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ABSTRACT

This handbook reports on some experiences with competency-based teacher education (CBTE) and is designed to serve as an instrument for self-examination and change. Chapter 1 presents 22 generic teaching competencies, which are a result of a reexamination of the 1973 Interim Inventory of 66 Generic Teaching Competencies (Generic 66). Chapter 2 answers the question, What can be done with a competency inventory? by going step-by-step through a process used by a hypothetical faculty to gain a perspective on its own efforts in role competency definition. Chapter 3 reviews research on teacher characteristics. Chapter 4 describes the design for formative evaluation of the Department of Education's PaCBTE program throughout its duration. Chapter 5 presents results from a pilot study showing the value that educators place on each of the Generic 66 competencies for the new teacher and where the competencies should be developed. Chapter 6 presents a detailed report on the 1974 CBTE program. Chapter 7 describes the efforts of the Bureau of Certification's Competency-Based Assessment Certification (PaCAC) program in wrestling with the problems of assessing the competencies of persons who are not graduates of approved teacher education programs in Pennsylvania. Chapter 8 reprints the Generic 66, including the inventory's source and the reference numbers for each competency statement. A "Glossary of CBTE Terms" and the "PaCBTE Consultant Group Directory" are appended. (Author/PD)

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PaCBTE HANDBOOK

A Resource for Developing Competency Based Teacher Education Programs

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Edited by:
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1974 PaCBTE Program
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1974 PaCBTE Program

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September 16, 1974

Dear Educator:

Pennsylvania's 66 generic teaching competency statements have been circulating for a year. They were a milestone in an effort to assist our colleges and universities in developing competency-based teacher education programs. Recent progress includes funding 27 CBTE projects and formation of a resource group of teachers and teacher educators.

Pennsylvania's membership in the Multi-State Consortium on Performance-Based Teacher Education adds a national dimension to our efforts. I look forward to a significant role for Pennsylvanians through the Consortium.

Competency-based education's strong field experience orientation requires a major commitment by the profession. Discussions of teacher competencies must begin at local levels and involve classroom teachers, college professors, and the consumers of public education. This 1974 PaCBTE Handbook is intended to stimulate interaction and to encourage program modifications and innovations. It represents my continued support for quality teacher education.

Sincerely,

John C. Pittenger
John C. Pittenger

FOREWORD

Competency-based teacher education (CBTE), is it the new kid on the block? No, not for Pennsylvanians. We've been working on teacher roles and competencies since the mid-60's. The pace has been deliberate, and it has been determined largely by the field's progress in exploring CBTE's potential.

Pennsylvania's Department of Education, prompted by proposed federal standards for state approval of teacher education, began seeking role definitions and specific statements of objectives as early as 1966. The question, "Does teacher education make a difference?" opened a challenge to the professional certificate's real meaning. Even though a teacher or administrator had certain courses listed on a transcript and would be certified as having completed them, did the program or courses prepare that person to do a job that someone else without similar preparation couldn't do?

CBTE showed early promise as a way to answer such questions; and the Department set out to answer concerns of Pennsylvania education consumers. Standards for approving teacher education programs were adopted; two were especially significant: one sought role definitions and competencies (General Standard III); the other asked for program evaluation procedures (General Standard IV). This initial effort in 1969 was followed by the Department of Education encouraging teacher-preparing institutions to define program objectives and assessment procedures. The colleges and universities responded with behavioral competency studies. By June, 1972, 1,400 teacher education programs in 83 colleges and universities had shipped their results to Harrisburg.

The paper avalanche covered Room 203 Education Building. The Division of Teacher Education was faced with the prospect of having the competency studies collect dust for lack of staff, so numerous educational foundations and the United States Office of Education were approached for funds. In the fall, 1972, an ESEA Title V grant was awarded to work with the college's and universities' initial efforts in CBTE. A consultant firm with experience in human service programs was hired to review the 50,000 competency statements, a major project that was launched within three months. The goal was to return the competency statements to the field in a more usable form after being evaluated by a large group of educators.

The 1974 PaCBTE Program has continuity with the decade of Pennsylvania CBTE activity. During 1973-74 the education professions have been analyzing, reacting to, rejecting, and implementing aspects of the 66 generic teaching competencies. The next logical step was to have even greater numbers of persons explore CBTE and the questions of the 1960's. To this end, the 1973 Title V continuation grant was put into 27 locally designed and administered projects proposed by colleges, universities, school districts and professional associations wanting to explore or develop the CBTE concept. The PaCBTE Consultant Group was created to serve these projects and to increase the service capability of the Department's Division of Teacher Education.

It's important to recognize that there has been continuity in Pennsylvania's PaCBTE Program. Without a sustained effort over a decade and the commitment by the Secretary of Education, our progress would not have been possible. Appreciation is expressed to William Charlesworth, Director of the Bureau of Teacher Education and Certification where these efforts began, and to the support staff which facilitated the Program's administration and communication efforts. Special acknowledgment and gratitude is directed to Barbara M. Kuhn, who prepared the final copy for publication of the 1974 PaCBTE Handbook.

Harold C. Wisor, Assistant Commissioner
Office of Higher Education
Kathleen M. Kies, Director
Bureau of Academic Programs
September, 1974

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INTRODUCTION

The Pennsylvania Competency-Based Teacher Education (PaCBTE) Program reflects concern for state government leadership guided by broad-based involvement in decision-making. Consequently, CBTE has not been legislated in Pennsylvania and we are not pursuing a rigid timetable. Projects proposed by colleges, universities, intermediate units, and professional associations have been funded by the Commonwealth, and a consultant group has been formed to extend the Department of Education's service potential. Even our operational definition of CBTE does not provide for one specific methodology or CBTE form. There are many valid ways to prepare teachers and none may be considered definitive. We have our *besten* done, and hope for a *besser* future.

Definition of CBTE

Word after word has been written to define CBTE and to distinguish between CBTE and PBTE. Nationally, the movement has progressed beyond the PBTE-CBTE polemic and the AACTE Performance-Based Teacher Education Project committee now considers the terms interchangeable. There's talk about making a distinction between competency-based and competency-referenced teacher education. It's been pointed out that "referenced" merely describes the outcomes of a program, while "based" means that in addition to outcomes, a program must have a full assessment system. Since such a distinction serves no significant purpose at this time, the Department of Education's Division of Teacher Education will continue with the term "CBTE."

The Department defines a CBTE program as one which specifies the role and role-competencies of the particular educator being prepared and which has systematic assessment procedures to document the competencies possessed by those persons being recommended for certification.* This definition has been implemented by the Department since the publication of Policies, Procedures and Standards for Certification of Professional School Personnel in January, 1970. This document's General Standards III and IV cite role definition and program evaluation procedures as conditions for program approval:

General Standard III: The institution shall identify the role and role competencies for each school position for which preparation programs of certification have been submitted.

