next page.)

Network of Events for Phase Two

Network of Events for Phase Two
Event Identification (Con't.)

8. Begin design: staff orientation and training.
9. Begin design: reciprocal commitments.
10. Begin design: administration.
11. Design completed: behaviors.
12. Design completed: candidate selection.
13. Design completed: instruction.
14. Design completed: program evaluation.
15. Design completed: staff orientation and training.
16. Design completed: reciprocal commitments.
17. Design completed: administration.
18. Refinement of designs for development, implementation, and operation of components completed.
19. Begin synthesis of designs into comprehensive program for development, implementation, and operation.
20. Design for comprehensive program completed.
21. Begin study of feasibility of design by components.
22. Begin feasibility study: behaviors.
23. Begin feasibility study: candidate selection.
24. Begin feasibility study: instruction.
25. Begin feasibility study: program evaluation.
26. Begin feasibility study: staff orientation and training.
27. Begin feasibility study: reciprocal commitments.
28. Begin feasibility study: administration.
29. Feasibility study completed: behaviors.
30. Feasibility study completed: candidate selection.
31. Feasibility study completed: instruction.
32. Feasibility study completed: program evaluation.
33. Feasibility study completed: staff orientation and training.
34. Feasibility study completed: reciprocal commitments.
35. Feasibility study completed: administration.
36. Complete study of feasibility of design of development by components.
37. Begin synthesis of revised designs for program development, implementation, and operation.
38. Complete synthesis of revised designs.
39. Begin required preliminary cost estimate report.
40. Complete and submit preliminary cost estimates.
41. Begin draft for final report.
42. Begin refinement of cost estimate.
43. Complete draft for final report.
44. Complete refinement of cost estimates.
45. Begin final report.
46. Complete final report.

The suggested management process for specific components is found in Vol. II, pages 7-23. Part three of the proposal describes procedures which will be used to produce cost data. The three items of interest in the cost effectiveness study are the inputs (items for which money is spent), the outputs (benefits received from expenditures), and their relationships.

6. Description of society in mid-70's. The applicant makes a number of societal projections concerning population trends, value conflicts, automation, the knowledge explosion, polarization of political positions, leisure time, crimes and violence, science and technology and so forth. (See Vol. I, pages 3-5.) The projections are then presented with implications for the educational planner.

University of Houston. Robert B. Howsam

1. Description of the institution. Enrollment of 23,000. One hundred College of Education faculty. Four million dollar education building being completed, planned for innovation and adaptable to change.

2. Program model selected. Houston elected to use control notions from the University of Massachusetts program augmented by components from Syracuse and Michigan State.

3. Rationale for selecting the program model. The above program models were selected because components therein seemed to be in keeping with Houston College of Education assumptions about teacher education. The assumptions supported the following:

   a. Teachers should be self-renewing.

   b. Instruction should be individualized in the broadest sense.

   c. Teachers should be prepared for differentiated roles.

   d. Continuous diagnosis should be made of teacher education, student progress, and needs.

   e. Protocooperation among education agencies is desirable.

   f. Teacher education students must be helped to understand and cope with human problems.

4. Features of the program model. The Houston program requires that the prospective teacher demonstrate his ability to:

   a. Effect desirable change in pupils

   b. Perform noninstructional tasks

   c. Use interpersonal and group process skills

   d. Integrate his professional competencies into a unique and relevant teaching style

   Although noting the need for field experience, Houston planners feel strongly that "field influence [can] subvert campus effort." Consequently, they augur for relative isolation from the field with reality portrayal and testing being done through simulation, microteaching, or other forms of laboratory experience. Specifically, the Houston program is based upon two of the "cornerstone areas" of the

Massachusetts model--human relations and behavioral skills. Human relations training is designed to bring about greater self-awareness, ability to be attentive, greater empathy, and more flexibility. Much of the human relations and training described seems to focus on race relations. The human relations component would be implemented, modeling the Michigan State "Interpersonal Process Phase of IPR plan." A second part of human relations training, "New Experience," is also borrowed from the MSU model. Such experiences are directed toward helping the teacher to become more experienced as a human being by learning about and meeting institutionalized juvenile delinquents and homosexuals, watching death, or observing birth. Both elements of the UH Human Relations Component seem to be related as much to liberal as to professional education.

Behavioral skills are described as acts of teaching and consist of responding verbally and nonverbally, questioning, increasing student participation, creating student involvement and presentation skills. Again Michigan State University's component was selected to enlarge and implement a Massachusetts concept.

Besides human relations training and learning to perform behavioral skills required in teaching, UH gives special consideration to field or clinical experiences. Such experiences are often simulated or done in schools associated with the university. Comments are used about microteaching (scaled-down experience with content, process, and children), utilizing a career ladder approach, and including a Career Decision Seminar.

5. Description of design, development, evaluation of the program. Houston sees development, implementation, and sustained operation as stages in the program model's life. Within these stages program components and their relationship would be established. Descriptions of each component would include cost, space needs, human needs, and so forth. The procedure to be used to make decisions about what component to develop, implement, and sustain is referred to as heuristic programming and is described as enumerating each possible path [to a goal] and selecting the path which seems best. The most difficult issue--balancing goals and resources--can be resolved utilizing such processes.

   Specific steps in the total feasibility study of the Houston program include:

   a. Identification of goals and subgoals

   b. Examination of goals and subgoals for consistency and establishment of goal priorities

c. Examination of each goal and subgoal for implications for curriculum, instruction, evaluation, cost analysis, and so forth

d. Identification of alternative means to reach each goal (heuristic programming)

e. Comparison of alternative routes with respect to time, money, personnel

6. Description of society in mid-70's. Houston sees the following trends which would be investigated to determine their effects:

a. Urbanization

b. Integration of ethnic and cultural minority groups or the reverse

c. Larger units of organization

d. Internationalization

e. Increased foreign exchange of teachers and students

f. Changing family life

g. Changing values regarding work

h. Better communication

i. Increasing technology

j. Increase in crime

University of Illinois. Jack Easley, Jr. and Walter Feinberg

1. Description of the institution. Located 125 miles south of Chicago. Enrolls 35,000.

2. Program model selected. Draws from four Phase I efforts as follows:

   a. From Teachers College, Columbia, the concept of contact experience and the teacher as a decision-maker and evaluator.

   b. From Syracuse, the program for general education and sensitivity training.

   c. From Michigan State, notions of "management, structure, and feasibility."

   d. From Northwest Lab, same as c above.

3. Rationale for selecting the program model. Support comes from statements including:

   a. They [parts of each] "reflect the philosophy and structure of the University of Illinois."

   b. They "allow the university to extend its commitment [so that] the teacher training unit . . . will be a definite force for social and intellectual change in the communities that are touched."

   c. "The model developed by Teachers College is . . . the most realistic . . . and is most likely to contribute in a major way to needed changes in education. It takes into account a greater range of relevant theory . . . and provides . . . a . . . much greater heuristic basis . . . ." (For an elaborate defense of Columbia's program, see pages 15-17 in the proposal.)

   d. "We found the strength of both the Syracuse and Columbia models to be in the relatively few unsupported assumptions that they were willing to make . . . ."

   e. "To a large degree these models supplement each other."

4. Features of the program model. UI proposes a program which addresses itself to the solution of two major problems: social integration and integration of knowledge. The goal is to produce teachers who are:

   a. Prepared to work effectively in urban as well as rural and suburban schools.

b. Capable of making intelligent instructional decisions. The consequent program demands a broad liberal arts base with strong emphasis on understanding cultural differences.

The following items "compose a sketch" of the Illinois program and would be projected into policies and components:

a. An integrated student body at UI

b. A new administrative unit for teacher education

c. Use of joint appointments

d. Rewards "for those faculty members who value teaching"

e. A curriculum policy committee composed of students, faculty, and public school staff

f. New courses and ways of organizing courses; use of regular seminars called inquiry groups

g. Contact laboratory experiences (See page 9 for description.)

h. Study of children as learners

i. Blending curriculum; subject matter courses will be intimately related to methods of teaching those subjects

j. Study of teaching and learning

k. Use of CAI

l. Use of sensitivity training

m. Opportunities for trainees to practice and select their own teaching style

n. Teachers prepared for K-4, 5-8

o. Establishment of Inquiry Schools (See page 11.)

p. Use of feedback groups (See pages 11-12.)

q. Developing teachers as change agents

r. Use of internship exchanges (See page 12.)

s. Workshops for school board members

t. Development of an evaluation plan per Stake or Stufflebeam

The rationale for some of the above "items" is presented in the proposal on pages 17-32. A course learning model based on work done by Revak and Rosen is discussed on pages 25-32.

5. Description of design, development, evaluation of the program. Stages in UI's program development plans include:

   a. Establishing procedures for developing the initial catalog of knowledge and skills and procedures for this revision. UI would use Columbia's but would develop them further "in the direction of content and theory" and the empirical shaping of lists of characteristics for teacher candidates. (See page 33.)

   b. Establishing procedures for developing learning activities which include use of microteaching, simulation, sensitivity training, interaction analysis, and so forth.

   c. Establishing procedures for developing evaluation processes and instruments.

   Three committees are envisioned as necessary to plan for Phase III. They are the Program Planning Committee(responsible for planning courses), the Evaluation Planning Committee, and the Administrative Planning Committee. (See pages 36-39.) A pilot program is indicated using two or more sections of college classes (freshman and sophomores). Cost estimates will be obtained using cost accounting procedures for development, transition, evaluation, and recurring operation.

6. Description of society in mid-70's. UI identifies indicators which will be studied to determine requisite responses. They include:

   a. Trends in educational organization

   b. Court decisions and political outcomes

   c. Population trends

   d. Trends in urban planning

   e. Minority group behavior

   f. Trends in science and technology

University of Maryland. Walter N. Gantt

1. Description of the institution. Strategically located between two rapidly expanding urban cities. College of Education enrolls 4,000 undergraduate students, half that many graduate students, and has a teaching staff including graduate students and fellows of 400.

2. Program model selected. The Georgia Educational Model (GEM) was selected but is supplemented and modified by the Florida State and Massachusetts programs.

3. Rationale for selecting the program model. GEM apparently was selected because Maryland identified with its philosphy and program components mentioned on page 5.

4. Features of the program model. Some policies, principles, and components of the UM program are listed next. According to the applicant, details of their development would be influenced by the analysis of societal trends.

   a. Teacher training goals should be in terms of expected and measurable behavior.

   b. Practices for selecting students for the program should be clear and provide for alternatives for higher education for those not selected.

   c. Materials and teaching methods to be used are suggested as those contained in the GEM specifications.

   d. The undergraduate program is divided into preprofessional and professional.

   e. Areas of specialization and differentiation will be available.

   (For influence of others, read pages 6-10.)

5. Description of design, development, evaluation of the program. The feasibility study anticipates producing answers to these questions: What components do we have as compared with those required? Should we continue in this [development] direction? Are the expected results worthwhile? Are we capable of providing needed resources? A three-phase feasibility plan is provided (see proposal, pages 11-13) based in part on a model constructed by Deterline. The phases are analyses, development, and implementation. Cost analysis techniques are explained on pages 14-16.

6. Description of society in mid-70's. The applicant intends to make a systematic study to determine trends and influences. In so doing, UM will look to professional literature, federal resources, and private foundations.

University of Massachusetts. James M. Cooper

1. Description of the institution. Not provided.

2. Program model selected. Massachusetts. The applicant states that a number of ideas from other models are incorporated but does not identify them. (See page 5.)

3. Rationale for selecting the program model. "The Elementary Committee has unanimously adopted the [CETEM] for our future elementary education program . . . . There is an institutional commitment to this program that is probably unmatched by any other institution's program."

4. Features of the program model. Appendix B, pages 69-71, missing from the proposal, was to provide a summary of the model. An analysis by Chance[6] was drawn upon for the brief data following.

   Performance criteria are written for three areas and subareas of competence:

   a. Cornerstone Criteria--human relations and behavioral skills

   b. Content Criteria--science, language arts, mathematics, aesthetics, social studies, and foreign languages

   c. Service Criteria--evaluation, media, supervision, technology

   Trainees have the option of being generalists or specialists. Features include the use of multiple instructional routes, preparation for differentiated staffing patterns, continuous trainee assessment, and continuous inservice training. Several subsystems (control, administration, information, placement, evaluation, and analysis) provide program support.

5. Description of design, development, evaluation of the program. The applicant's feasibility study is designed to answer six questions.

   a. Is the model technically feasible in terms of available faculty, staff, equipment, physical facilities, student time, and so forth?

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[6]Chance, Charles A., "The University of Massachusetts Program Model" in The Ohio State University Analysis of the Nine Comprehensive Elementary Teacher Education Models. Edited by Donald R. Cruickshank. Washington, D.C.: U.S. Department of Health, Education and Welfare, 1970, pages 69-83.

b. Is the model economically feasible?

c. Is the model administratively feasible?

d. Is the model pedagogically feasible? Can students achieve the selected performance criteria utilizing the instructional alternatives?

e. Is the model acceptable to its clients (public school teachers, administrators, state departments, parents)?

f. How will the model insure and maintain its relevance?

The study is to be conducted in two phases. Phase I would secure expert judgments regarding the generalizability of the program to other institutions. Delphi Technique will be used to obtain a convergence of expert opinions. If the program is found to be acceptable and generalizable in Phase I, Phase II activities will be directed toward answering the six questions (a-f) posed earlier. Descriptions of procedures to be used in this event are found on pages 8-25. Computer-simulation of the program is described on pages 9-11 and in Appendix A, pages 50-67. A cost system is to be integrated with the computer simulation model. (See pages 12-14.) The cost system will be developed so that costs can be classified by function and variability. Various budget constraints will be evaluated from a traditional and PPBS viewpoint.

6. Description of society in mid-70's. Not available. Discussion of how the UM model would maintain its relevance is found on pages 23-25.

University of Michigan. J. Scott Fleming

1. Description of the institution. The School of Education is one of seventeen schools and colleges at Michigan. Programs in education are offered for secondary, nursery school, kindergarten, and elementary teachers. Special curricula are available for preparing others. Freshmen entering the university rank well above the national average on high school achievement and come from above average income families. Education is an upper-level program.

2. Program model selected. The proposal addresses itself to key ideas from the Phase I programs but does not adopt a model intact.

3. Rationale for selecting the program model. Several statements of belief are enumerated and discussed which undergird UM's program. (See pages 8-11.) Beliefs include the following:

   a. Only intellectually qualified persons should enter teaching.

   b. The teacher education program should promote development of knowledge, skills, and attitudes which enable teachers to understand themselves, our multicultured world, and their role as teachers and citizens.

   c. Teachers must be well educated in the liberal arts and science.

   d. Teachers must have adequate groups of fields of knowledge that contribute to improvement of educational theory and practice.

   e. Teachers must have mastery of methodology in all of its aspects.

   f. Since there is no evidence of a superior method for preparing teachers, several forms should be available.

   g. Teaching personnel should be prepared for differentiated roles.

4. Features of the program model. The student in the program must make five decisions.

   a. What will be his area of subject specialization--sciences, social studies or other?

   b. What will be his area of age group specialization--early childhood, early elementary, later elementary?

c. What will be his area of setting specialization--urban, suburban, rural?

d. What program option does he wish to pursue to prepare himself?

e. Shall the teacher, after receiving a bachelor's degree, go on for graduate training, or combine the two?