*See page 80 in the "Glossary of CBTE Terms." Although not adopted by the Pennsylvania Department of Education, the AACTE definition is frequently cited by staff as a useful CBTE model. It characterizes a program as being competency-based if: there are competencies for objectives, there are explicit assessment criteria, there is performance-centered assessment, there is learning progress determined by demonstrated competency, and there is a program specifically designed to facilitate development and assessment of competencies.

1974 PaCBTE Handbook Features

The 1974 PaCBTE Handbook started out as a simple document to help faculties and programs take the steps necessary for critical self-examination and movement toward CBTE. As ideas matured, the handbook took on its present dimensions.

Deficiencies in the Generic 66 were quickly recognized by lay persons and educators. It represented a significant process but carried the earmarks of committee authorship. It pleased all, but perhaps in the process it lost vitality and a central theory of teacher education. The Generic 66 had to be reexamined in terms of its style/format and the need for a philosophical orientation. The result, the Generic 22, forms Chapter I.

"What can be done with a competency inventory?" is a question that prompted the need for Chapter II, "Application of the Generic 66." In that chapter, the reader is taken step by step through a process used by a hypothetical faculty to gain a perspective on its own efforts in role competency definition.

Research on CBTE has barely begun. Three chapters build on this need: Chapter III reviews research on teacher characteristics; Chapter IV describes the design for formative evaluation of the Department of Education's PaCBTE Program throughout its duration; Chapter V presents results from a pilot study of the value that educators place on each of the Generic 66 competencies for the new teacher and where the competencies should be developed (the college, the school, or both).

A detailed report on the 1974 PaCBTE Program is presented in Chapter VI, including an annotation for each of the 27 CBTE projects funded by the Department of Education. Independent of the PaCBTE Program, but certainly coordinated with the program, is the Bureau of Certification's Competency Based Assessment Certification (PaCAC) Program. Chapter VII describes the PaCAC Program's efforts in wrestling with the formidable problems of assessing the competencies of persons who are not graduates of approved teacher education programs in Pennsylvania.

Chapter VIII reprints the Generic 66, including the inventory's source and the important reference numbers for each competency statement used throughout this handbook. A "Glossary of CBTE Terms" and the "PaCBTE Consultant Group" directory are part of the handbook's Appendix.

Use of the Handbook

The 1974 PaCBTE Handbook is a source of information in that it reports on some experiences with CBTE. More important, however, it should serve as an instrument for self-examination and change. The current state of CBTE development of Pennsylvania colleges and universities is dominated by competency definition efforts. Faculty in some institutions are redesigning programs; in other institutions they're tackling difficult assessment questions.

Clearly, Pennsylvania teacher educators have, for the most part taken an initial step toward CBTE. The efforts that went into the preparation of competency studies in 1970 and 1971 are now the foundation for serious reconsideration and refinements in teacher competency definition. It's to this large group of teacher educators that this publication should be most useful. Uncritical adoption of the Generic 66 or the Generic 22 is discouraged, but both inventories can be used for self-evaluation by teachers and by programs preparing teachers (See Chapter II).

The inventories may serve to streamline programs and as the focus of research on their validity (i.e. Do these teaching competencies have any relation to pupil learning?). As widely distributed lists, the inventories can serve as an informal way to coordinate research and to communicate developments in assessment procedures. Of course, the Division of Teacher Education is willing to serve as a clearinghouse, a role that might well become its major contribution in the future.

As the competency definition stage passes, this handbook may be used to initiate program changes. Chapter VI reporting on PaCBTE projects can spotlight some of the pockets of CBTE activity and program development. Generally, however, the inventories may stimulate penetrating questions about the value, impact and origin of many current practices in teacher education, both pre-service and in-service. Concepts such as *appropriate practice* and *equivalent practice* are useful to suggest instructional methods when applied to the generic competency and its enabling or enroute competencies.

The Department of Education hopes that this handbook will help you explore the potential of CBTE in Pennsylvania. Your reactions to this publication and suggestions for future publications would be greatly appreciated.

William D. Kautz, Chief
 Division of Teacher Education
 Bureau of Academic Programs
 September, 1974

CHAPTER I

Revised Inventory of Generic Teaching Competencies (Generic 22)

This chapter, including the Generic 22, was written by Matthew H. Bruce, Barbara Burkhouse, and George Morrison, all members of the Pennsylvania Competency Based Teacher Education (PaCBTE) Consultant Group. Dr. Bruce, professor of secondary education, has been coordinating Temple University's PBTE program development in secondary education and analysing training material effectiveness. Dr. Burkhouse, associate professor of education at Marywood College, has designed a competency-based course in foundations of education and has been a constructive philosophical critic of CBTE. Dr. Morrison, professor of elementary education at Edinboro State College, is also a director of Edinboro's Life Experience Center and is an institutional representative for the competency-based Head Start Supplementary Training Program leading to the Child Development Associate Credential.

Publication of this chapter and the Generic 22 in the PaCBTE Handbook is not necessarily an endorsement by the Pennsylvania Department of Education of the approach or the resulting list.

Introduction

The authors were invited by the Pennsylvania Department of Education to examine--and if necessary rewrite--the 1973 Interim Inventory of 66 Generic Teaching Competencies (Generic 66). The authors' assumptions for the examination and possible rewriting are that generic competencies should:

- a. Be categorized by teacher roles.
- b. Be appropriate for teachers entering the profession.
- c. Not be associated with the particular subject area or content.
- d. Not dictate or mandate a specific manner of teaching.
- e. Not be enablers or part of the supporting body of knowledge.

Delimitations

The Generic 22 are not prescriptive for teacher education programs. Instead, only through critical examination and adaptation to local philosophy, resources and strengths can an institution develop its own dynamic, unique CBTE program. Such programs may have certain broad characteristics. For example, they are likely to

- a. Include field-based components.
- b. Be cooperatively determined by students, faculty, teacher education institutions, public schools, and state and federal agencies.
- c. Be individualized for the institution and student.
- d. Represent a dynamic process involving evaluation and change.
- e. Include instructional modules, workshops and seminars as alternatives to traditional courses.
- f. Recognize that the ultimate consumers of teacher education are children in schools.

Organization

The examination and rewriting of the Generic 66 produced 22 competency statements, six teacher attributes, and a mandate for professional literacy. Some of the Generic 66 were dropped completely, not being combined with or subsumed by a rewritten statement. Those dropped and the reasons why are:

<u>Generic 66 Reference No.</u>	<u>Reason for Dropping</u>
5	Not a generic competency; possibly an enabling objective
9	A long term consideration; too much to be considered seriously for beginning teachers
21	Appears to be a curriculum mandate rather than a statement of competency
40	Appears to be an enabler rather than generic

**Generic 66
Reference No.****Reason for Dropping**

44	Appears to be an enabler rather than generic
48	Appears to be a curriculum mandate rather than a statement of competency
49	Not a generic competency
60	A long term consideration; too much so to be considered seriously for beginning teachers
61	Not a generic competency
64	Not a generic competency

The Generic 22Reference
Number*Competency Statement

- I. The teacher will develop a position statement to serve as a basis for instructional goal setting and planning. (New)**
- A. The teacher will develop a set of convictions about the educational process which he/she can defend on the basis of theory. (3)**
- R1 1. *The teacher will analyse educational issues and theories. (6)*
- R2 2. *The teacher will analyse the degree of congruence of his/her values with those of the community and the profession. (58)*
- R3 3. *The teacher will analyse the consistency of educational goals with his/her statement of convictions. (1)*
- R4 4. *The teacher will analyse educational practices for their consistency with his/her set of convictions. (2)*
- R5 5. *The teacher will evaluate and relate to teaching the results of research. (8)*
- R6 B. *The teacher will develop educational goals. (New)*
- R7 C. *The teacher will plan and implement an instructional program. (New)*

*These are newly assigned reference numbers and are not related to the Generic 66 reference numbers.

**The numbers appearing in the parentheses refer to the Generic 66 from which the statement evolved. New statements, not identified with one of the Generic 66, are so indicated.

<u>Reference Number</u>	<u>Competency Statement</u>
	II. The teacher will personalize the teaching/ learning process. (New)
	A. The teacher will demonstrate respect for students. (38)
R8	1. <i>The teacher will provide for student awareness of and respect for individual and cultural differences. (41)</i>
R9	2. <i>The teacher will utilize value clarification techniques. (51)</i>
R10	3. <i>The teacher will assess and utilize the unique characteristics of learners. (43)</i>
R11	4. <i>The teacher will promote development of a healthy self-image in students. (53)</i>
	B. The teacher will understand and promote the natural development of individual differences among children. (New)
R12	1. <i>The teacher will diagnose pupil needs and prescribe appropriate actions. (46)</i>
R13	2. <i>The teacher will design instruction consistent with student achievement levels and learning styles. (22)</i>
R14	3. <i>The teacher will evaluate teaching styles and instructional strategies. (New)</i>
	C. The teacher will create and maintain a physical and emotional environment which facilitates learning as a worthwhile activity. (36)
R15	1. <i>The teacher will create an environment which promotes inquiry and process skills. (17)</i>

<u>Reference Number</u>	<u>Competency Statement</u>
R16	2. <i>The teacher will create an environment which supports the creative processes. (16)</i>
R17	3. <i>The teacher will create an environment which maximises the learning potential existing between the school and the community and the world. (50)</i> D. The teacher will select and utilize varied strategies to actively involve students in effecting instructional objectives. (11)
R18	1. <i>The teacher will aid students in the selection, evaluation, and achievement of personal goals and objectives. (52)</i>
R19	2. <i>The teacher will provide for students alternative procedures for meeting instructional objectives. (12)</i>
R20	3. <i>The teacher will select and utilize a variety of materials and resources to meet instructional objectives. (20)</i>
R21	E. <i>The teacher will use skills necessary for effective interaction with individuals and groups. (27, 57, 59)</i>
R22	III. <i>The teacher will demonstrate the ability to speak and to write clearly the English language. (New)</i>

Teacher Attributes

Examination of the interim inventory uncovered a category of characteristics which, although not actually measureable competencies, were nevertheless attributes considered essential to successful teaching. Such attributes describe teachers as being:

enthusiastic
flexible
open
ethical
responsible
warm and caring

Institutions and individuals are urged to explore the implications of such factors for professional development. (4, 34, 35, 55, 56)

Professional Literacy

As the competencies were rewritten, it was apparent that although some aspects were not generic, they would nevertheless lead to fulfillment of the teacher as a person and a facilitator of learning. This would include awareness of the total human condition as well as of education as a profession. The specific manner of developing such awareness becomes the joint responsibility of the individual and the institution. (14, 62, 63, 65, 66)

CHAPTER II

Application of the Generic 66

This chapter was written by Paul E. Bell and Marilyn A. Selfridge, members of the PaCBTE Consultant Group. Dr. Bell is associate professor of education in the Division of Academic Curriculum and Instruction, The Pennsylvania State University. His experience includes development of competency based methods courses, field experiences and modules. Mrs. Selfridge is a reading specialist in the Clearfield (Pennsylvania) Area School District. In addition to teaching she has been an active reading consultant and member of PSEA's Instruction and Professional Development Council.

Publication of this chapter in the PaCBTE Handbook is not necessarily an endorsement by the Pennsylvania Department of Education of the procedure used or the competency list. It is presented to illustrate a procedure which might be useful to those involved with CBTE program development.

How to use a competency list is a nagging question. Pennsylvania now has the Interim Inventory of Generic Teaching Competencies (Generic 66), a Revised Inventory of Generic Teaching Competencies (Generic 22), specialized inventories and local lists galore across the Commonwealth. This chapter presents an illustrative application of the Generic 66 following these other suggested uses.

The Generic 66 (or Generic 22) could be used as:

- a. A set of competencies to be considered for adoption by a faculty.
- b. A comprehensive list to compare with a local faculty development list for assessing whether or not all important "bases" are covered.
- c. A model format to exemplify how competencies may be conceptualized into a theoretical construct.
- e. A set of competencies to stimulate research in reference to Pennsylvania's Goals for Educational Quality Assessment, Guidelines from the Competency Assessment Committee (see Chapter VII), or recommendations by the Commission on Basic Education and the Task Force on Long Range Planning in Teacher Education.

- f. A list for discussion of practical questions such as: How could these be met by our faculty? How could we monitor these? Where do field experiences fit in? What responsibilities does each phase of our program have in meeting these competencies? What implications do they have for our long range follow-up program evaluation? What implications do they have for student-advising procedures? What can our faculty offer and what can be offered better by some other agency?

An Illustrative Application

The Generic 66 resulted from sifting many statements by a large group of educators without benefit of a common organizational concept. This process incorporates thinking of educators with diverse orientations. The logistics of multiple committees at the Lock Haven Workshop introduced the possibility of overlap and gaps. Hence, there was a need to revise the Generic 66, producing the Generic 22 (see Chapter I). As the Generic 22 was written, so the faculty of an elementary school, secondary school, college or university might attempt a similar task.

Following is a list of generic competencies written by a hypothetical faculty. The faculty began with the Generic 66, applied 15 selection criteria to each of the 66, and produced the following list of generic competencies.