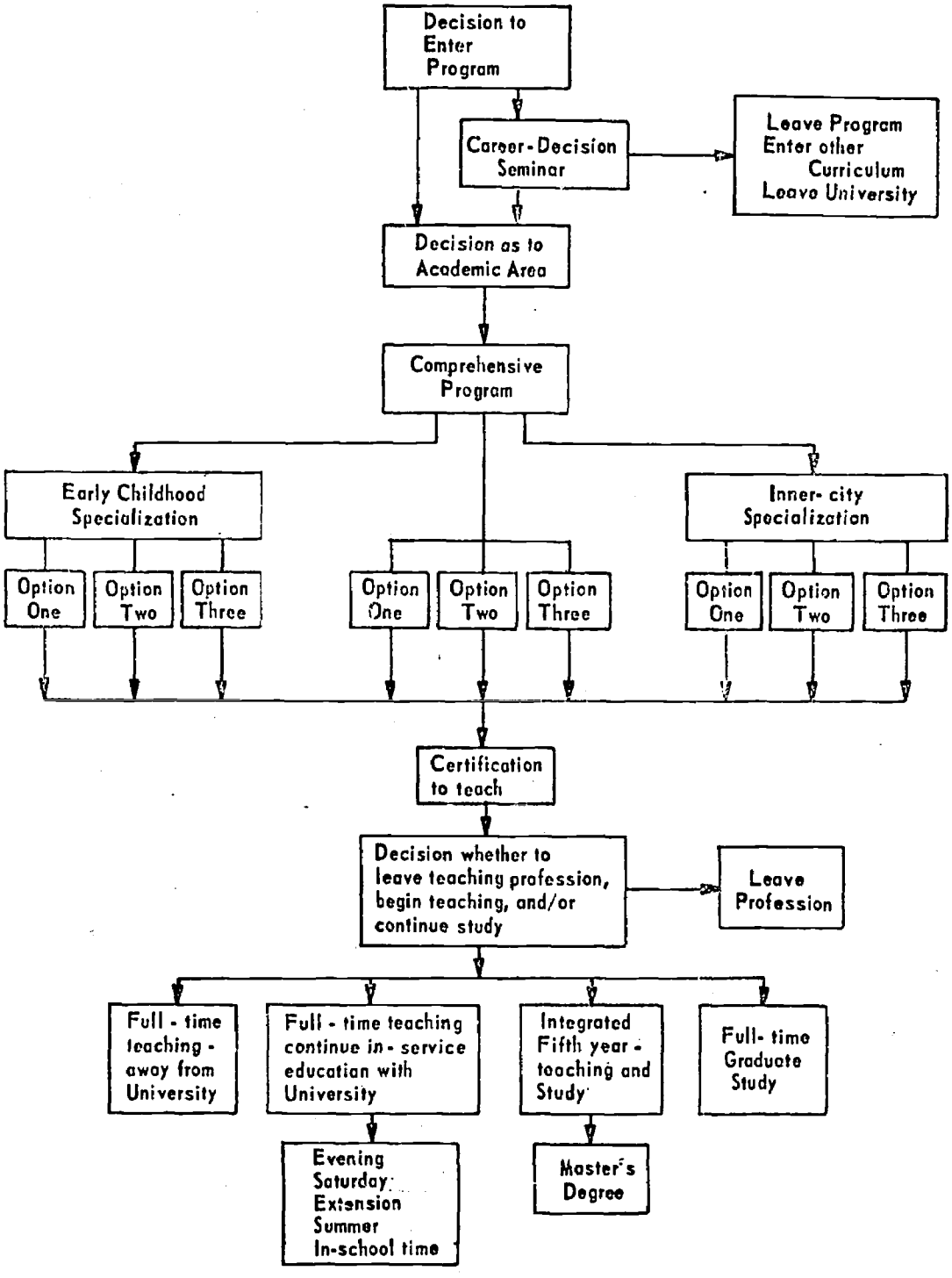
The decision points and options are illustrated on the chart following.

The three types of program options "range from a completely field-based experience to a description of the present program which combines course work and field-type experiences." Program options are illustrated on the next chart and discussed in the proposal on pages 22-37. In each option the first two years are primarily liberal education with a Career Decision Seminar at the end of the second year. Options involve a full professional year either as a junior or senior. That year is almost entirely school based. Option II provides professional education across those years with emphasis on observation, special methodology, and half-day student teaching. Option III offers professional education over two years also but emphasis is on general methodology, elective observation, but required half-day student teaching. Also, mention is made of providing students with opportunities to "practice facing the kinds of situations [they] will face in the classroom." In order to do this, simulation and microteaching techniques are called for. The CIPP model is suggested for program evaluation.

5. Description of design, development, evaluation of the program. A number of subcommittees will be formed to develop and implement the various components. Members will represent students, public schools, and the university. A tentative schedule for program initiation is found on page 68. Program costs in terms of three stages--development, implementation, and operation--are to be determined in the following categories: salaries and wages, equipment, materials and supplies, travel, services, and other. (See pages 75-80.) Costs per program component and per student are promised.

6. Description of society in mid-70's. The applicant cites areas of common agreement in Phase I. They are:

   a. That there is a transition from a white, western, Anglo-Saxon perspective to a multicultural one



DECISION POINTS IN STUDENT PROGRESS THROUGH PROGRAM

b. That advances in science and technology will create new problems as they solve old ones

c. That teachers of the future need subject matter specialization

d. That the elementary teacher needs improved human relations skills

e. That change must be accepted and, in fact, influenced by the elementary teacher

f. That new college-public school relationships must be developed

g. That use of simulation and microteaching experiences and other forms of early engagement is critical

University of Oklahoma. Gene Shepherd

1. Description of the institution. Information, perhaps taken from a university brochure, is available in Appendix D in the proposal. Nothing therein is directly related to the College of Education.

2. Program model selected. OU developed its model "including the desired characteristics . . . from the models developed by Syracuse University and Michigan State." Syracuse provided a general design of the organizational structure while Michigan State provided the design for modules and accompanying behavioral objectives.

3. Rationale for selecting the program model. Desirable characteristics for a teacher education program were established. It should:

   a. Have a system for gathering information, feedback, and evaluation for both the student and institution that would support learning and program change

   b. Provide a number of program alternatives

   c. Be individualized and self-directed

   d. Provide planned, structured experiences with pupils through a variety of means

   e. Support a sustained, mutually supportive relationship with public schools

   f. Be a five-year program resulting in certification and an advanced degree

   g. Be based upon a general-liberal program that develops literacy, a system for knowing

   h. Utilize behavioral objectives to govern selection and evaluation of curricula content and student activities

   After review of the nine CETEM program models, it was thought that the work at Syracuse and Michigan State would best serve these goals. In addition OU saw these programs as viewing the learner as an information processor which was consistent with OU's philosophy.

4. Features of the program model. Major components of the program are:

a. General-liberal education with special emphasis on humanities, social sciences and natural sciences (Credit is given to MSU program model.)

b. Scholarly Modes of Knowledge intended to "bridge the generation and knowledge gap in the areas of linguistics, communication, literature for children, fine arts, social science, science, and mathematics" (Credit is given to MSU.)

c. Curriculum methods in five general areas of elementary school subject matter and related methods (Credit to Syracuse)

d. Child Development based upon pertinent techniques, theories, and normative data from the Child Development area (Credit to Syracuse)

e. Teaching Theory and Practice including examination of the decision-making process, planning, practicing teacher behaviors, and so forth (Credit to Syracuse)

f. Professional Sensitivity Training emphasizing awareness of self, understanding the teacher role, professional role (Credit to Syracuse)

g. Social and Cultural Foundations (Credit to Syracuse)

h. Clinical experiences which accompany academic learning (Credit to MSU)

i. Fifth year resident internship and specialization (Credit to Syracuse)

j. Program evaluation and management systems designed to encourage creative behavior and professional growth of all persons associated with the program (Credit to MSU)

5. Description of design, development, evaluation of the program. Each component of the OU program will be judged in terms of its "psychological merit and the learning potential it can provide." More specifically two criteria are presented which will be used as "yardsticks." Stated as questions, they are: (a) Does the component view the learner as an information processing system receiving information, storing, manipulating, and synthesizing it into constructs and being able to apply the constructs to the real world? (b) What is the cost of development and implementation of each module? (See Part III, pages 1-2.) Another major function for the feasibility study is to determine the cost of converting

the present program to the new one. An overview of the feasibility process is presented on the next chart.

6. Description of society in the mid-70's. The dynamic nature of society is accepted. In order to assess the future the Michigan State evaluation is seen to be most useful. In addition, Oklahoma will conduct a survey of demographic and sociological information which will describe the elementary schools served by its graduates, identify technological advances which appear relevant, and obtain parental attitudes toward education and educational programs. Taken together the data would describe the then current social scene. As significant trends are detected, teacher education program objectives would be adjusted.

AN OVERVIEW OF THE PROPOSED FEASIBILITY STUDY

1. Each module will be evaluated upon its psychological merit and the learning potential it can provide.

2. A PERT chart will be developed for each module in priority order, presenting the sequence of events and activities.

3. A flow chart will be developed showing how each module will be phased into the ongoing program.

4. As each module is specified, the evaluative measurements for testing and evaluating its objectives will be designated. Where necessary, flow charts or PERT charts showing the development of unique instrumentation will be presented.

5. Plans will be developed for the physical facilities needed to sustain the operation of the program.

6. The personnel needs of each module, including programs of professional retraining, will be specified. Costs will be estimated.

7. A plan for increasing internal communications will be devised. A flow chart for putting it into operation will be presented.

8. A PERT chart will be developed showing the progress of each module from design through field testing and into standard operation.

9. An iterating evaluation will be designed to revise the modules sequentially.

10. A summary statement will be provided, including a master PERT chart and a PPBS analysis. A final cost-benefit statement will be prepared.

The end result should be a management package which will support a decision on whether to attempt the new program or not. If a go-decision is obtained, the package will serve as a guide to the development of the new program.

University of Pittsburgh and Cleveland State University (seen as an "Applicator Institution"). Horton C. Southworth

1. Description of the institution. Information is provided about school building programs in Cleveland and cooperative relationships which promise laboratory settings. The historical evolution of Cleveland State is noted. (See page 6.) See also page 41.

2. Program model selected. Pittsburgh and Cleveland State University faculties selected the Pittsburgh model but altered and extended it with notions provided by Syracuse, Ohio Consortium, Florida State, Michigan State, Northwest Lab, and Teachers College, Columbia.

3. Rationale for selecting the program model. Both applicant institutions feel strong commitment to individualized instruction. The first ten pages of the proposal state this need and the need for and value of the partnership between Pittsburgh and Cleveland State. The rationale for selecting the individualized approach is supported by learning studies which indicate that individuals tend to learn better when they:

   a. actively participate, rather than passively receive the learning experience.

   b. have an opportunity to participate in the selection of what they learn. (This factor may involve motivational aspects in that the opportunity to choose increases the individual's sense of control and worthiness. It may also operate because individuals learn best those things they feel are significant, and they may be more likely to see the significance of the task if they choose it themselves.)

   c. have opportunity for knowledge of results very soon after the response is made (before an incompatible or erroneous response is made or repeated).

   d. experience success. (Success is most likely when the task is matched to the individual's capabilities and need for challenge.)

   e. are expected to succeed.

   f. identify with a competent model.

   g. work on a task suited to their dominant learning mode or style.

h. work at their own pace or have a choice in the selection of pace.

Continued support for the notion of individualization is found on pages 12-15.

4. Features of the program model. Not all parts of each of the five components mentioned in the Pittsburgh Phase I Final Report are presented or discussed. Those parts which are presented are:

   a. Academic Education referred to in Phase II as Liberal Education. Rationale is provided on pages 16-20.

      Individualized instruction in the liberal arts is called for.

   b. Professional Education referred to in Phase II as Developing the Professional Knowledge Base for Teaching. The applicant stresses the need to develop a component which will provide students with a conceptual framework and modes of inquiry for extending the knowledge base in education. Provided that framework and requisite skills, the student in a clinical setting applies his conceptual framework, utilizes his data-collecting decision-making skills, and with the assistance of a university clinical team reflects on the decision process. (See pages 20-23.)

   c. Teacher competencies referred to in the Phase II proposal as Development and Rationale of Teacher Competencies. The applicant notes that many similarities exist between competencies Pitt and other program models require of their students. "One unique feature of the Pitt model is the emphasis on planning with the learner and helping the learner develop the skills and attitudes for gradually assuming responsibility for his own learning."

After reviewing the eight other program models, Pittsburgh extended its list of competencies from nine to ten, adding that the teacher must "serve as a professional leader and change agent in the schools." [For the original list of nine, see Rosso's analysis of the Pittsburgh program in Cruickshank (ed.) footnote 4.]

   d. Guidance referred to in the Phase II Proposal as the Guidance Requirement in Teacher Training. Considered a support base. Within the component seem to be housed responsibilities for improving interpersonal relations, providing occupational counseling and personal assessment, providing opportunity for self-direction, improving knowledge of self, and so forth.

e. Clinical Setting referred to as Clinical Requirement in Teacher Training. Presented on pages 29-31 are details of how this component is restructured after analysis of other programs. Emphasis is on establishing new coalitions with school districts, providing a model (of individualized instruction), and provision of non-stress clinical experience.

5. Description of design, development, evaluation of the program. During the feasibility study Pittsburgh and Cleveland State intend to involve each of their elementary faculties and a team of core investigators in analyzing and improving clinical experiences while identifying five "graduate scholars," each responsible for one of the model components. The graduate scholars with appropriate assistance would develop "management and role strategies," determine cost formulas, refine components, and so forth.

   In addition to accumulating feasibility data for Pittsburgh and Cleveland State, data will be obtained for other colleges adjacent to Pittsburgh. Several areas of feasibility will be subcontracted. They are development of an evaluation model, development of "architectural factors necessary to house an individualized teacher training program," construction of a room management study, and procurement of cost and management details that cannot be attained by the applicant. Four hundred elementary education majors will be involved in field tests.

   Costs will be determined for development, implementation, and operation phases utilizing a cost model by which dollar estimates can be made for major activities.

6. Description of society in mid-70's. Applicants suggest utilizing the "minimax" process. "A minimax model would be one which allows maximum flexibility and which has continual feedback of data from students, faculty, school settings, and community groups to be used in the revision of the program." (See page 11.)

University of Texas. Wayne H. Holtzman

1. Description of the institution. Location in Austin, largest institution in the University of Texas System. Enrollment is 32,000 with more than 1,700 faculty.

2. Program model selected. Massachusetts.

3. Rationale for selecting the program model. The Massachusetts model provides a framework consistent with UT's philosophy which, in part, recognizes (a) the need to prepare teachers to assume roles in schools of tomorrow, (b) the need for teachers to be "autonomous learners" (implies use of performance criteria and performance packages), and (c) the need to diagnose and assess student progress. In addition, UT supports the Massachusetts notion of differentiated staffing and specialization.