HYPOTHETICAL FACULTY LIST

- A. The teacher will show evidence of the impact of his/her expanding knowledge based on his/her personal philosophy of education by matching the shift in his/her position reported at least once per year with the sources of influence for each change. (#3)
- B. The teacher will describe the relationship between the ethics embodied in his/her personal philosophy statement at entry into the profession and (1) values and ethics in the community of which his/her home, student-teaching locale or college is a part, and (2) values and ethics of the profession. (#6, 58)
- C. The teacher will provide repeated examples of fairness, compassion and respect for his/her students as unique individuals and as a group, regardless of differences in their respective value systems. (#38, 39, 41) (Depends on early field experience)
- D. The teacher will show the compatibility of goals and priorities for instructional programs to which he/she is assigned with (1) his/her personal philosophy, (2) documents showing the philosophical and cultural characteristics of his/her school, community, state and nation, and (3) policies and services of local, state, national and international educational agencies. (#1, 2, 6, 8, 9, 48, 61, 63)
- E. The teacher will show that he/she has extensively used the persons, places and things (e.g., educational technology) in the community and school as resources for planning and instruction. (#3, 10, 11, 30, 31, 35, 59, 60)
- F. The teacher's instructional plans will show agreement with the current trends in his/her field, psychological and social learning theories, accumulated research on instruction and his/her own research in his/her specialty as they relate to the local community. (#7, 8, 9, 13, 14).
- G. The teacher will demonstrate regularly incorporated instructional activities that are designed to meet the unique set of needs and to use the unique set of capabilities of each student, including social skills, responsible independence in learning, the will to learn and the capability to maintain a healthy learning environment. (#24, 25, 27, 28, 29, 36, 37, 40, 42, 43, 46, 49, 52, 53)
- H. The teacher will show that he/she has employed a variety of techniques, materials, persons, methods and sequences to guide active involvement by each student in the creative planning, in accordance to his/her needs of the use of basic learning and study skills to perform critical analysis, convergent and divergent thinking, selection and synthesis of ideas, and the implementation of his/her own projects. (#15, 16, 17, 18, 19, 20, 23, 24, 25, 27, 28, 29, 30, 44, 45, 47, 50)

- I. The teacher will interpret research literature in his/her use of multiple evaluation techniques in planning, implementing and using the findings from ongoing assessment of the (1) internal consistency and (2) effectiveness of the conception, implementation and evaluation procedures on student learning. (#8, 9, 26, 32, 33, 54)
- J. The teacher will systematically relate conceptualization, implementation and assessment with his/her increasing knowledge of the perspectives, norms, conventions, standards and expectations provided by the fields outside of teacher education. (New)

The criteria applied to the Generic 66 were determined by an examination of a large number of competency statements to cull characteristic deficiencies. This approach was inductive and the deficiencies determined selection criteria.

- Subsumed:** The ideas in the statement have already been included within the context of a more inclusive statement.
- Knowledge:** The statement does not demand use by the teacher; knowledge, identification of, or awareness are not acceptable in themselves.
- Scope:** The statement implies a tendency to identify a specific course or applies to a limited range of educational fields.
- Language:** The statement tends to alienate good teachers, is too technical, or lacks clarity because of grammatical problems or too much educational jargon.
- Behavioral:** The statement is not easily translated into observable behavioral cues or outcomes.
- Client:** The statement may be behavioral, but is too dependent upon performance of pupils in field situations over which the teacher has little control.
- Feasible:** The statement demands performance which is unreasonable to expect of a teacher training institution.
- Standards:** The statement describes a personal attribute or does not imply standards of quality expectations.
- Patent:** The statement describes the obvious or something likely to occur in spite of institutional efforts.
- Dynamic:** The statement does not require repeated attention throughout the preparatory program; does not provide for meeting changing conditions; or defers monitoring to student teaching.

- Reorganization:** The statement, as worded, cuts across two or more of the previously accepted competencies or conceptual categories.
- Crucial:** The statement does not represent an important capability.
- Entry:** The statement identifies a competency that is either too advanced or not comprehensive enough to expect of a beginning teacher during his/her first assignment.
- Variety:** The statement describes expectations which if implemented would inhibit flexibility of faculty style and/or demand administrative reorganization.
- Construct:** The statement is not easily related conceptually to the other competency statements.

The hypothetical faculty's analytic and synthetic processes tackled each of the Generic 66 as follows:

<u>Generic 66 Reference No.*</u>	<u>Selection Criteria Applied</u>	<u>Faculty's Resulting Generic Competencies</u>
1	subsumed, dynamic, knowledge	D
2	subsumed, reorganization	D
3	subsumed, dynamic	E
4	standards	discard
5	patent	discard
6	subsumed, dynamic, knowledge	D
7	subsumed	F
8	subsumed	F
9	subsumed	F
10	subsumed, patent, reorganization	
11	subsumed, patent, reorganization	E, F E, F
12	subsumed	C
13	subsumed	F
14	subsumed	F
15	subsumed, scope, client	H
16	subsumed, language, scope, client	H
17	subsumed, scope, client, reorgani- zation	H, E, D
18	subsumed, client	H
19	subsumed, scope, reorganization	H
20	subsumed, scope	H
21	behavioral, scope	discard
22	subsumed, scope, behavioral, patent, reorganization	H

*See Chapter VIII

<u>Generic 66 Reference No.</u>	<u>Selection Criteria Applied</u>	<u>Faculty's Resulting Generic Competencies</u>
23	subsumed	H
24	subsumed	H
25	subsumed	H
26	subsumed	I
27	subsumed, scope	H
28	subsumed, scope	H
29	subsumed, language, scope, dynamic	H
30	subsumed, scope	H
31	subsumed	E
32	subsumed, language	I
33	subsumed	I
34	knowledge, behavioral, client, feasible	discard
35	subsumed	E
36	subsumed	G
37	subsumed	G
38	subsumed, language, scope, standards, dynamic, feasible	C
39	subsumed, behavioral, standards	D
40	subsumed, scope	G
41	subsumed, scope, behavioral, client	C
42	subsumed, behavioral, standards, client	G
43	subsumed, knowledge	G
44	subsumed, behavioral, standards, dynamic	H

<u>Generic 66 Reference No.</u>	<u>Selection Criteria Applied</u>	<u>Faculty's Resulting Generic Competencies</u>
45	subsumed, reorganization	H
46	subsumed, scope, standards	H
47	subsumed, scope, reorganization	G, H
48	subsumed, scope, language, standards	D
49	subsumed, knowledge, scope, behavioral, standards	G
50	subsumed, reorganization	G, H
51	knowledge, scope, behavioral, client, standards, reorgani- zation	discard
52	subsumed, client	G
53	subsumed, client	G
54	subsumed	I
55	scope, language, client, standards, patent, feasible, reorganization	discard
56	scope, language, behavioral, standards, client	discard
57	add to faculty list with attention to client, standards, feasible	rewrite
58	subsumed, behavioral	B
59	subsumed, standards	E
60	subsumed, standards	E
61	subsumed, knowledge, scope	D
62	knowledge, scope, behavioral, standards, patent	discard
63	subsumed, knowledge, scope, behavioral	D

<u>Generic 66 Reference No.</u>	<u>Selection Criteria Applied</u>	<u>Faculty's Resulting Generic Competencies</u>
64	subsumed, knowledge, behavioral	D
65	subsumed, knowledge, behavioral	D
66	subsumed, knowledge, behavioral	D

CHAPTER III

Review of Related Research

This review was prepared by Peggy L. Stank, Educational Research Associate, Bureau of Information Systems, Pennsylvania Department of Education. Dr. Stank is coordinating the formative evaluation of the PaCBTE Program.

A recent in-house report of the summaries on teacher effectiveness (Donny, 1972) provides an extensive profile of 51 articles reporting research findings and analytic studies of teaching competencies. Forty-eight of the studies reviewed reported lists of teaching behaviors that have been observed in classrooms and are judged as good teaching behaviors. Many instruments and checklists were cited as valid for use in evaluating teachers on the basis of these behaviors, but there was little or no valid research cited that shows which of the behaviors produce change in students. Of the 51 studies reviewed, only three attempted to relate student achievement to teacher competencies.

A three-year longitudinal study by Olmstead (1974) identified seven major stances or types of teacher personality profiles. These stances or profiles are described in terms of characteristics in both affective and cognitive domains. Olmstead, a sociologist and professor of medical education research and development and of education, reports a rigorous and well documented research study and provides a valid table of the profiles for these seven "teacher stances." She recommends that only candidates with preentrance profiles indicating four teacher stances (child focuser, pragmatist, task focuser and contented conformists) be accepted into teacher training programs.

Although Olmstead's evidence supports the validity of the seven stances, her identification of four stances as good teacher profiles is based on her expert understanding of socializing processes. These four teacher stances have not been shown to be related to differential achievement in students. Additional research is necessary to support the validity of these four desirable teacher stances.

Herman (1969) investigated differences in the effects of student-centered and teacher-centered teaching behaviors and reported no differences except for high IQ children. However, no data was reported on differences among teachers within treatments and only "appropriate" behaviors were reported. These "appropriate" behaviors occurred during two-thirds of time; no report was made of behaviors occurring in the remaining one-third of the observation time.

Hiller (1969) reported several correlations between teachers' verbal characteristics and student learning. The instructional time was limited to 15 minutes and a posttest only design was used. Because

there was no pretest, there is no way that total posttest scores can be attributed only to knowledge gained during the 15 minute lecture period.

Rosenshine and Furst (1971) reviewed 50 process-product studies relating teacher behavior to student achievement. Forty of the studies sampled behaviors during one or two school semesters; in 10 of the studies the time ranged from seven minutes to 10 one-hour lessons. Rosenshine reports a scarcity of studies in which student performance is assessed over a long period of time.

In summarizing the results of the process-product studies, Rosenshine and Furst list five variables as showing a strong relationship with measures of student achievement: clarity, variability, enthusiasm, task orientation and student opportunity to learn.

The seven cognitive clarity studies used mostly high-inference measures, and it is difficult to identify low-inference behaviors for this area. Both high and low inference measures showed that variability is related to student achievement. Enthusiasm and task orientation were usually measured using high inference techniques. Student opportunity to learn was measured in a variety of ways involving both high and low inference techniques.

Teacher behavior in most studies has been limited to verbal and nonverbal interaction with students. No attention has been given to other variables such as selection and use of materials, organization of classroom management, use of evaluation procedures, etc.

A multitude of studies has been reported in curriculum areas comparing various methods or curriculum with teacher behaviors either undefined or vaguely described. These studies ultimately provide data only on differences between two sets of materials and little information as to which instructional variables contributed to the differences.

A survey of educational journals over the past 10 years produces a wealth of information on categorical classroom observational systems. These systems focus on specific defined teacher behaviors, usually demonstrate high interrater reliability and can discriminate among teachers. There has been no attempt reported that relates the behaviors observed to student achievement. Certain teacher behaviors and student responses have arbitrarily been judged as more desirable than others on the basis of one other theoretical construct or another.

The current status of information available from research on teacher effectiveness has been described by Rosenshine (1971):

At most, there are 70 correlational or experimental studies in which observed behaviors of teachers or students have been related to student growth. Almost all of these studies were reported in 1966 or thereafter; approximately half were

conducted by doctoral students who had limited resources and so had to use 15 teachers or fewer in their samples. The number of instructional behaviors which have been studied is limited and many of the activities which are of interest to educators and the public have not been studied to any large extent in situ.

Despite the lack of definitive research in the area of teacher effectiveness there is professional consensus about the competencies a "good" teacher should have.

Thomas (1973) reports on a study using two systems for determining the judgment of professional educators as to the priorities of specific teacher competencies in seven categories. The results of the Thomas study showed that teachers and supervisors tend to agree on the value of specified teacher competencies and consistently ranked human relation skills first and evaluation last. The competencies were considered equally important for both beginning and experienced teachers.

The results indicate that teachers are expected to be competent in subject matter and instructional methodology and on several levels of interpersonal relations and community involvement.

Millman (1973) defines teacher competency as "the ability to change pupil performance according to prespecified objectives." He discusses the value of measuring teacher effectiveness through controlled teaching encounters. These teaching encounters control lesson content and time spent on instruction. The teacher effectiveness is evaluated by student posttest scores. Although objections have been raised as to the legitimacy of evaluating teachers through observable basic skills achievement of pupils, Millman states that basic skills are an important part of the curriculum; and he expresses doubt that a person who cannot communicate knowledge in basic skills effectively will be able to communicate with students to assist them in development within the affective domain.

Rabinowitz and Travers (1953) agree with the Millman premise that effective teachers are primarily those who contribute to the growth of the pupil.

The research cited reports the existence and use of a multitude of observational techniques for recording teaching behaviors. There are just as many studies identifying "effective" teaching behaviors and competencies through the use of the expert opinions of professional educators. Only a few studies have attempted to relate teacher behaviors or competencies to the ultimate criteria for effective teaching and for students' cognitive and affective growth. There are no long-term studies that report the effects of teaching behaviors on student growth over an extended period of time.

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CHAPTER IV

Evaluation of CBTE: Design and Status Report

This chapter was prepared by Peggy L. Stank, Educational Research Associate, Bureau of Information Systems, Pennsylvania Department of Education. Dr. Stank is coordinating the formative evaluation of CBTE programs in an effort to share developmental experiences with programs across the Commonwealth.

Evaluation, essential to instructional programs at all levels, serves three purposes: to define program procedures and to measure their adequacies; to identify areas for change, adaptations or recycling; and to analyze the end product in reference to a specified criterion level. The Bureau of Information Systems (BIS) of the Pennsylvania Department of Education has developed a Prototypic Evaluation Procedure (PEP) which has been adapted with little or no modification to evaluate CBTE programs.

PEP for CBTE

Program Definition. A program is defined by a specific set of statements that describe each component (i.e., selection criteria, content mastery, general education, professional education, etc.). These statements are developed by the program's staff and should provide a clear picture of what is being investigated.