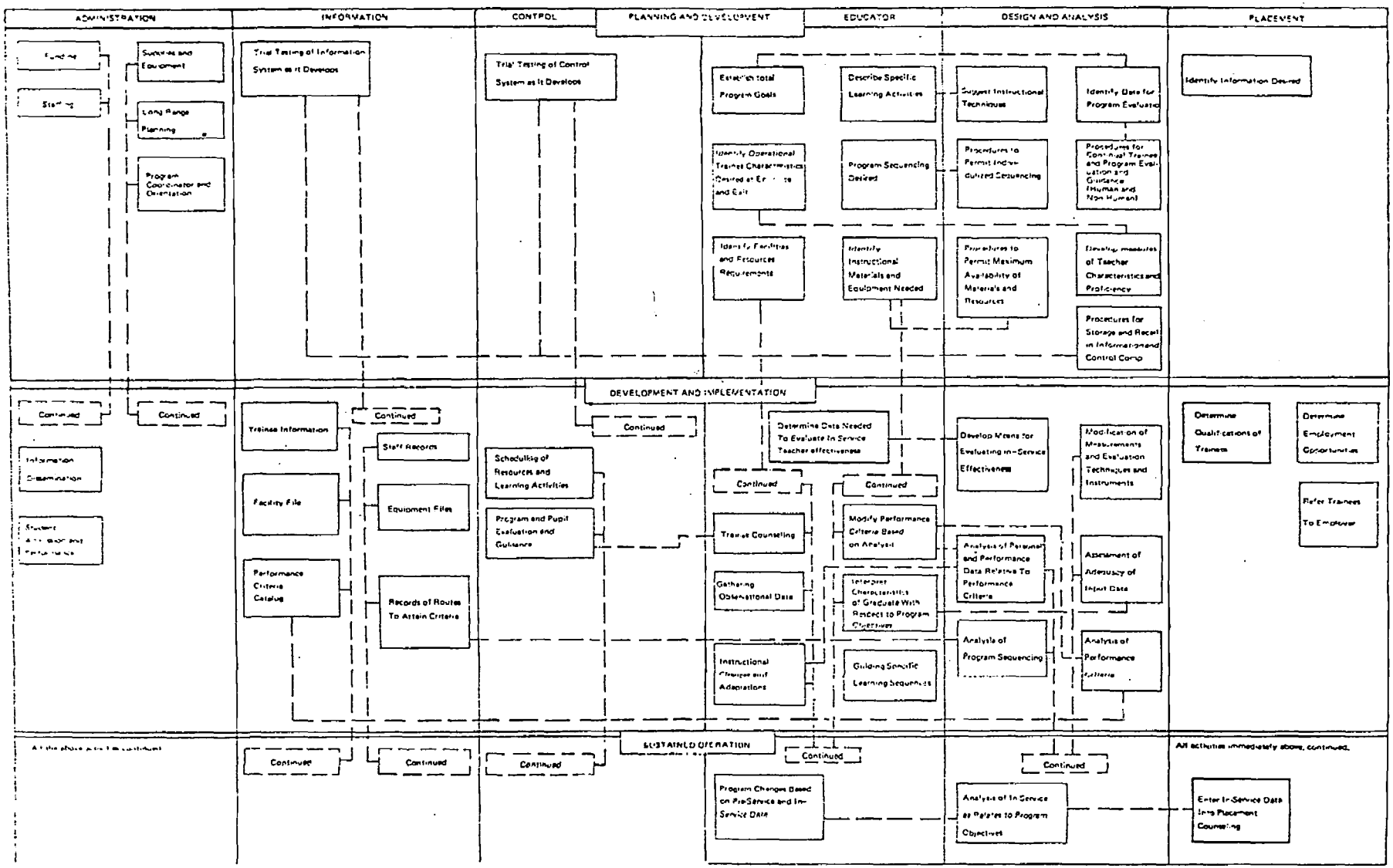
   Support for use of the Massachusetts program came also from the Research and Development Center and the Southwest Educational Development Laboratory which have aims in harmony with that model. (See pages 3-9.)

4. Features of the program model. Texas envisions teacher education consisting of an "ever-growing diversified 'library' of modules" which are performance criteria oriented and evaluated. The R and D Center at Texas already has organized to produce a system of modules for the undergraduate preparation of elementary school teachers.

   Generally the features of the Massachusetts model are like UT's. Additions and alterations, however, include (a) expansion of the Language Arts Component to include greater emphasis on writing, spelling, and linguistics; (b) modification of the Human Relations Component in terms of performance criteria; and (c) the addition of component on compensatory education. Additional components to be developed or revised are described in Appendixes A-M and besides those already mentioned include Behavioral Skills, Aesthetics, Social Studies, Mathematics, Foreign Language, Early Childhood Education, Evaluation, Technology, Supervision, Education of the Disadvantaged, and Special Education.

5. Description of design, development, evaluation of the program. The following chart presents the six over-all program components identified in the Massachusetts Phase I Final Report. Under each component are the activities in that program domain.

   Procedures for estimating costs and effectiveness are being worked out by College of Education and Business faculty.


ADMINISTRATION
INFORMATION
CONTROL
PLANNING AND DEVELOPMENT
EDUCATOR
DESIGN AND ANALYSIS
PLACEMENT
Funding
Staffing
Systems and Equipment
Long Range Planning
Program Coordination and Orientation
Trial Testing of Information System as it Develops
Trial Testing of Control System as it Develops
Establish Total Program Goals
Describe Specific Learning Activities
Suggest Instructional Techniques
Identify Data for Program Evaluation
Identify Operational Trainee Characteristics Desired at Entry and Exit
Program Sequencing Desired
Procedures to Permit Individualized Sequencing
Procedures for Continual Trainee and Program Evaluation and Guidance (Human and Non-Human)
Identify Facilities and Resources Requirements
Identify Instructional Materials and Equipment Needed
Procedures to Permit Maximum Availability of Materials and Resources
Develop modules of Teacher Characteristics and Proficiency
Procedures for Storage and Recall in Information and Control Comp
Identify Information Desired
DEVELOPMENT AND IMPLEMENTATION
Continued
Information Dissemination
Trainee Information
Facility File
Performance Criteria Catalog
Staff Records
Equipment Files
Records of Routes To Attain Criteria
Scheduling of Resources and Learning Activities
Program and Pupil Evaluation and Guidance
Determine Data Needed To Evaluate In-Service Teacher effectiveness
Trainee Counseling
Gathering Observational Data
Instructional Changes and Adaptations
Modify Performance Criteria Based on Analysis
Interpret Characteristics of Graduate With Respect to Program Objectives
Guiding Specific Learning Sequences
Develop Means for Evaluating In-Service Effectiveness
Analysis of Personal and Performance Data Relative To Performance Criteria
Analysis of Program Sequencing
Modification of Measurements and Evaluation Techniques and Instruments
Assessment of Adequacy of Input Data
Analysis of Performance Criteria
Determine Qualifications of Trainee
Determine Employment Opportunities
Refer Trainees To Employer
SUSTAINED OPERATION
All the above are to be continued
Program Changes Based on Pre-Service and In-Service Data
Analysis of In-Service as Relates to Program Objectives
Enter In-Service Data Into Placement Counseling
All activities immediately above, continued.

The derivation of component costs will be based upon the year 1973-74 when UT will graduate 600 elementary teachers.

6. Description of society in the mid-70's. UT notes that such data will be obtained by drawing, among other resources, upon (a) a chapter by Ralph Tyler in Agenda for the Nation, (b) the Institutes on Educational Policies Studies at Stanford and Syracuse, (c) the program of technology at Harvard, (d) the Center for Coordinated Education at University of California at Santa Barbara, and (e) the Center for the Study of Democratic Institutions.

Consortium of the State Universities of Ohio Through the University of Toledo. George Dickson

1. Description of the institution. The Ohio Consortium is a federation of eleven state-supported institutions of higher education in Ohio. University of Toledo, Ohio University, and Ohio State University particularly arranged for staff members to participate in Phase I and Phase II planning. Descriptive information about each institution and its service region is found on pages 2-17 and in Appendix A, pages 106-149.

2. Program model selected. The Ohio model "with appropriate modifications from all other designs" except Columbia's.

   Following is a summary of what and from whom the Ohio Consortium "borrowed or modified."

   a. Selection, Admission and Retention practices from Georgia, Pittsburgh, and Michigan State

   b. Guidance and Counseling practices from Syracuse, Massachusetts, Michigan State, and Georgia

   c. General Education from Syracuse, Michigan State, Northwest Lab, and Massachusetts

   d. Educational Technology from possibly Michigan State and Massachusetts

   e. Learning-Teaching Process from Pittsburgh and Massachusetts

   f. Intern-Type Experiences from Michigan State and Syracuse

   g. Inservice Education from Michigan State

   Descriptions of borrowed features are found on pages 26-32.

3. Rationale for selecting the program model. After a review of the other Phase I programs, the applicant "remained convinced that the Ohio design was efficacious and in important aspects superior to the other models." Most models were able to add something to the Ohio program. The most useful design was Michigan State's since it "produced compatible specifications." Rationale for selecting characteristics of the other programs is found on pages 26-32.

4. Features of the program model. The Ohio Consortium design began with a departure from remarks made by Don Davies. (See page 20.) Next it was established that the program would

prepare six groups of educational personnel as follows: preservice preschool and kindergarten teachers, preservice elementary teachers, inservice teachers at all levels, college and university personnel as teachers of teachers, administrative personnel for elementary schools, and supportive personnel as paraprofessionals and aides.

Further it was accepted that the multiunit school and team teaching concept of the Wisconsin R and D Center for Cognitive Learning would provide the prototype school of the future. Five contexts were selected as benchmarks for developing specifications for a professional educational program whose output would be multiunit school personnel. The contexts are instructional organization, educational technology, contemporary learning-teaching process, societal factors, and research.

Behavioral objectives were developed for each context for each of the six previously mentioned educational groups. The chart following shows how the resultant 818 behavioral specifications are organized by educational (target) group and by context. Thus the Ohio Program provides specifications which the user may assemble in curriculum components to suit his unique purpose.

5. Description of design, development, evaluation of the program. Feasibility of the program will be established by these procedures:

   a. An inventory of the existing resources of the Consortium.

   b. An analysis of current socioeconomic conditions and a projection of future conditions. Projections will be prepared to accommodate a variety of possible and probable developments.

   c. The construction of a sophisticated computerized "simulator" which is a device to represent the model program and manipulate it in innumerable ways in response to changes in objectives or present and future socioeconomic factors.

   d. The determination of needed resources of all types and their costs.

   e. The exercise of the simulator to determine the relationships of all conditions included in 1-4 above.

   f. All aspects of the feasibility study will be organized by objectives by means of a process called PPBS which is compatible with the simulator mentioned in 3 above.

Detailed descriptions of simulator application, methods for simulating the model program, procedures for determining economic, sociopolitical, and technological changes on program methods, materials, and costs are found on pages 33-80.

6. Description of society in mid-70's. No description is provided but Chapter V, pages 52-61, explains how three factors (economic, sociopolitical, and technological) were identified and how they will be studied to determine their future impact on methods, materials, and cost of the program model.

SUMMARY OF COMPOSITE SPECIFICATIONS FOR

SIX TARGET POPULATIONS BY CONTEXT

Target	Instructional Organization	Educational Technology	Learning-Teaching Process	Societal Factors	Research	Total
Preschool	157	60	102	74	67	460
Elementary	151	75	102	69	67	464
Inservice	144	85	113	91	77	510
College and University	79	93	96	65	116	449
Administrative	62	70	103	126	77	438
Supportive	22	71	-	18	-	121

University of Wisconsin. M. Vere De Vault

1. Description of the institution. Little provided. The evaluation of the elementary teacher education program since its inception in 1948 is reviewed on pages 2-3.

2. Program model selected. Wisconsin developed its own Phase I program model but was influenced in the development of some elements as follows:

   a. Music, Michigan State

   b. Physical Education, Florida State

   c. Media and Technology, Ohio Consortium

3. Rationale for selecting the program model. Applicant notes that selection of the Wisconsin Elementary Teacher Education Project (WETEP) "is a logical extension of the . . . philosophy developed . . . since the inauguration of model exemplary programs in elementary teacher education . . . ." Specifically, WETEP "is designed to incorporate the many facets of intellectual challenge which typify scholarly teaching and research at the University of Wisconsin."

   Objectives of WETEP include:

   a. Developing a center for improvement of teacher education

   b. Improving teacher-student contacts

   c. Preparing teachers for roles in schools with varying responsibilities and with children of varied backgrounds

   d. Facilitating closer relationships between schools and universities

   e. Providing a faculty re-education facility

   f. Providing a center for development and evaluation of teacher education materials and facilities

   g. Providing a research facility wherein problems of teacher education may be studied

   h. Providing a center for graduate studies in teacher education

4. Features of the program model. The applicant discusses many features on pages 6-12. They are noted as responses to USOE's guidelines and, among others, include:

a. Personalization--increasing both the quantity and quality of individual, personal contact between faculty and student through (1) utilization of seminars and individual conferences and (2) provision of opportunities for students to engage in self-selection and self-pacing. In this case the applicant seems to use personalization interchangeably with individualization.

b. Use of a systems approach. The system will include an extensive data bank which "will provide for the control of the presentation of instructional modules, for the management of assessment information for individual students, and for the management and control of feedback information concerning the effectiveness of the many parts of the WETEP program."

c. Use of an assessment program based upon "criterion rather than norm reference testing."

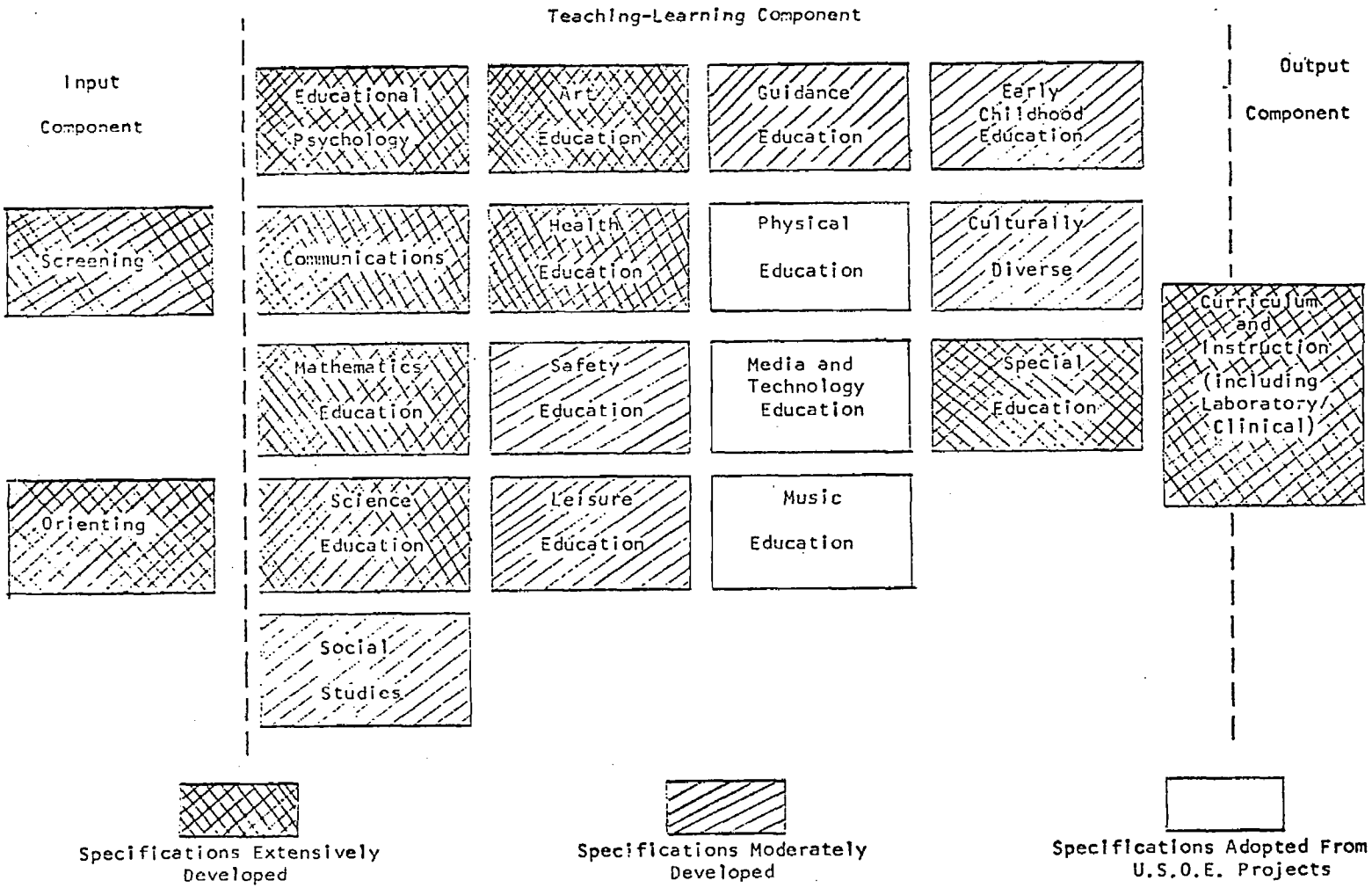
d. Development of a consortium of public schools "to facilitate curriculum development in the schools to parallel WETEP principles in teacher education."

e. Career-long provision of continuing education of WETEP products. Plans are presented to make instructional modules available via "technological transmission."

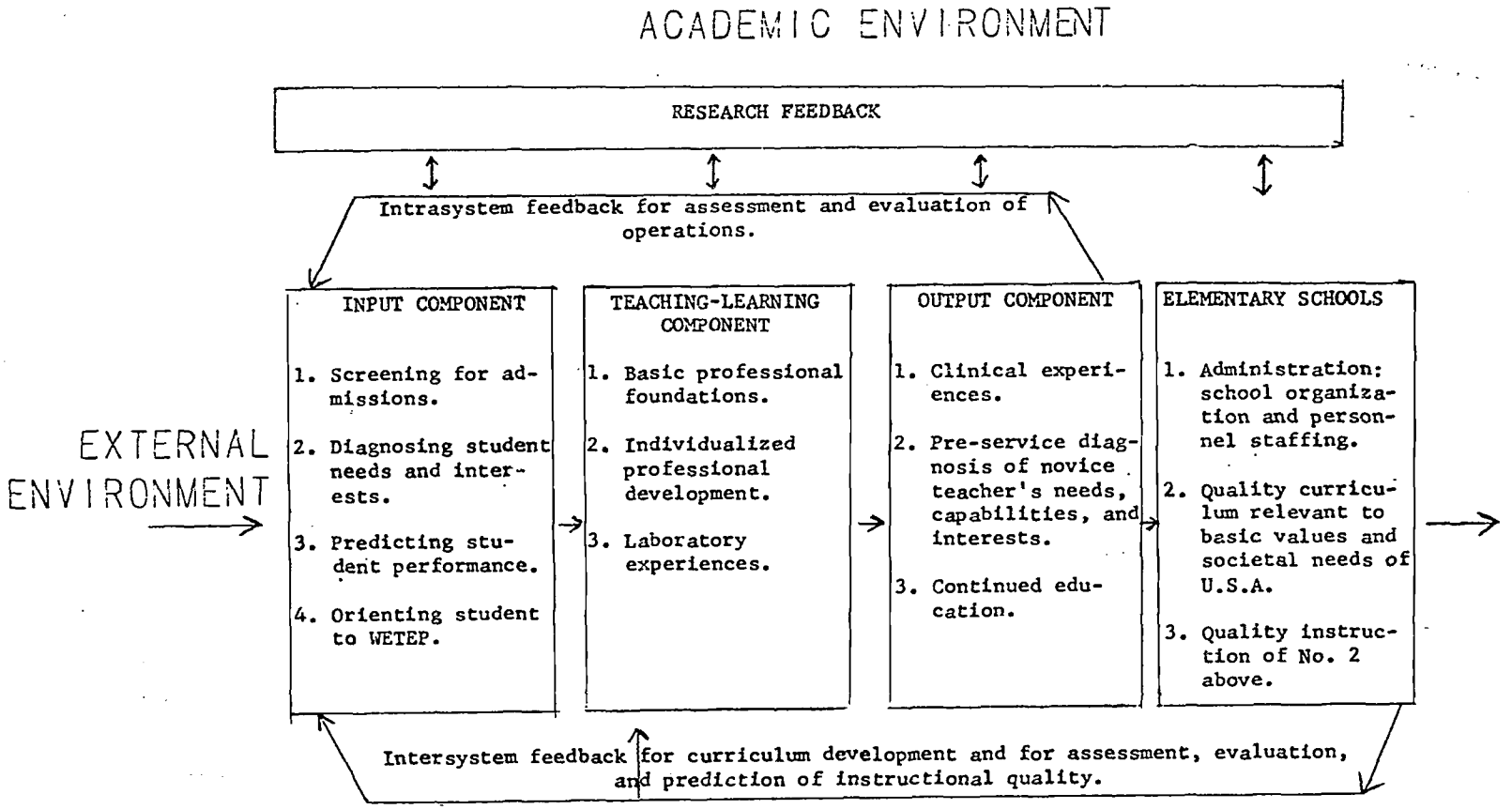
Specific elements, their genesis and stage of development can be noted on the next chart. Discussion is found in the proposal on pages 3 and 6.

Over-all, the program is seen in systems fashion as containing an input component (provides for selection and entrance of teacher education candidates), an output component (consists of the intern experience and the full-time career of the WETEP teacher), and a feedback component (supplies control and guidance of students and assesses the system itself). The following chart, Cybernetic Model for WETEP, illustrates the three components, their functions and interrelationships.

5. Description of design, development, evaluation of the program. Utilizing PPBS, an economic analysis of WETEP will be conducted in order to determine the cost of developing, implementing, and maintaining WETEP. Information on costs and benefits will be generated. Such cost analysis will be done at the "program element level" and some costing will be done "at the level of specific modules." The applicant states that, "Attempts will be made to assess the costs of partial program implementation on other campuses . . . ." Detailed



PATTERN OF DEVELOPMENT OF SPECIFICATIONS FOR WETEP ELEMENTS



CYBERNETIC MODEL
FOR WETEP

description of the use of PPBS and PERT is found on pages 13-24. Project management procedures utilizing Critical Path Methodology are presented on pages 24-31.

6. Description of society in the mid-70's. The applicant describes a Center on Futuristics in Education (page 31). Its staff will engage in "continuing social analysis oriented toward economic, political, technological, and ethical issues of the future." It appears that at the time the proposal was submitted, the Center did not exist.

   The WETEP program abstracts a section of the proposal (see pages 33-63) entitled "Schooling for 1975," describes "new" roles for the teacher (small-group instructor, television teaching or tele-writing, tutor-challenger, learner) and notes that schools of tomorrow will be media centered and computer facilitated. A second paper, "Teacher Roles for 1975," anticipates that teachers' priorities of teacher behavior will be in this order: (a) modeling, (b) guidance, (c) management and administration and, (d) information transmission. Information transmission, the most commonly perceived task of teachers today, will be assumed by "technological aides." Time consuming managerial tasks will be assumed more by paraprofessionals and computers. (See pages 34-35.)

Washington State University. Frank B. May

1. Description of the institution. Located at Pullman, graduates about 200 elementary education majors each year.

2. Program model selected. WSU utilized several objectives noted by Michigan State, Pittsburgh, and Syracuse including:

   a. From Michigan State, that the elementary teacher must be one who is basically well-educated, engages in teaching as clinical practice, is an effective student of human learning, and acts as a responsible change agent

   b. From Pittsburgh, that the program should be based upon individually prescribed experiences

   c. From Syracuse, that the elementary teacher must have a high degree of self-awareness, flexibility and understanding of others

   Consequently, much of the WSU program reflects the influence of these three Phase I models particularly Michigan State's. Although utilizing MSU's General Education Component, WSU modified it to make it "less structured for today's student." Too, WSU decided initially not to design competency modules utilizing behavioral objectives. (See pages 5-6.)

   Michigan State's Scholarly Modes of Knowledge Component also was adopted with modifications eliminating the option of the teacher as a generalist.

   Clinical experiences, again MSU derived, are taken and revised. The applicant discusses use of "student-teaching centers," a career-decision seminar wherein students learn to observe elementary pupils and teachers, tutoring, a human learning seminar to provide "self understanding and understanding of child behavior," observation in the Pullman Schools and in the Campus Nursery School where focus will be upon the trainee's emotional reaction to the classroom, analysis of classroom episodes via videotape, microteaching, work as a teaching assistant, and finally service as a paid intern.

   MSU's Professional Use of Knowledge Component will be used, the modules organized into three categories: (1) Reading, Mathematics, Art, and Audio Visual; (2) Social Studies, Science, Children's Literature, and Language Arts; and (3) advanced modules related to a major.

   A human learning component derived from the MSU and Syracuse program was described. Human learning seems to encompass

human growth and development and study of "learning processes." The Counseling Component, another MSU-Syracuse derivative, contains the Career Decision Seminar mentioned under clinical experience. Specifically, the Seminar contains five "elements": career decision, non-participative observation, sensitivity training, methods of observation, and tutoring. Little difference can be seen between this component and others.

3. Rationale for selecting the program model. Not clear. The implication is that elements chosen were harmonious with WSU notions.

4. Features of the program model. The sequence of the components for the program is presented clearly on the following charts. Note that the trainee has the option of either a four or five year program and that the order depends upon the program followed. The five year route is presented first.

   Over-all features in addition to those mentioned earlier include self-directed learning, computer management of learning activities, provision for many learning styles, and preparation of teachers for three age levels: 3-6, 6-10, 10-13. Brief mention is made of preparing teachers for work with "educationally deprived pupils."

5. Description of design, development, evaluation of the program. An inservice program for WSU faculty of education is planned which will attempt to train members in the writing of behavioral objectives and the development of the competency modules. Later efforts will be made to engage liberal arts colleagues in similar activity. The applicant envisions programmed materials being produced and used.

   A variety of student entrance assessment was suggested including diagnostic tests and inventories. Post-tests. Conferences will be used for interviews and oral examination.

   Evaluation and revision of the program will be based upon such things as average student time to complete a module, which modules students select most, student performance and assessment made by the clinical staff.

   Cost accounting procedures are to be used. Both nonrecurring (one-time) and recurring (continuous) expenses are to be determined for staff, plant, equipment, materials, and service. The Rand Corporation model of cost accounting is illustrated (Volume 3, pages 2-3). That system requires obtaining research and development costs, investment costs, and annual operating costs.

Sequence of Components in Model Programs for
Elementary Education Majors at Washington State University

Route #2: Four Years

Terms 1 & 2 ("Freshman" Year)

Career decision seminar - 4 semester hours
General education electives - 26-28 hours

Term 3: Summer (student may choose Term 12 as an alternative)

General education electives and/or outside major - 8-10 hours

Terms 4 & 5 ("Sophomore" Year)

Human learning seminar - 2 semesters - 4 hours
Curriculum modules - Set 1 - 8 hours
Physical education modules - 2 hours
Health education modules - 2 hours
Music modules - 2 hours
Outside major - 12 - 20 hours

Term 6: Summer

Outside major - 4-10 hours
Music modules (if not taken previously) - 2 hours
Physical education modules (if not taken previously) - 2 hours
Health education modules (if not taken previously) - 2 hours

Terms 7 & 8 ("Junior" Year)

Alternate two teaching-assistant experiences with curriculum modules - sets II and III (see "Teaching-Assistant Year" - Figure 3)

Term 9: Summer

Outside major - 5-10 hours
Music modules (if not taken previously) - 2 hours
Health education modules (if not taken previously) - 2 hours
Physical education modules (if not taken previously) - 2 hours

Terms 10 & 11 ("Senior" Year)

Internship
Group Counseling

Term 12: Summer

For those who missed Term 3 or are short of credits

Sequence of Components in Model Program for
Elementary Education Majors at Washington State University

Route #1: Five Years

Freshman Year

General education electives - 30-32 semester hours

Sophomore Year

Career decision seminar - 2 semesters - 4 hours
- Career decisions
- Sensitivity training
- Methods of observing children and teachers
- Non-participant observation
- Tutoring

General education electives - 8-10 hours.
Outside major - 16-22 hours

Junior Year

Human learning seminar - 2 semesters - 4 hours
- Group counseling related to self-understanding and understanding of children
- Non-participant observation

Curriculum modules (competency based) - set 1
- Reading - 2 hours
- Math - 2 hours
- Art - 2 hours
- A.V. - 2 hours

*Music modules (competency based) - 2 hours

*Physical education modules (competency based) - 2 hours (may be taken in sophomore year)

*Health education modules (competency based) - 2 hours

Outside major - 12-14 hours

Senior Year

Alternate two teaching-assistant experiences with Curriculum Modules - sets II and III (see "Teaching-Assistant Year" - Figure 3)

Fifth Year

Internship - regular teaching under direction of Intern Consultant who six interns; intern has reduced salary (see "Financial Arrangements for Teaching-Assistant Year and Internship" - Figure 4)

Group Counseling

*Modules to be developed outside of Department of Education.

Extensive discussion of cost-accounting philosophies and procedures is found on pages 4-10 of Volume 3.

Individual and societal cost-benefit ratios are discussed in Volume 3, pages 11-12.

6. Description of society in the mid-70's. WSU noted that as a participant in the Eight State Project on Designing Education for the Future, it would draw heavily upon those conference reports which discussed society as it might be in the 80's.

Western Washington State College at Bellingham. Herbert Hite

1. Description of the institution. WWSC has approximately 7,200 students, about 30 per cent of which are elementary education majors.

2. Program model selected. Northwest Regional Laboratory.

3. Rationale for selecting the program model. According to the applicant, the ComField program describes the best possible training program for elementary teachers and also fulfills the intent of teacher education institutions of the State of Washington. In addition, WWSC felt that it has a certain advantage over others in testing feasibility of ComField. The director of the feasibility study was the leader of the task force which developed the ComField instructional program. That instructional program was, in part, based on an experimental instructional system developed and tested under the supervision of the applicant. A WWSC doctoral student already had completed a feasibility study of the instructional system. ("In effect, the design for this study had already been developed and tested.") A training program for implementing the objectives and systems of ComField was already underway at Western. Four other teacher education faculties, and the staff of the State Superintendent's Office agreed to work collaboratively with WWSC.

4. Features of the program model. For a complete description, see the ComField Phase I Final Report. Generally the Northwest Regional Laboratory (ComField) program consists of a sequence of individualized learning experiences. By completing a series of such experiences the beginning teacher, described as the Instructional Manager, demonstrates his ability to bring about behavioral change in elementary pupils. The ComField instructional program consists of four stages. Stage I describes prerequisites for admission to the program. Stage II enables the Instructional Manager "to judge the appropriateness of learning behavior." Stage III is a laboratory in which competency is developed and demonstrated. Stage IV is "practice in actual instructional management with pupils."

   The instructional setting is not defined in the ComField proposal. WWSC describes elements of it to include:

   a. Use of instructional modules of twenty-five students, one teacher educator, one part-time assistant (advanced graduate student).

   b. A self-counseling apparatus. Subgroups within each student group of twenty-five and a counseling leader for each subgroup.

c. A campus environment to include a learning laboratory for use by groups and subgroups. Emphasis in the facility is placed upon use of technology and increasing interpersonal communication.

d. A local school setting for the practicum.

e. A management component containing a systems designer, systems engineer, evaluation teams, and computer-based management and control.

For elaboration of the features enumerated above, see pages 9-11.