Description of Program Structure. The following variables can be identified within total program structure: organization, task, methodology, facilities and cost.

Organization. The structure of program is a matrix in which people are brought together to perform specific tasks. This matrix has three components: (a) time, the duration and sequence of blocks of time; (b) vertical organization, the upward movement of students within the program; and, (c) horizontal organization, the alternative patterns of instruction available at various levels of the vertical structure.

Task. The task is a set of activities performed by students in a given program. This set has two components: (a) content, the knowledge identified with a specific curriculum area; and, (b) process, that series of related activities and events that facilitate accomplishment of a given task, as affected by the institution's philosophy.

Methodology. The methodology is the formal structure of activities designed to facilitate learning, including both teaching activities and learning theory.

Facilities. The facilities include space, equipment and other expendables necessary to support an educational program.

Cost. The program's cost is the money required for facilities, maintenance and personnel within a given program.

Description of Subjects. The education, background and attitude of instructors, administrators, specialists, students and community expectations are included in the description of the subjects.

Description of Terminal Behavior. The behavioral objectives or goals are expressed for instructors, students, administrators and specialists.

Identification and Operational Definition of Objectives. The identification and operational definition of objectives includes (a) pupil outcomes expected in classroom, Pennsylvania's 10 Goals for Quality Education; (b) specific teacher competencies necessary to realize pupil outcomes, generic and enabling competencies; (c) pre-service conditions or instructional experiences necessary for teachers to achieve these competencies, modules; (d) the overt teacher behaviors to be accepted as evidence of the competencies specified for both generic and enabling competencies; and, (e) criterion levels of performance accepted as adequate mastery of specified competencies for both generic and enabling competencies.

Types of Possible Evaluation

Following are types of evaluation which will be used for the PaCBTE Program: (1) context evaluation (interview schedules, questionnaires and basic data forms); (2) input evaluation (panel deliberations, review of professional literature and consultants); (3) process evaluation (observation schedules, interview scales, questionnaires, rating scales, opinionnaires and suggestion boxes); and, (4) product evaluation (measurement and interpret outcomes in relation to stated context, input and process).

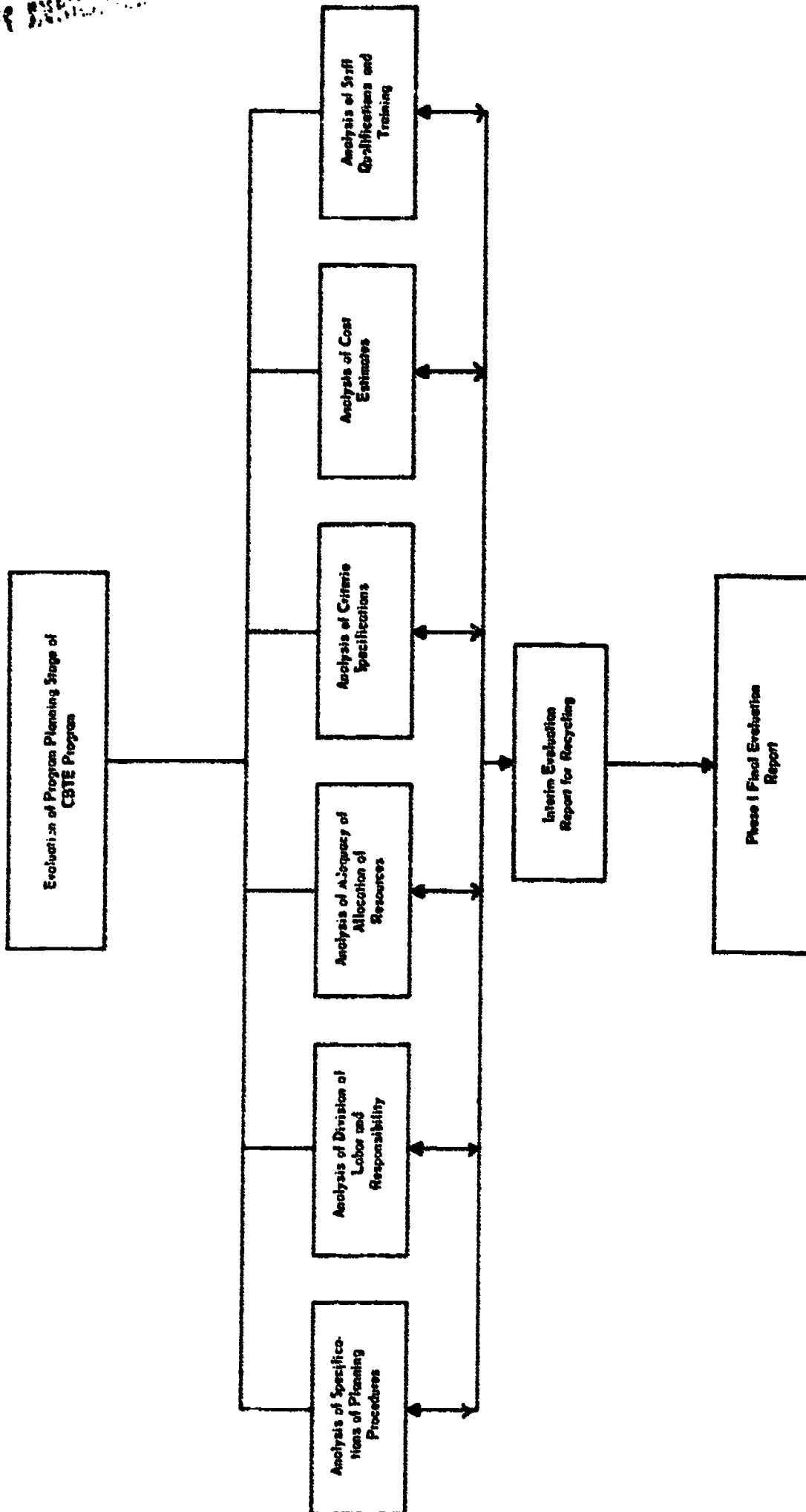
Evaluation of CBTE

The following outlines a three-phased evaluation of CBTE: Phase I, gathering and interpreting data on the planning stages; Phase II, evaluating the developmental stages of a pilot CBTE program; Phase III, evaluating the impact of a CBTE program's graduates in the classrooms and schools of Pennsylvania. The evaluation involves a sampling of programs at different types of institutions and at different stages of development, and both formative and summative approaches.