5. Description of design, development, evaluation of the program. The design of the feasibility study is presented on pages 13-26. Majors steps are:

   a. Development and implementation in Seattle Schools of a sample of each major component of ComField

   b. Analysis of "costs and consequences" of developing and implementing samples of components

   c. Estimation of costs and consequences of developing and implementing the total program at WWSC

   d. Extrapolation of costs of implementation to other institutions in western Washington

   Cost data ("administrative, human, and educational") will be obtained for each of the major components in ComField (Entry Behaviors, Foundation Systems, Laboratory Systems, Practicum, Staff Training, Management and Evaluation).

6. Description of society in mid-70's. Although mention is made of "judging the appropriateness of . . . ComField objectives in light of anticipated needs of education in the mid-70's," no yardstick or referent seems to be available (See page 23).

Wisconsin State University at Oshkosh. David L. Bowman

1. Description of the institution. Producer of the greatest number of elementary teachers of any school in Wisconsin.

2. Program model selected. Although WSU-O did not mention any specifically, the applicant declared that, "After a lengthy review of the [nine] Phase I models . . ., it was decided . . . [to use] an eclectic approach." Apparently WSU-O had a number of Phase I suggested program components already in operation.

3. Rationale for selecting the program model. WSU-O appears, in many instances, to have selected Phase I components consistent with their ongoing and developing teacher education program. There may be some relationship too between components selected and "major student-oriented goals" (presented on page 3). Unfortunately no rationale for use in program selection is made explicit.

4. Features of the program model. The program is designed to provide students with an individualized curriculum. Provision is made for differentiated student abilities, interests, and needs. Several time options are available according to student needs, abilities, and goals. They are presented on pages 6-7.

   Various components are mentioned for use during the feasibility study. They include:

   a. Knowledge, skill, and competencies (pages 12-15) component which requires that students have general knowledge ("about honored disciplines"), depth of knowledge in a discipline or broad field, professional skills, self-awareness and a positive self-concept, and empathy for others.

   b. Early and continuing participation in schools and interaction with students (pages 15-16).

   c. Clinical experiences (pages 16-18). WSU-O describes its approach to clinical experience called LINIS (Limited Non-Isolated Instructional Segments) which seems to be a modification of microteaching.

   d. Personal development seminars (pages 18-19) intended to improve self-awareness, to develop more positive self-concepts and to increase empathy for others. The seminars appear to rely on modified sensitivity training.

   e. Student teaching/Internship (pages 19-20).

f. Learning Centers (pages 20-21) to provide multi-media materials and experiences to help students to be more successful in their college work.

5. Description of design, development, evaluation of the program. Unlike most programs, WSU-O seems to have already developed and is using some components. How new components are to be developed, implemented, and evaluated is not as explicit as it might be. Scant mention is made of "faculty committees . . . formed and . . . working on the development of interdisciplinary courses . . . " and "a nucleus of faculty are already involved in planning, designing, and field testing various aspects of the . . . program."

   Cost estimates for each component of the model program are to be determined for development, implementation, and operation. The base unit for such calculations will be one of the following:

   a. Cost per class

   b. Cost per professor

   c. Cost per student

   d. Cost per student-teacher contact hour

   Pages 31-32 describe in detail how such assessments would be made for one component.

6. Description of society in mid-70's. Not provided.

Summary of Results of Objective 2.

1. Description of the model institution. Evidently applicants did not understand what they were to do in response or chose to ignore the request to describe a model institution which could be developed and the institutional setting in which it would reside.[6] There is some reason to believe the former since many reacted by providing descriptive data about the college of education and/or the university. Most data provided were extremely general and probably did little more than ensure Washington that the applicant was eligible by graduating more than one hundred elementary teachers annually. A few institutions, as they explained program features, alluded to teacher training facilities as learning laboratories, multi-unit schools, and centers for educational studies, applied instruction, and management of educational systems.

2. Program model selected. According to the guidelines the respondent was to describe "a model teacher training program based upon the specifications designed by one or more of the groups engaged in Phase I."[7]

Table II illustrates which Phase I programs were selected as a basis for Phase II proposals. Table III, essentially a summary of Table II, is a list of Phase I programs showing the number of times each was selected as a major source and as a supplement or minor source.

Although twenty of twenty-seven applicants chose to give major attention to one model, that attention was well distributed. Massachusetts and Michigan State were selected most often as primary sources--four times each. Syracuse and Michigan State were selected most often as secondary sources--thirteen and twelve times, respectively. Michigan State and Syracuse were chosen over-all sixteen and fourteen times, respectively. Since the potential for any Phase I model being selected in either category was thirty-four, no Phase I model seemed to be seen as generally attractive by even one-half the applicants. Michigan State, Syracuse and Massachusetts were likely to be chosen often since in Phase I they were among those who had developed more detailed programs. Teachers College, Columbia was likely to have less appeal since it was essentially a five-year program.

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[6]Appendix A, pages 6-7.

[7]Ibid., page 3.

TABLE II

PHASE I PROGRAM MODELS SELECTED AS BASE
BY PHASE II APPLICANTS

	Florida State	Georgia	Massachusetts	Michigan State	Northwest Regional Lab	Ohio Consortium	Pittsburgh	Syracuse	Teachers College
1. California State College at Hayward				a	a				X
2. Drake University	X				a			a	
3. Florida State University	X								
4. Iowa State University	a		a	X	a	a		a	
5. Michigan State University				X					
6. New York University	a		X			a		a	
7. Northwestern State College of Louisiana							X		
8. Oklahoma State University			a	a				a	
9. Oregon College of Education	a		a	a	X		a		a
10. San Jose State College				X					
11. Southern Methodist University						X	a		
12. Southwest Minnesota State College	a	a	a	a	a	a	a	a	
13. Syracuse University								X	
14. University of Georgia	a	X	a			a			
15. University of Houston			X	a				a	

X indicates major source.
a indicates additional sources or sources jointly used.

TABLE II (continued)

		Florida State	Georgia	Massachusetts	Michigan State	Northwest Regional Lab	Ohio Consortium	Pittsburgh	Syracuse	Teachers College
16.	University of Illinois				a	a			a	a
17.	University of Maryland	a	X	a						
18.	University of Massachusetts			X						
19.	University of Michigan			a	a	a	a		a	
20.	University of Oklahoma				a				a	
21.	University of Pittsburgh	a			a	a	a	X	a	a
22.	University of Texas			X						
23.	University of Toledo for the Ohio Consortium	a	a	a	a	a	X	a	a	
24.	University of Wisconsin	a			a		a			
25.	Washington State University				X			a	a	
26.	Western Washington State College					X				
27.	Wisconsin State University at Oshkosh		a		a	a			a	

TABLE III

INCIDENCE OF SELECTION OF PHASE I PROGRAMS AS PRIMARY OR SECONDARY SOURCES BY PHASE II APPLICANTS

Phase I Program	Chosen as Primary Source	Chosen as Secondary Source	Total Frequency of Selection
Florida State	2	9	11
Georgia	2	3	5
Massachusetts	4	8	12
Michigan State	4	12	16
Northwest Lab (ComField)	2	9	11
Ohio Consortium	2	7	9
Pittsburgh	2	5	7
Syracuse	1	13	14
Teachers College, Columbia	1	3	4

3. Rationale for selection of the program model. In addition to ascribing the source of each program component taken from the Phase I model or elsewhere, applicants were asked to present the rationale for selection.[8] Table IV indicates the nature and frequency of rationales presented for adopting Phase I programs or components.

TABLE IV

REASONS GIVEN FOR SELECTION OF PHASE I PROGRAMS OR COMPONENTS

The Phase I program or component selected	Frequency of choice
1. Reflected values similar to those of the applicant institution	17
2. Was familiar (e.g., developed by the applicant in Phase I)	5
3. Was well done--a superior job	3
4. Had curriculum features similar to the applicant institution's	2
5. Was realistic	1
6. Responded to problems of higher education	1
7. Was flexible	1
8. Was committed to academic excellence	1
9. Has a similar view of society in the future	1
10. Was consistent with new directions in elementary education	1
11. No rationale for selection could be determined.	1

[8] Ibid., page 6.

Applicants seemed to select Phase I programs which presented notions about teacher education most like their own. The other reasons for selection were not supported with much frequency. There is some reason to believe that not all, and perhaps only a very few, of the applicants studied all nine Phase I final reports. For instance, there is no discussion of the comparative merits of each by any applicant nor can it be inferred that time permitted such discussion to take place. It is likely that given the time strictures and the size of the Phase I output, applicants had to make early and probably casual distinctions among the programs. Too, if any Phase I Final Reports were late they may have received less enthusiastic attention. Since the phenomenon of curriculum selection is so important and yet so poorly understood, further efforts should be made to determine how selections actually were made.

4. Features of the program model. Phase II guidelines requested respondents to "indicate the various components of the model."[9] Synthesis of the components or features of Phase II programs is presented in Table V.

TABLE V

FEATURES OF PHASE II PROGRAMS

1. Teachers to be trained for emerging tasks--for example, the teacher as an institution builder and change agent.
2. Evaluation of teacher trainees to be based upon use of performance criteria.
3. Success of teacher trainees to be based upon their ability to demonstrate desirable change in pupils.
4. Teacher trainees to be taught to use behavior modification techniques.
5. Various styles of teaching to be explored by trainees.
6. Trainees to study systems for analyzing teacher and pupil behavior.
7. Techniques of developing and producing curriculum materials to be mastered.
8. Trainees to be given earlier, more, and more intensive experience with children.
9. Trainees to experience a paid internship as a capstone experience.

[9] Ibid., page 7.

TABLE V (continued)

10. Wide utilization to be made of simulations (Selected experiences which are controlled and less complex than the real world).

11. Trainees to be familiar with many media and forms of technology including the computer and how it can serve as an administrative and instructional aid.

12. Trainees to study the microethnology and dynamics of the classroom.

13. Trainees to learn to work in teams.

14. Social, political, historical, and technical nature of schools to be studied.

15. Trainees to experience personal and group awareness and improve human relations skills through forms of sensitivity training.

16. Trainee instruction will often take place utilizing modules characterized by pretests, alternative teaching-learning strategies, and post-tests of a behavioral nature. Individualization and personalization of instruction is stressed.

17. All teacher trainees to be exposed to a rich and demanding program of general education which is to be reshaped in a way to model the desired behavior of that trainee as a teacher.

18. Human learning to be learned.

19. Styles of inquiry to be learned.

20. Trainees to be given early insight and experience into teaching as a career.

21. Areas of professional education concentration to be available, including teaching of learning disabled, societal outcasts, very young children, and so forth.

22. Trainees to be prepared for differentiated roles (Career Ladder notion).

23. Multiple entrance and exit points to be used for moving into or out of the program.

24. Trainees to be prepared for professionalism.

25. Study of methodologies of teaching to continue (e.g., reading, language arts, social studies, science, mathematics).

TABLE V (continued)

26. Child development to be studied.
27. Evaluation and research skills to be learned.
28. Scaled-down teaching including microteaching to be utilized.
29. Much of the program to be self-directed.
30. Teacher education to require at least five years of preparation.
31. Continuing education beyond graduate level is to be maintained.

Almost without exception, applicants responded by indicating what their program would be like. They described the curriculum to be studied, instructional strategies to be employed, and techniques for evaluating learning. In addition curricular, instructional and evaluative support subsystems were identified. Attention also was given to problems such as student selection and the continuing education of teachers.

5. Description of design, development, evaluation of the program. Guidelines requested respondents to "describe the techniques, e.g., network of flow charts, analyses and strategies to be used to allocate and control the resources . . . necessary to carry through a program of development, implementation and sustained operation." Specifically, applicants were to indicate components and how each would be "designed, planned, developed, field tested, phased in and evaluated."[10] As indicated in the Procedures section, Objective 2, pages 5 and 6, certain components were suggested by USOE. A review of the selected data presented in Table VI reveals that a variety of approaches to the task was suggested. Group work and division of labor were ubiquitous. Most attention seems to have been given to earlier stages of program change (design, development) and less to operational stages (implementation, operation, evaluation). Systems approaches abounded and common terms (uncommon to teacher educators) and activities included time estimation, simulation, scheduling, time cost trade-offs, resource allocation, cost accounting, project control, PERT and PPBS. Apparently much "outside" help was obtained by applicants as they responded to this task.

[10] Ibid., page 7.

TABLE VI

SELECTED APPROACHES FOR DESIGNING, DEVELOPING, EVALUATING COMPONENTS OF THE PHASE II PROGRAMS

Approach 1 (See chart on page 19.)

a. Develop instructional materials
b. Conduct training and retraining programs
c. Evaluate the effectiveness of the training and retraining programs
d. Determine cost estimates including salaries and wages, fixed expenses, equipment costs, cost by program phase, cost per student and so forth

Approach 2 (See chart on page 24.)

Assess several dimensions of feasibility--fiscal, logistical, programatic, human in relation to system--operation, implementation, development, text and program

Approach 3 (See this report, page 29.)

Task forces are assigned to five jobs: (1) general administration of the program, (2) program development, (3) information retrieval, (4) research, evaluation and cost benefit analysis, and (5) other organizational structure. Questions are posed for each task force and procedures are suggested for each to follow

Approach 4 (See this report, page 38.)

a. Development of educational projection for 1970's
b. Development of operational program specifications
c. Development of plans for managing development, implementation, and operation of the program
d. Derivation of cost estimates

Approach 5 (See this report, page 52.)

Each of eight task forces responsible for one of the following:

a. Refine Phase I program according to a review panel's recommendations and in keeping with other Phase I programs
b. Design alternative strategies for development and operation
c. Determine implementation and operation requirements
d. Analyze cost
e. Design an "exportability" instrument
f. Devise a simulation of decision-making required
g. Determine final specification as a result of cost analysis and cost effectiveness studies
h. Prepare the final report

TABLE VI (continued)

Approach 6 (See this report, page 55.)

a. Organize, orient, and train feasibility staff
b. Each team organized undertakes the design and development of one program component
c. Resultant designs synthesized and subjected to cost analysis

Approach 7 (See this report, pages 67-68.)

The feasibility study was to address itself to the following questions:

a. Is the model technically feasible in terms of available faculty, staff, equipment, facilities, student time, etc.?
b. Is the model economically feasible?
c. Is the model administratively feasible?
d. Is the model pedagogically feasible?
e. Is the model acceptable to its clients?
f. How will the model ensure and maintain its relevance?

Approach 8

See chart in this report on page 76.

6. Description of society in the mid-1970's. One part of the proposal was to "describe the procedures by which [the applicant] would make a systematic analysis of what American society would be like in the mid-1970's."[11] Table VII present the approaches taken. Again applicants were not in general agreement--less than one-fourth concurring on any one approach. Most popular were identifying indicators and trends to be studied and presenting trends and conditions which affect schools and teacher education. In general, applicants were not truly responsive to the guidelines. Even though most (twenty-one) addressed the task, few provided the exact data requested. Agencies contacted for assistance did not appear to be too helpful. It may be that we do not have the know-how or the capacity to project such trends and that those responsible for projections cannot account for all the variables which are causative.

[11] Ibid., page 6.

TABLE VII

RESPONSES TO THE REQUEST TO PROVIDE PROCEDURES FOR ANALYZING WHAT AMERICAN SOCIETY WOULD BE LIKE IN MID-1970

Applicants	N*
1. Not responding to the request	6
2. Identifying indicators and trends which would be studied	6
3. Presenting trends and conditions which would affect schools and teacher education	6
4. Reporting they would obtain such data from existing agencies including the Syracuse and Stanford Educational Policy Centers	3
5. Using projections already made by a Phase I institution	2
6. Suggesting committees be formed to study the problem	2
7. Suggesting a plan for keeping the program up-to-date at all times, disregarding the target mid-1970	2
8. Planning revision based on internal feedback rather than on external conditions	1
9. Establishing a permanent component to determine data	1
10. Using an earlier study (Eight State Project) which provided the data	1

*N does not equal the twenty-seven applicants since some noted more than one approach.

Objective 3. To determine which Phase I programs and components seemed to be most attractive.

In determining Objective 2 (How responsive applicants seemed to be to the guidelines), data were collected which answered questions raised by other project objectives, notably Objective 3 (Which Phase I programs were most attractive), and Objective 4 (What were common program features). Consequently discussion of this objective and the rest will refer the reader to earlier pages and tables.

In part, in order to determine how responsive applicants were to the guidelines, an assessment was made to find out whether or not each indicated the Phase I program(s) he had selected. Table II on pages 102-103, presents data showing the number of times each Phase I program was selected as a major and/or supplementary source. Table III, page 104, summarizes the data in another way, showing the incidence of "popularity" of each Phase I program. The text on page 101 discusses these findings.

Objective 4. To determine common program features contained in Phase II proposals.

Again, in order to determine applicant responsiveness to guidelines, the section on Objective 2 presented relevant data. Table V, pages 106-108, illustrates features of the Phase II programs. Table VIII, following, presents the common features from Table V classified into four categories--General, Curriculum, Instruction and Evaluation. The General category lists common processes and philosophic concerns. The Curriculum category presents common curricular features and could be envisioned as an eclectic teacher education program by considering each of the eighteen categories as components. The third category presents common notions regarding instruction while the last, Evaluation, notes unusually common concern for utilizing performance criteria and performance assessment.

As suggested above, the composite picture of features provided could well serve as another program model in addition to the nine in Phase I and the inclusion of Wisconsin's from Phase II. Departments, schools, and colleges of education would do well to note the mood of the educator from the twenty-seven applicant institutions reviewed. Educational publishers should find herein keys to curriculum materials which need to be fashioned. Very few of the curriculum notions are now pervasive in the elementary teacher education curriculum scene which still seems almost totally preoccupied with methodology. Newer trends in content seem to be: (1) preparing the teacher as a change agent, (2) accepting operant conditioning as a mode of shaping behavior, (3) investigating the classroom in terms of what teachers and students do, how they do it, and with what effects, (4) preparing teachers to develop curriculum and curriculum materials rather than just to use them, (5) preparing teachers increasingly to utilize media and

TABLE VIII

CATEGORIZED FEATURES COMMON AMONG
PHASE II PROPOSALS

General Characteristics (including process)

1. Establishment of objectives for curriculum and instruction utilizing performance criteria
2. Provision for earlier and more productive experience with children
3. Provision of a paid internship as the capstone experience
4. Preparation of teachers for a variety of roles and stages of professionalism suggested by differentiated staffing and Career Ladders
5. Provision of multiple entry and exit points for the student
6. Provision for career-long professional growth of graduates
7. Development of support subsystems for program design, development, implementation, and evaluation
8. Establishment of closer ties with public schools--transfer of some instructional responsibilities to school settings
9. Provision of greater freedom for students to select from a wider range of content and experience
10. Redefinition of faculty roles--greater emphasis on individual and small group interaction with teachers, the teacher as instructional manager
11. Interdisciplinary planning for teacher education

Curriculum (content)

1. Change and the teacher as a change agent
2. Child behavior modification techniques
3. Styles of teaching
4. Analysis of pupil-teacher behavior and interaction
5. Developing the curriculum and materials of instruction

TABLE VIII (continued)

6. Media and technology

7. The classroom as a social system and a microethnology

8. The school: its historical, social, political and technical nature

9. Human relations: personal and group awareness

10. Child development and human learning

11. Styles of scholarly inquiry

12. Teaching as a career

13. Teaching special children (Including learning disabled, societal outcasts, very young)

14. Professionalism

15. Methodological teaching

16. Evaluation and research skills

17. Technical skills of teaching

18. Rich and demanding program in general education; greater emphasis upon the Behavioral Sciences

Instruction

1. Use of simulations, mirror teaching, and other forms of controlled, focused, scaled-down experience

2. Building of interpersonal and team teaching skills

3. Students taught as they are expected to teach; college teacher as a model

4. Self-direction as often as possible

5. Integration of theory and practice; immediate application of classroom knowledge in simulated or real settings

6. Useof modules characterized by pretests, alternative teaching-learning strategies, and post-tests of a performance nature

7. Individualized and personalized instruction

TABLE VIII (continued)

Evaluation

1. Based upon student's ability to bring about desirable change in pupils

2. Based on college instructor's ability to bring about desirable change in students

3. Based on performance criteria

---

technology, (6) studying the classroom and educational scene in the manner of the behavioral scientist, (7) helping teachers to become more aware and understanding of themselves, (8) understanding and applying what is known about human learning, (9) providing teachers-to-be with career information and career choice activities, (10) preparing teachers to work with more diverse kinds of children, (11) making teachers aware of the concept of professionalism, (12) teaching technical skills, and (13) producing teachers who have evaluation and research competencies.

Objective 5. To determine unique program features.

It was not always possible to identify something unique about each program. However, it was possible to determine something unique about either the program, the way it was developed, or information the applicant made available. Table IX presents such data for each of the applicant institutions.

The information, expanded and indexed properly, could be used as an encyclopedia by teacher education planners. Subsequently the planner interested in a program which gives significant attention to differentiated roles or which provides multiple entry and exit points would be referred to the New York University proposal, while one seeking descriptions of ongoing special programs would be guided to the Sane Jose College work. It is impressive to note the amout and quality of data available but yet unmined and unprocessed. Perhaps a Readers' Guide to the Phase II proposals should be developed.[12]

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[12]Phase I final reports were so analyzed and a publication resulted. See Joel L. Burden and Kaliopee Lanzellotte, eds. A Reader's Guide to the Comprehensive Models for Preparing Elementary Teachers (Washington, D.C.: ERIC Clearinghouse on Teacher Education, 1969).

TABLE IX

UNIQUE ELEMENTS FOUND IN PHASE II PROPOSALS

California State College at Hayward

- o Selection of a program in terms of its ability to overcome major problems in society and higher education
- o Helping students identify teaching styles through literary models
- o Emphasis on behavior modification techniques

Drake University

- o Use of Drumheller Module Design Model for constructing modules

Florida State University

- o Development of a data-based system, oriented to accepted performance criteria, for admission to teacher preparation
- o Establishment of a network of portal schools tied to a preparation institution

Iowa State University

- o Preparation of teachers N-8 for all settings and all forms of school and classroom organization
- o Development of a Talent Component consisting of experiences organized around six world-of-work needs

Michigan State University

- o Attention to total curriculum instead of just professional education

New York University

- o Attention to differentiated roles and provision of multiple entry and exit points

Northwestern State College of Louisiana

- o Development of a Laboratory Experience School designed specifically for individualized instruction and central to training pre- and inservice teachers in that methodology

UNIQUE ELEMENTS FOUND IN PHASE II PROPOSALS (continued)

Oklahoma State University

- Presentation of a theoretical model for developing the teacher education curriculum

Oregon College of Education

- Efforts to test and obtain feasibility of program model in several locations both within and outside the state

San Jose State College

- Description of several ongoing teacher education programs

Southern Methodist University

- Specific indication of how its present program is to be modified based on two models

Southwest Minnesota State College

- Utilization of components from eight Phase I program models

Syracuse University

- Carefully developed and well explained process to be undertaken for judging feasibility

University of Georgia

- Extension of its program to include components from Florida State, Massachusetts, and Ohio Consortium

University of Houston

- Concern that, because field experience can subvert campus effort, greater use must be made of simulation and microteaching as forms of laboratory experience

University of Illinois

- Placement of teacher education in a new administrative unit to be planned by personnel from many departments within the university

UNIQUE ELEMENTS FOUND IN PHASE II PROPOSALS (continued)

University of Maryland

- o Notation of resources available for use in making societal projections

University of Massachusetts

- o Development of a computer programmed simulation model of the program which caused UM to produce more specific program information

University of Michigan

- o Provision of three types of program options from which students may choose
- o Provision of an integrated fifth year program combining full-time teaching at full salary with continued supervision, study, and guidance by the university

University of Oklahoma

- o Consideration given to determining change-over costs from present to new program (Most developers mention only start-up costs of the new program.)

University of Pittsburgh

- o Strong section on support of methodology of individualization of instruction
- o Formation of a working relationship with an "Applicator Institution"

University of Texas

- o Strong association with an R & D Center (Texas Research and Development Center)

University of Toledo for the Ohio Consortium

- o Extensive adaptation of simulation to test program alternatives

University of Wisconsin

- o Inclusion of abstracts of position papers undergirding the development of the program's various subsystems, elements, modules, and so forth

UNIQUE ELEMENTS FOUND IN PHASE II PROPOSALS (continued)

Washington State University

- Substantial development of clinical experiences sequence

Western Washington State College

- Inclusion of exhibits including (1) a sample of a proposed instructional system on writing behavioral objectives in accordance with Bloom's Taxonomy of Educational Objectives: Cognitive Domain, (2) a sample of a proposed instructional system on demonstrating interaction competency, and (3) a trial form for evaluating Instructional Managers during the practicum

Wisconsin State University at Oshkosh

- Some components already operative and thus visible

Objective 6. To determine how applicants felt about Phase II competition.

Of the thirty-four applicants considered by the panel of field readers, only eleven responded to the request made by the reviewer for "comments and feelings" regarding Phase II competition. Edited comments from those eleven are provided below. Reviewer responses are in parenthesis.

(1) A private midwestern university:

> I don't think that the U.S. Office could have devised a program . . . which could better alienate teacher education institutions and discourage them from participating in Federally initiated programs. From the beginning it seemed clear that the institutions participating in Phase I would be accepted in Phase II if they so desired. (In actuality eight of the nine Phase I institutions submitted proposals--Teachers College, Columbia University did not--and all but one, Pittsburgh, were funded. One other proposal, University of Wisconsin, was supported.)
>
> The one benefit derived by the participating institutions was that they were pressured into reading the nine project reports from Phase I. I seriously doubt if this would have been done without the motivation stemming from the lust for federal funds.
>
> Another concern which discouraged us was the kind of institution the U.S. Office was seeking to develop the models. The institution had to be East of the Mississippi and a large state university. Although I have no data before me, I would assume that half the teachers in the United States are trained west of the Mississippi and the institutions training the bulk of them are typically smaller than any one of those funded. No one seems concerned about developing a model for training teachers in such settings. (Using the Mississippi as a relative geographical demarcation, it is true that only one Phase I or Phase II winner, the Northwest Regional Laboratory, later the Oregon College of Education, was west of that landmark. Six of the nine were what might be termed "large state univerities," two were private universities while one was a consortium headed by a regional educational laboratory. The thirty-four Phase II proposals were distributed among twenty-one states. See Figure 1, page 10, for a map showing the geographical distribution. Of the thirty-four submitted, eighteen were from so-called "Eastern" states.
>
> For a list of institutions submitting Phase II proposals see Table I, page 8. Actually the second smallest institution submitting a proposal, Oregon College of Education, was funded for Phase II. Some of the largest "Eastern" institutions were

not, including University of Michigan, NYU, Maryland, Illinois, and Purdue. Only ten institutions competing were in the under 10,000 student category. Smaller institutions may have felt they lacked the capacity and resources, or agreed that such institutions are discriminated against.)

We are deeply concerned about the closed corporation that exists in the funding operations of the U.S. Office of Education. We recognize that the ties are not official and that efforts are being made to guard against such practices. The Washington members make a conscious effort to avoid it. On the other hand, their friends and professional colleagues whom they respect and trust are in these large Eastern institutions and it is down this path that they move when they seek advice. There are few opportunities for unknowns to submit a proposal for funding which will be processed through impartial, objective channels. The big projects tend to be staffed and housed by invitation.

(2) A public far western college:

I had only two and one-half weeks to prepare the proposal when several months would have been more in order. We got it in with one day to spare, however. (As mentioned earlier the total time period available under the most favorable conditions was two and one-half months.)

(3) A public midwestern university:

We have some mixed feelings about the whole Phase II operation. What we object to is not the work involved but the lack of feedback on how our proposal was evaluated or any kind of reactions to it. We were also very disturbed that of the eight proposals funded, only one had not been involved in Phase I. This seems to indicate confirmation of the concern that many of us had and called to the attention of the Office of Education regarding the real possibilities of being funded if you had not participated in Phase I. I wrote all these things to the Office of Education and have yet to receive even a courtesy reply. (Evidently no feedback was given to unfunded proposal writers. Phase II proposals were evaluated by a panel of field readers representing private non-profit organizations and colleges of various sizes, geographic locations, and so forth. Criteria for selection of winners are found in Appendix B. It is true that the odds of being funded in Phase II if the applicant had not been funded in Phase I were small--one in twenty-six.)

(4) A public midwestern university:

I question the appropriateness of my proposal for Phase II because its essence was developed as part of a separate research proposal. We did not make any major modifications in the plans of our study as originally written nor did we attempt to follow specifically the directions in Phase II as pertained to the proposal. Our proposal was submitted after a discussion with Mr. X at USOE in the hope that there might be a remote possibility that evaluators would look upon our project as really an additional model under Phase I.

(5) A private city university on the East Coast:

Regardless of the funding aspect, working on the proposal was a splendid activity for our division. This study represents directions in which we must move and the proposal preparation provided an opportunity for us to concentrate our thinking in a way which we had never previously quite achieved. I think one of the difficulties in retrospect was that I was unable to get from Washington any criteria for their judgment or evaluation or final decision-making. As it turned out all but (one) of the final awards were to institutions in Phase I. It would have been helpful if we had been told that USOE felt an obligation to continue to support most of the Phase I institutions. It seems clear that those who came into Phase II without having been in Phase I were at a decided disadvantage. It was impossible for us to accept any of the Phase I studies as a plan which represented our beliefs. Another annoying factor has been my inability to get any detailed statement of the reviewers' comments. I see no reason why USOE could not be completely honest with us in this request. All I have gotten is some generalized statement of no help at all. (Again Washington seems to be negligent in responding to applicant requests for data. Yes, institutions were supposed to use at least parts of the Phase I work so this applicant would be at a disadvantage.)

(6) A public state university on the East Coast:

We considered our participation in Phase II to be an excellent opportunity to appraise our existing program and to project some plans for the future. However, it was a foregone conclusion that those institutions whose Phase I models had been accepted would have an advantage in Phase II. It might have been more feasible to have fostered development of one or two different components at selected institutions. In this way more schools would have had an opportunity to make commitments within their resources.

(7) A public West Coast state college:

We have received no comments or evaluation from USOE. Hopefully your study will shed some light on how panels of reviewers make decisions regarding grant awards as well as "how educators make decisions regarding teacher education curriculum." The fact that only thirty-four Phase II proposals were submitted in large part resulted from the rumors that decisions as to who would receive grants had been made long before the deadline for submission of proposals. I know of two institutions who decided against writing proposals for this reason. Final awards to eight rather than ten institutions, seven of which were developers of the original models has done little to negate the rumors. In addition, it would seem that the feasibility of introducing a model program into an institution which had not developed the original model needed to be studied to learn if the Phase I program was generalizable to various institutions.

The length of time between distribution of the Phase I models and deadline for submission of Phase II proposals gave a distinct advantage to institutions which had developed the models and knew them thoroughly. It was nearly impossible to try to integrate elements of several models into a coherent program in this time, to say nothing of involving large groups of faculty members in making decisions about the merits of Phase I models and components.