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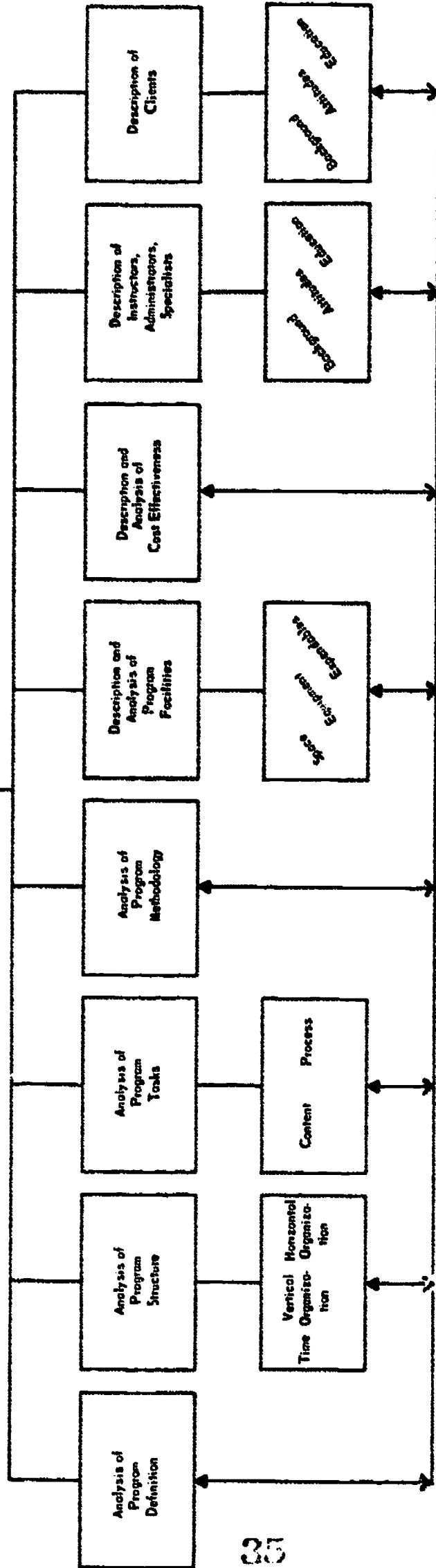
MODEL FOR THE EVALUATION OF CBTE

Developed by Peggy L. Stank
Phase I



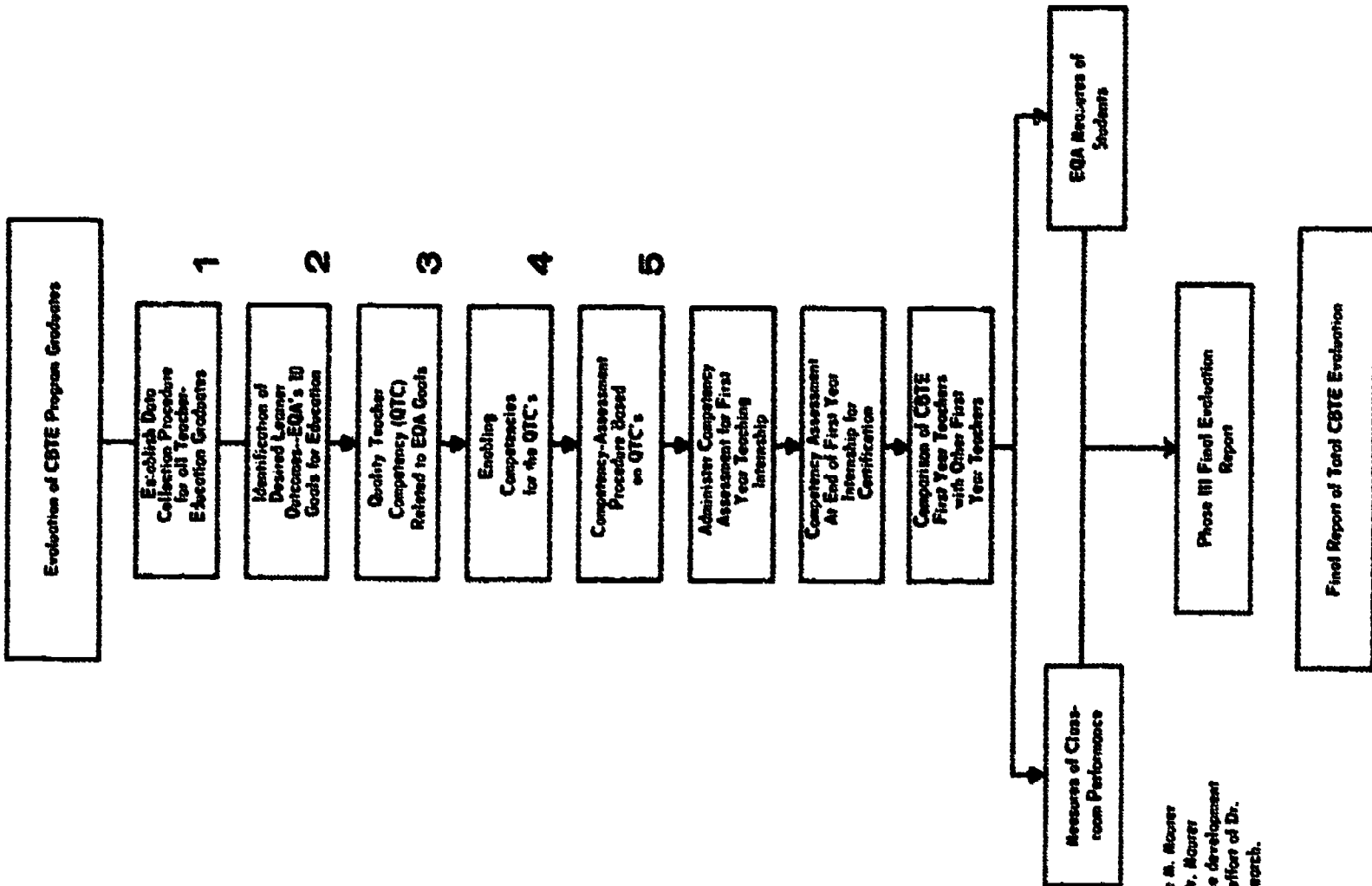
Phase II

Evaluation of Developmental Steps of a Pilot CBTE Program



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Phase III



Steps 2-5 were planned by Wallace M. Maurer
 Products 2-4 were developed by Dr. Maurer
 Refinement of Products 2-4 and the development
 of No. 5 will be a cooperative effort of Dr.
 Maurer and the Division of Research.

Evaluation Status Report

According to a report to the State Board of Education in September, 1973, 10 colleges and universities were operating CBTE programs that had received program approval. These programs had the capability of recommending candidates for certification on the basis of demonstrated competency, as distinguished from program completion.* Questionnaires were sent to all of these institutions to gather descriptive data on their CBTE programs. Returns were received from seven; and the data are presented in Tables 1 and 2.