Limitations on length of proposals also restricted attempts to integrate various models or to modify aspects of one model. (See Appendix B for criteria used by the panel of readers. True, many of the original eighty who submitted in Phase I may have been discouraged. Consequently less than half that number sought Phase II awards. No Phase I grantee was promised a Phase II award and, in fact, Pittsburgh applied but its proposal was not considered responsive or adequate. Eight rather than ten awards were made because of limited funds. True, the feasibility of using Phase I models in other institutions was not studied. That was partly the purpose of Phase II activity. True, institutions in Phase I had a large head start. True, as mentioned earlier, time was extremely limited for all involved. A quick skimming of the Phase II Guidelines, Appendix A, does not support a limitation on proposal size. Perhaps a limitation was imposed in another document.)

(8) A public, midwestern university:

Our feelings may be summed up in the remark that, with the exception of the Teachers College Columbia program, Phase I specifications were heavily slanted in the direction of the

arbitrary choice of behavioral objectives and feedback based on them. We feel this position (1) ignores the greater part of the literature on teaching, learning, human understanding, and social change, and (2) grossly oversimplifies communication and systems theory. Furthermore, the crisis of our times demands attention to communication between groups that are culturally different and this was largely overlooked. (These comments are more directly related to Phase I decisions.)

(9) A public midwestern state college:

The proposal which we prepared with the assistance of the Regional Educational Laboratory was an attempt to build the framework of a model we might implement at this institution. We have spent considerable time studying the Phase I reports and acknowledge that they have been of considerable help in our planning. We did ask for an evaluation from USOE but received no response. If you are successful in obtaining this evaluation, could you share it with us?

(10) A public midwestern state university which was funded in Phase II:

The university has never so extensively explored aspects of cost analysis. It seems to us at the present time that our efforts will be of much value if we are funded in Phase III.

(11) A public southeastern university:

I believe one of the greatest problems is time. Our work must be creative and at the same time rushed. Another "hang up" that caused us difficulty was that the RFP failed to give a clear explanation of the meaning of feasibility. To our knowledge never before in higher education has there been such an extensive study of feasibility in program development.

Thus, of the eleven of thirty-four applicants responding to the reviewers' request for comments, many felt (1) that participation in Phase I and general politicking made the competition unfair, and (2) that USOE was remiss in not responding to requests for evaluation of their efforts. It should be emphasized that most of those participating and not funded still looked upon the effort as worthwhile and preliminary to remodeling their own teacher education programs.

CHAPTER V

SUMMARY AND CONCLUSIONS

Summary

The Comprehensive Elementary Teacher Education Model (CETEM) program was established in October, 1967 by the U.S. Office of Education and housed within the National Center for Educational Research and Development. Its purpose was "to develop complete and comprehensive instructional programs for the training of elementary school teachers."[13]

Phase I of the program concluded with the submission of final reports by nine institutions. Each final report projected specifications for a new program for the preparation of elementary teachers. Phase II was established to determine the feasibility of developing and implementing one or more of the Phase I designs.

Thirty-four institutions applied for funds during Phase II competition. Since only a few institutions could be supported, USOE wished to collect and save the efforts put forth by all who participated in the competition. That is the purpose of this study. As a consequence of the study information is available to answer the following questions: What kinds of institutions participated? What was their geographical distribution? Did the same institutions compete in both Phase I and Phase II competition? How responsive were applicants to the USOE guidelines? Which Phase I programs did Phase II applicants see as most attractive and why? What were some of the major features (general, curricular, instructional and evaluative) proposed? How did applicants propose to design, develop, implement, and evaluate their programs? How did applicants propose to determine what future society would be like and how teacher education would be responsive to that future? Two additional questions have special significance for institutions looking toward change in teacher education: What common program features were discernible? and, What unique or unusual elements were presented? Finally some applicants provided their reactions to the competition. Some of the findings from the twenty-seven cooperating Phase II applicants follow.

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[13]Howard F. Hjelm, "Bureau of Research Teacher Education Development Program: Rationale and Operation," Teacher Education: Issues and Innovation. Twenty-First Yearbook of AACTE, 1968, pp. 129-33.

Applicants were almost entirely state operated colleges and universities. The thirty-four proposals came from twenty-one states with USOE Region V, the upper-midwest, submitting most often. Far fewer small (less than 20,000 enrollment) institutions participated in Phase II than in Phase I. Only six of seventy-one Phase I losers continued into Phase II competition. Only one Phase I loser (Wisconsin) became a Phase II winner.

Applicants seemed much more responsive to certain guideline requests than to others. Generally, they failed to describe the model teacher education institution in which the program would be carried on. Institutions, too, were less responsive to describing what society would be like in the future. A wide range of sophistication was revealed as applicants sought to describe how they would develop and operationalize the program and obtain cost estimates. More responsive were sections wherein applicants described their adopted programs and the rationale for their selection although in the latter case, rationales were often meager. Unfortunately, institutions were prone to select Phase I programs most in keeping with their own values which would seem to indicate that very little change would really take place.

The most frequently used Phase I programs were Michigan State, Syracuse, Massachusetts, and Florida State in that order. Least used were Teachers College Columbia, Georgia, Pittsburgh, and the Ohio Consortium. Falling between was the Northwest Lab's ComField program. Those chosen more often seemed to have a common characteristic: they had reasonably well-developed program components. Those chosen least often were either more theoretically oriented and/or contained lists of performance criteria or mere skeletal outlines of curriculum. Interestingly, Michigan State University had features of both the most and least popular. Perhaps it had something for everyone.

Major and common features proposed included: (1) preparing the teacher as a change agent, (2) accepting operant conditioning as a mode of shaping children's classroom behavior, (3) investigating the classroom in terms of what teachers and students do, how they do it, and with what effects, (4) preparing teachers to develop curricula and curriculum materials rather than just to use them, (5) preparing teachers increasingly to utilize media and tehnology, (6) studying the classroom and educational scene in the manner of the behavioral scientist, (7) helping teachers to become more aware and understanding of themselves, (8) understanding and applying what is known about human learning, (9) providing teachers-to-be with career information and career choice activities, (10) preparing teachers to work with more diverse kinds of children, (11) making teachers more aware of the concepts of professionalism, (12) teaching technical skills, and (13) producing teachers who have evaluation and research competencies.

Other areas of high agreement included: (1) use of performance criteria in assessment, (2) provision for earlier and more productive

experience with children, (3) provision of paid internships, (4) preparation of teachers for a variety of roles and stages of professionalism, (5) provision of multiple entry and exit points, (6) provision of career-long professional growth, (7) development of sophisticated teacher education support systems, (8) establishment of closer ties with public schools and others, (9) provision of greater freedom for students to select from a wider variety of content and experience, (10) redefinition of faculty roles, and (11) interdisciplinary responsibility for teacher preparation.

Reactions to involvement in Phase II came from only eleven of thirty-four participants. Those responding (possibly an unrepresentative sampling), generally felt that participation in Phase I and politicking by Phase I applicants made Phase II competition unfair. Applicants, too, felt USOE was completely unresponsive to losers' requests for evaluation of their efforts. Beyond such criticisms, however, Phase II applicants felt the USOE effort worthwhile and preliminary to creating change in teacher education on their campuses.

Conclusions

Attempting to change teacher education is, indeed, a praiseworthy activity. However, before such efforts can be fruitful much work remains to be done in scrutinizing and attempting to explain the phenomenon of change in teacher education. Such theorizing, remarkably undone though 200,000 teachers are processed each year, is essential for engaging more institutions more wisely and economically in the change process. Lack of theory causes each new developer to start from scratch and to "reinvent the wheel" rather than improve it. When legitimate teacher education curriculum efforts are made they pass relatively unknown and almost totally unstudied. Such has been the case with CETEM Phase I and Phase II efforts. Each, without the guidance of theory, engaged in the process of curriculum and program development as if it had never been done before. The legacy of such activity, useful as it may be, is not in keeping with a scientific approach to problem solving. Furthermore, the work has not been well studied with an eye toward generating theory.

This study too was devoted more to product than to process. Studying the process of curriculum development in teacher education would provide knowledge more likely to result in change by increasingly greater numbers of teacher preparation institutions. The cry is more likely to be "How do we do it?" rather than "What did they do?"

In keeping with this caution it would be wise for USOE or professional organizations to commission the nine Phase I directors and perhaps Phase II applicants to document the process of curriculum and program development as they engaged in it. As suggested earlier, synthesis of this data and theorizing about the processes could be a more important contribution than the presently available final reports.

The most obvious value of this study is the general blueprint it provides in terms of teacher education curriculum specifications. It must be assumed that the men and women of good faith who engaged in Phase II, given adequate support and reinforcement, would change teacher education in ways indicated. Perhaps USOE and professional organizations have a responsibility to alert all levels of government and foundations to these plans and assist in their implementation. If support is not forthcoming the blueprints will, of necessity, be put back in folders labeled "Things to Do."

Finally, it seems reasonable to conclude that USOE must work toward (1) developing clearer guidelines, (2) providing adequate time for applicants to respond to RFP's, (3) providing adequate time for applicants to do an outstanding job, and (4) responding to unsuccessful applicants' requests for evaluations. It may be that RFP's should contain explanations of restraints faced by USOE. Such revelations may well decrease the likelihood of later animosities. Long-range planning for similar big-impact programs should be carefully PERTED and developed utilizing PPBS or other cost accounting and program management systems. After all, we should practice what we preach.

APPENDIX A

REQUEST FOR PROPOSALS AND GUIDELINES ISSUED BY USOE

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

October 31, 1968

Presidents of Institutions
of Higher Education

Gentlemen:

We are delighted that over two-thirds of the eligible institutions across the Nation have submitted letters of interest in the Bureau of Research Elementary Teacher Education Project.

As originally planned, the Project was to consist of two phases. Phase I, during which the specifications for the model institutions were prepared, ends October 31, 1968. This Phase was to have been followed immediately by the development of several model programs based on Phase I specifications.

It now appears that we would be wise not to initiate the development work for another year. There are two reasons for this decision. First, we are uncertain at this time of adequate funds for such major development activities. Second, additional management, planning, and cost data are necessary to justify a request for adequate funds. As a result, we propose to use FY 69 funds for a comprehensive planning period.

An institution approved for a Phase II contract will plan a model teacher education program best suited to its needs and based upon the Phase I specifications and will then make the necessary feasibility studies--particularly in terms of a cost and management analysis--of the program. About ten institutions will be funded in FY 1969 to carry on such work. These studies will provide data which the Federal Government and institutions of higher education will need to undertake large-scale development.

Our original eligibility requirement remains, that an applicant be an institution which graduates one hundred elementary teachers annually. Based upon past experience, we feel that all the competencies required to carry out the studies described in the attachment are generally not available in any one institution. Therefore, applicants are strongly encouraged to consider obtaining the necessary competencies from other institutions, the regional

educational laboratories, profit and non-profit research and development groups, or appropriate combinations thereof from the private as well as public sectors.

Our commitment to the teacher education project remains firm. We believe that the study requested in the attachment will provide the data necessary to support our commitment, and to secure the support necessary to cope with the magnitude of the problem in preparing elementary teachers and of the funding level necessary for its resolution.

If you are eligible and have not previously submitted a letter of interest, but plan to submit a proposal, please advise us accordingly and indicate the number of elementary teachers graduated in 1967-68.

The enclosed sheet identifies two pre-proposal conferences which will provide more detailed information regarding this project. We hope your institution will be represented.

Sincerely yours,

Norman J. Boyan

Norman J. Boyan
Associate Commissioner for Research

UNITED STATES OFFICE OF EDUCATION

PRE-PROPOSAL CONFERENCES ON

THE BUREAU OF RESEARCH ELEMENTARY TEACHER EDUCATION PROJECT

The purpose of these conferences is to provide more detailed information regarding Phase II of the Elementary Teacher Education Project. Attendance will be at the expense of the institution represented. Each representative is responsible for his own travel and hotel arrangements.

CONFERENCE 1

November 18, 1968 Denver, Colorado 9:00 to 4:30

Location: Room 269
Post Office Auditorium
18th and Stout Streets

CONFERENCE 2

November 20, 1968 Washington, D.C. 9:00 to 4:30

Location: Room 1134 (Management Review Center)
FOB #6
400 Maryland Avenue, SW.

Please return the attached postcard no later than November 12. For further information contact:

James P. Steffensen
Project Officer
Bureau of Research
Division of Elementary and
Secondary Education Research
U.S. Office of Education
400 Maryland Avenue, SW.
Washington, D.C. 20202
202-963-3082

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

INFORMATION FOR INSTITUTIONS PREPARING PROPOSALS FOR PHASE II OF THE BUREAU OF RESEARCH ELEMENTARY TEACHER EDUCATION PROJECT

Direct all inquiries to:

James P. Steffensen
Project Officer
Bureau of Research
Division of Elementary and
Secondary Education Research
U.S. Office of Education
400 Maryland Avenue, SW.
Washington, D.C. 20202
202-963-3082

I. INTRODUCTION

The Teacher Education Project is a multi-phase project which has as its goal the production of outstanding, or model, programs for the training of elementary school teachers. This includes the design of the exemplary models, studies of their feasibility, and their eventual implementation and operation. Through these phases, the project will attempt to bring together in a few institutions the best elements of the educational tools and knowledge developed, in many cases with Office of Education grants, in laboratories, schools, and institutions widely scattered across the country. The project is based on the assumption that in a number of years comprehensive programs of development, well-funded and well-conceived, could produce demonstration institutions which will bring about the improvement and up-dating of elementary teacher education.

The reasons for deciding to make the field of elementary teacher education an area for major support are obvious to the educators who work in colleges that prepare teachers. The demand for well-trained teachers remains high. Many of the institutions which have a major responsibility for teacher education are in the same stage of a long transition from normal school to multi-university. New research must be absorbed and adapted for use. There is a demand that the training institutions follow the graduate through the first year of teaching and provide in-service experiences for graduates. All of these problems are in the process of being solved.

At this time it should be clearly stated that in encouraging the design of specifications for model teacher training programs, the U.S. Office of Education and the consultants who have been involved in planning the proposal are aware of the danger of developing a program which would be adequate for the time being but unable to change to incorporate future research findings, utilize the technology of tomorrow, or meet the unrevealed demands which the future will make on schools and teachers. It is hoped that any plan which is widely used will have some built-in arrangement for its future growth, development, and change. There is a general dread of visiting a school which became famous in 1975 and finding there the same program which made it famous virtually intact in the year 2000.

On October 16, 1967, the U.S. Office of Education issued a request for proposals which would develop educational specifications for a comprehensive undergraduate and inservice teacher education program for elementary teachers. (The term elementary teacher included preschool teachers and teachers through grade 8).

These proposals were for Phase I of the project, the design phase. On March 1, 1968, the Bureau of Research awarded nine contracts to design conceptual models for programs for the training of pre-kindergarten and elementary school teachers, for the pre-service as well as inservice components. These models are to be completed by October 31, 1968, and their specifications will be the blueprints for the exemplary teacher training programs.

In Phase II approximately ten institutions will carry on studies directly concerned with the feasibility of developing, implementing, and operating a model teacher training program based upon the specifications designed by one or more of the groups engaged in Phase I.* This is to be done through an analysis of the resources, including costs, needed for the various components of such an institution. Analyses must also be made of the appropriate administrative and management structures and devices which could be used to initiate, carry on, control, and evaluate a long-term program of development. These detailed analyses should provide alternate cost projections necessary to implement and operate any or all of the components at other institutions of varying characteristics.

The task of an applicant for Phase II is to describe in its proposal a model teacher training program based upon the specifications designed by one or more of the groups engaged in Phase I. The remainder of the proposal then becomes the design for a feasibility study of developing, implementing, and operating such an institution. It will be necessary, for example, to indicate in the proposal the procedures or methods to be used to produce estimates of cost of various program components. Actual estimates should not be a part of the proposal for Phase II, only the procedures by which these estimates will be produced.

The basic eligibility requirement, that an applicant be an institution which graduates one hundred elementary teachers annually, remains. This does not preclude an institution from relying upon other groups for assistance and support in preparing and carrying out the proposal. Based upon our past experience, we feel that all the competencies required to carry out the studies described in the attachment are generally not available in any one institution. Therefore, we strongly encourage applicants to consider obtaining the necessary competencies from other institutions, the regional educational laboratories, profit and non-profit research and development groups, or appropriate combinations thereof from the private as well as public sectors.

*O.E. will distribute one copy only of each of the nine final reports from Phase I to each eligible institution planning to submit a proposal for Phase II.

Proposals for Phase II will be due in the Office of Education by March 3, 1969.

These guidelines have been prepared to reflect a minimum scope of work. All studies that are funded must include and reach these minimum goals. However, the applicant is encouraged to develop as strong a study plan as possible in his proposal. The proposal should be addressed to the resources, procedures and systems which the applicant will martial and use to accomplish the objectives described in this announcement.

On the basis of these proposals, the Bureau of Research will select about ten institutions to carry out the proposed studies. The planned award date is May 1, 1969, with the final report due by January 1, 1970.

II. INSTRUCTIONS FOR PREPARING A PROPOSAL*

Each proposal should include a standard cover page, a one-page abstract, a body section, a statement on institutional resources, and a project budget. Within this framework the applicant states the case for his activity.

A. The Cover Page

Nothing may precede this page. It contains only the information found in the sample (See enclosure).

B. The Abstract

The abstract occupies a single page, identifies the proposal, and concisely and simply summarizes the contents. To accommodate the various uses made of this page, the abstract should be written in language understandable by an informed layman. One copy of the abstract is placed after the cover page in each copy of the formal proposal, and twenty copies are provided separately. At the top of the abstract page the following terms should appear on separate lines: title of project, principal investigator, contracting agency, amount of Federal funds requested, and proposed beginning and ending dates. The summary portion of the abstract has three parts: (1) a statement of the purposes, objectives, or nature of the project; (2) an indication of the expected contribution to education; and (3) a compendium of procedures or description of what is to be done. The summary is limited to 200 words or 2,000 letters and spaces, whichever is less.

C. The Body of the Proposal

The institutions selected to carry out Phase II will be expected to produce two sets of data. The first will involve estimates of the resources, plans, and strategies necessary to carry on a major program of development of the Phase I specifications. The second will involve estimates of the resources, plans, and strategies necessary for the implementation and sustained operation of the specifications as developed.

The proposals for Phase II can, then, be considered as an outline of the study by which such data could be obtained and by which the feasibility of using the Phase I specifications to significantly change elementary teacher education programs can be determined.

*See enclosed supplementary materials for additional instructions

1. Description of Model Program

Even if the Phase I models were concisely and explicitly stated with a high degree of proficiency, it is conceivable that they might be irrelevant for society as it will exist in a few years. For this reason, it is necessary to relate contemplated programs to the economy, technology, politics, and values of our society of the future as well as today. It is necessary, then, to consider a variety of projective techniques to examine the implications of current trends and their determinants, to analyze the long-range consequences of the alternative decisions confronting us now and in the immediate future, and to explore the desired future states that we might wish to achieve and the kinds of programs by which it might become possible for us to achieve them. This kind of input to the proposal is critical. In this part of the proposal describe the procedures by which you would make such a systematic analysis of what American society will be like in the mid-1970's.

The proposal should describe both the model institution with its major components and the institutional setting in which they reside. This description would constitute the basis of an exemplary teacher training program which could be developed by the applicant within a five-to six-year period and which would be generalizable for implementation at other institutions which prepare teachers.

This exemplary teacher training program should be based, in whole or in part, on the specifications designed by one or more of the groups engaged in Phase I.

Selection of the program for study constitutes a critical first step in preparing the proposal. The applicant has the option of choosing a single Phase I design in its entirety or of choosing a major portion of a single Phase I design, augmented by selected components from other designs. In any case, the applicant must clearly indicate which design has been selected, in toto or for its various programs or components.

In addition to ascribing the source of each program component taken from the Phase I model, or elsewhere, the proposal should briefly present the rationale for selection.

At this point the proposal will have described a model institution which could be developed at the applicant's institution for implementation at other institutions and which is relevant to the applicant's conception of American society in the mid-1970's. The next part of the proposal should describe the procedures by which adequate cost, program, and management data may be obtained.

2. Management and Program Techniques

This part of the proposal should describe the techniques, e.g., network or flow chart analyses, and strategies to be used to allocate and control the resources, including fiscal, which would be necessary to carry through a program of development, implementation, and sustained operation. Indicate the various components of the model as they are phased into an operational teacher education program, and how their progress would be determined and regulated. This type of scheduling and control would include such activities as design, planning, development, field-testing, phasing in, and evaluation of each component.

These components will be drawn from the nine Phase I specifications. Such components might include:

a. A catalogue of knowledge, skills, and competencies to be achieved by the trainee.

The knowledge, skills, and competencies which constitute the teacher education program goals should be expressed in terms of observable (measurable) teacher behavior.

b. The learning activities prescribed for the teacher trainee to master the skills and competencies deemed essential for the teaching role.

1) The teacher education program should prepare the trainee to teach elementary levels which include preschool, beginning with ages three or four, and which may include the middle school, extending through grade 8.

2) It is likely that the teacher education program will be interdisciplinary and will be competence-oriented. Each activity should be designed to develop a particular skill or segment thereof. Provision should be made for joint planning and for joint decision-making for the program and for the graduates (the product of the program) among all appropriate faculties.

3) In planning all learning experiences, including clinical (and/or practical) experiences for the teacher trainee, the institution should take into account significant subgroups of the elementary school population (such as the "culturally disadvantaged", the "educationally deprived", the poor, and the non-English-speaking) whose special needs will affect the teaching experiences and techniques of the elementary school teacher. Institutions should develop appropriate instructional materials and meaningful curricula for training teachers to help disadvantaged pre-schoolers and elementary pupils succeed in current and developing settings. The focus of such efforts should be on helping these children achieve a positive self-image and a high motivation to deal constructively with problems they confront in their school and neighborhood.

c. Instruments and procedures to be used to measure and evaluate the teacher trainee's proficiency in the designated skills and areas of competency.

Student behavior and knowledge should be evaluated in terms of replicable measures of adequate reliability and validity at each essential stage of progress. This implies the existance of a structure in the program that is oriented toward development of competency and ability to perform, the existence or development of activities that are sequentially structured, and the existence of appropriate measurement devices.

d. A plan for systematically revising and improving all aspects of the proposed program and procedures of the institution.

A plan for revising and improving both the preservice and the inservice programs should be prepared. A rationale for this plan should be stated which can then be systematically implemented by a series of actions and materials that are pertinent.

The plan should also include an administrative and staffing pattern of the model institution. A description of the organizational structure of faculty and administrative staff, of the competencies of faculty and administrative staff, or operational patterns and procedures, and of program performance relative to the established criteria of the model should be included.

The measurement and evaluation system should have a provision for institutionalizing continuous program improvement and updating on a long-range basis. Thus, the program should include as a major component provision for continuous evaluation which insures the flexibility to incorporate new but compatible practices.

e. An orientation of the institution to the new program goals and techniques.

Before the program for teacher trainees begins, there should be inservice programs for assuring that staff, both existing and new, will carry out the program. These inservice programs should continue after the program is implemented as well, in order to insure continuous updating as the program matures and develops through its sequential evolution and reworking in the light of evaluation.

f. Procedures for recruitment, selection and retention of trainees to participate in the program.

A rationale and a description of procedures for selecting teacher trainees should be presented. There should be a description of the relevance of the screening process, and of any type of self-selection--in and out of the program--process used. The institution would be expected to attract and actively recruit students from minority groups to participate in this program.

g. Evidence of the availability of resources to carry on a major development effort.

The institution should evidence the commitment to, and the specifications for, an administrative unit which will absorb immediate and total responsibility within the institution. The commitment of the institution should be further demonstrated by the involvement and support of the administration, a large portion of the education faculty, and a sizable portion of the related faculty.

h. Evidence of reciprocal commitments with State and local agencies.

Local education agencies should be involved to provide clinical experiences which will satisfy the needs of future elementary teachers. These agencies might include the regional educational laboratories, State and local education agencies, other institutions of higher education, and other organizations from the private as well as the public sector.

This list exemplifies the types of components for which fiscal, management, and program resources must be allocated and controlled. The list is not meant to be exhaustive and only careful examination of the specifications from Phase I will produce a comprehensive statement of components.

3. Cost Estimates

The intent of this Project is to improve elementary teacher education programs generally and not just to operate a number of model institutions. It is imperative, then, that sufficient cost data be available to those institutions wishing to implement one of the programs, or parts thereof, developed at the model institutions. These data should be available in a form which makes possible the rational consideration of alternative decisions, dependent upon alternate amounts of funds available.

In this section of the proposal, describe the procedures which might be used to produce such data, on development as well as implementation costs, with attention to those variables which might provide alternate cost estimates.

Assuming that there will be a five-year period of development before the program is fully implemented at the institution, describe:

a. Procedures to estimate and relate the proper cost to each of the program components, and to allocate accordingly to:

   1) Program development

   2) Program implementation

   3) Sustained operation

b. Procedures to determine ways in which costs might be allocated to the several program components

c. Procedures to establish costs, e.g., per student, which make it possible to estimate the cost of operating the program at other institutions which may vary in size, location, organization, etc.

d. Procedures to relate the proper costs of the program components to program effectiveness.

D. Institutional Resources

This part of the proposal should describe the personnel, facilities and other resources available to carry out the proposal.

The section should include a description of the administrative unit which will absorb immediate responsibility (within the institution) for the activities necessary to carry out Phase II, the feasibility studies. Describe the structure of this unit, including its linkage to the total institution, to other internal organizations, to such external units as the local school system(s), the State department of education, other universities, the community, the student body, and the private sector. Key project personnel are to be listed by name, position, title, experience, responsibilities within the project, and percentage of their time committed to the activity. If a key staff member cannot be identified by name when the proposal is submitted, a brief job description and a list of competencies required for the position should be provided. Consultants who have agreed to serve should be similarly identified; otherwise, the application should describe the type of consultative assistance required. Describe the contribution to be made by other organizations, public or private.

III. ADDITIONAL INFORMATION

A. Appended Items

1. If any of the primary personnel, including consultants, have a current or uncompleted project with the Office of Education or other agency, an appended statement should indicate the status of the project, the amount of time devoted to it, and the relationship between the current and the proposed project.

2. If any of the personnel have completed a research or development project supported by the Office of Education, give information to identify it; if findings of the previous project are related to the current proposal, summarize them briefly.

3. Where agreement with school districts or other cooperating agencies are a factor, copies should be appended.

B. Additional information for submitting Bureau of Research proposals will be distributed.

C. Details about Submitting Proposals

Proposals should be typed on one side of standard (8½" x 11") paper and stapled at the left margin, if feasible. Cover pages on two copies should be signed by the Initiator or Project Director and by the Transmitter.

Send twenty (20) copies of the proposal to:

Research Analysis and Allocation Staff
Bureau of Research
U.S. Office of Education
Washington, D.C. 20202

D. Time Schedule

November, 1968	Final reports from contracting institutions of Phase I will be distributed to all institutions indicating a desire to submit proposals for Phase II.
	Additional information for submitting Bureau of Research proposals will be distributed.
November 18 and November 20, 1968	Two pre-proposal conferences will be held by the Office of Education for all institutions who may wish to submit proposals.
March 3, 1969	Written proposals must be delivered to the Office of Education and will not be accepted at any later date.
March-April, 1969	Review of proposals.
May 1, 1969	Planned award date.
September 1, 1969	Progress report of preliminary estimates of development costs.
January 1, 1970	Final report due.

APPENDIX B

SUGGESTED CRITERIA FOR USE BY FIELD READERS EVALUATING PROPOSALS TO CONDUCT PHASE II OF THE BUREAU OF RESEARCH ELEMENTARY TEACHER EDUCATION PROJECT

I. Projection 70's

A. Methodology
B. Feasibility
C. Clarity

II. Model

A. Totality
B. Rationale
C. Relevance to rpojection
D. Attention to Phase I components
E. Generalizability

III. Cost Analysis

A. Methodology
B. Procedures for alternate costs
C. Transportability
D. Program effectiveness
E. Program allocation

IV. Management

A. Techniques--A description of the network or flow chart analyses, and strategies to be used to allocate and control the resources, including fiscal, which would be necessary to carry through a program of development, implementation and sustained operation.

B. Components--An indication of how these will be phased into an operational teacher education program, and how their progress would be determined and regulated. This type of scheduling and control would include such activities as design, planning, development, field testing, phasing in, and evaluation of each component.

V. Institutional Resources

A. Key project personnel
B. Commitment
   1. Internal
   2. External

SUMMARY REACTION: The above five sections follow the Bureau of Research guidelines set for in the October 31 letter inviting proposals to do the Phase II study. Therefore, we would like your summary statement to consider the question: TO WHAT EXTENT IS THE PROPOSAL RESPONSIVE TO THE BUREAU OF RESEARCH SPECIFICATIONS FOR THE CONDUCT OF THE FEASIBILITY STUDIES?

Your response to this question should, we believe, determine the general rating which you give each proposal.

APPENDIX C

SELECTED READINGS RELATED TO CETEM PROGRAM

1. Burden, Joel L. and Lanzelotte, Kaliopee (eds.) A Reader's Guide to the Comprehensive Models for Preparing Elementary Teachers. Washington, D.C.: ERIC Clearinghouse on Teacher Education; American Association of Colleges for Teacher Education, 1969, 342 p. Publisher's price: $4.00.

2. Cruickshank, Donald R. and others. The Ohio State University Analyses of the Nine Comprehensive Elementary Teacher Education Models (CETEM). Final Report Research Foundation Project No. 2865. Washington, D. C.: U.S. Department of Health, Education, and Welfare; Office of Education, February 28, 1970. 274 p.

3. Engbretson, William E. Analysis and Evaluation of Plans for Comprehensive Elementary Teacher Education Models. Project No. 8-8056. Grant No. OEG-0-8-088056-4476(010). Washington, D.C.: American Association of Colleges for Teacher Education for the U.S. Department of Health, Education, and Welfare, 1968. 212+ p.

4. LeBaron, Walter. Elementary Teacher Education Models Analyzed in Relation to National Accreditation Standards. Washington, D.C.: American Association of Colleges for Teacher Education, July, 1970, 14 p.

5. Shaftel, Fanny. The Stanford Evaluation of Nine Elementary Teacher Training Models. Final Report Project No. 081710, Grant No. OECO-9-148032-4402(010). Washington, D. C.: U.S. Department of Health, Education, and Welfare; Office of Education, August 25, 1969, 72 p.

6. Silverman, Harry and Kooi, Beverly. Some Comments on Nine Teacher Education Models. Santa Monica, California: System Development Corporation, 1969, 13 p.

7. Systems Development Corporation. Analytic Summaries of Specifications for Model Teacher Education Programs. Contract No. OEC-0-9-569006-3704(010). Falls Church, Virginia: The Corporation for the U.S. Department of Health, Education and Welfare, July, 1969, 200 p.