From the data in Table 1, it can be seen that in only one college, Robert Morris College (Pittsburgh, Pennsylvania), is the total education department competency-based. In the institutions with the largest enrollment, 10 to 25 per cent of the students are enrolled in CBTE programs. The proportion of time spent in field experiences ranges from 10 per cent to 75 per cent. In three of the smaller schools, the total faculty of the education department is involved in CBTE; larger institutions reported from 10 per cent to 50 per cent of faculty involved in CBTE. The student-to-faculty ratio ranged from 7 to 1 to 30 to 1. Although most schools reported some method of assessing competencies, this is a problem area in all programs.

Table 2 indicates that only two institutions have developed modular scheduling; most schools operate CBTE in a traditional schedule or time framework. CBTE ranges from a four-year program to a one-semester program. Almost all respondents have retained traditional grading systems. Where use of computers was reported, it was only used for scheduling. Pre-operational planning varied from two months to three years.

One of the questions asked of all the respondents concerned the identification of problems encountered in the development and implementation of CBTE. The most common problems reported are (a) identification of competencies; (b) determining level of competency expected; (c) competency assessment, procedures and instrument development; (d) faculty recruitment, assignment, orientation and communication; (e) development of instructional units; and, (f) scheduling of faculty load and adjustment to time divisions of the existing schedule.

Two colleges were visited, and their faculty and students interviewed during the 1973-74 term. Additional on-site visits are planned for the 1974-75 term; and a report of these on-site visits will be published early in 1975.

*It must be noted that many other programs have major competency-based components and are in transition to a position where a candidate's recommendation for certification will be based on demonstrated competency rather than program completion.

Table 1. CBTE Programs, Summary

<u>Institution</u>	<u>Enrollment</u>			<u>Faculty</u>			<u>Time in Fld. Exper.</u>	<u>Comp. Assess. Proced.</u>	<u>CBTE Pgm. Approved for Cert.</u>
	<u>Ed. Div.</u>	<u>CBTE</u>	<u>Ed. Div.</u>	<u>Ed. Div.</u>	<u>CBTE</u>	<u>CBTE</u>			
Lafayette Col.	160	40	3	3	3	3	70%	Yes	Yes
Robert Morris Col.	52	52	10	10	10	10	60 hours	Yes	Yes
Millersville S. C.	2,500	260	---	---	9	9	---	Yes	Yes
Bucknell Univ.	500	100	9	9	9	9	30%	Yes	Yes
Temple Univ.	351	265	360	360	13	13	10%-75%	No	No
California S. C.	3,050	---	143	143	14	14	10%	In Process	Sp. Ed.
Univ. of Pittsburgh	2,357	523	143	143	72	72	33%-66%	Yes	El. Ed. Read.

Table 2
CBTE Programs, 1973-74

<u>Institution</u>	<u>Level*</u>	<u>Program</u>	<u>Type**</u>	<u>State Cert.</u>
Lafayette Col.	S	Foreign Lang. Science Soc. St. Math English	T	Yes
Robert Morris Col.	S	Business Ed.	T	Yes
Millersville S. C.	E,S	Library Sci.	T	Yes
Bucknell Univ.	S	School Psy. Teacher Ed. Ed. Admin. Super. Letter of Elig.	T	Yes
Temple Univ.	E,S	Art Ed. Counselor Ed. Ed. Media Dist. Ed.	T	
California S. C.	---	Spec. Ed.	//	Yes
Univ. of Pgh.	---	E1. Ed. (Mstrs) Mdle Sch. (Mstrs) Read. Sp. (Mstrs) Voc. Ed. Early Childhood E1. Ed	//&P	Yes --- Yes --- --- Yes

*Elementary - E
Secondary - S

**Parallel - //
Total T
Pilot P

Table 2CBTE Programs, 1973-74 (contd.)

<u>Pre-Operational Period</u>	<u>Initiation</u>	<u>Duration</u>	<u>Computer-ization</u>	<u>Organization Instruction</u>		<u>Grading</u>
				<u>Modular-ization</u>	<u>Time Block</u>	
1 Yr.	1971	1 Sem.	No	X		A-F
1 Yr.	1962	4 Sem.	No	X		A-F
1 Yr.	1968	4 Years	No	X		Pass/Fail A-F
"Years"	1966	4 Years	No		Traditional Organization	A-F (Courses) P-F (Student Teaching)
---	1972	1 Term	No		Traditional	A-F
18 Mo.	1969	3-4 Sem.	Yes			Combination
1 Yr.	1973	2-6 Sem.	No			A-F
2 Mo.	1972	8 Sem.	Yes			A-F
2 Yrs.	1973	8 Terms	No		Traditional	A-F
2 Yrs.	1970	3 Terms	No		Traditional	Grades
1 Yr.	1973	3 Terms				Grades
1 Yr.	1971	3 Terms				Grades
1 Yr.	1974	4 Terms				Grades
1 Yr.	1973	4 Terms				Grades
3 Yrs.	1971	4 Terms				Grades & P-F

CHAPTER V

Importance of and Responsibility for the Generic 66

This report was prepared, and data analyzed, by Peggy L. Stank, Educational Research Associate, Bureau of Information Systems, Pennsylvania Department of Education. The data collection instrument was designed by Dr. Craig and administered at 10 certification conferences for teachers, teacher educators, and school administrators held in cities and towns across Pennsylvania in October and November, 1973.

Importance of the Generic 66

The Generic 66 was submitted for evaluation to 586 professional educators: teachers, supervising teachers, principals, superintendents and college professors. First, they were asked to rate each competency on the following scale:

A new teacher must be able to (the competency). 1. . .

1. strongly agree (SA)
2. agree
3. disagree
4. strongly disagree (SD)

The mean rating for each competency is given in Table 3, page 43.

The data here show that only four competencies had mean ratings lower than 2.0. (It should be noted that a rating of 1 on the scale used was a high rating indicating strong agreement.) All of the competencies with mean ratings of 2.0 or lower were related to administrative areas of a school system rather than to classroom competencies. The mean ratings of all other competencies ranged from 1.13 to 1.87. Most of the items with mean ratings between 1.5 and 2.0 appear to be competencies that were rather indirectly related to classroom teaching. Items directly related to classroom teaching were rated at 1.5 or higher (between 1.5 and 1.0.)

It is obvious from the data in Table 3 that educational consensus supports the premise that new teachers should be able to demonstrate 62 of the Generic 66. The differences in mean ratings of competency could be interpreted as indicating the degree of skill a new teacher should have in each competency. For example, the mean rating of competency 2 was 1.13 while competency 32 had a mean rating of 1.83; this could indicate that new teachers should demonstrate a high level of competency in reflecting enthusiasm toward his/her profession, while a lower level of competency in awareness of teacher negotiations would be acceptable.

The ratings of the competencies were compared across the categories of the respondents (teachers, principals, etc.) but the differences in the mean ratings of specific competencies by the respective categories were minimal, ranging from .1 to .3. This similarity in how teachers, superintendents, principals, etc., value certain teacher competencies is supported by the work of Thomas (1972), cited in Chapter III.

Responsibility for the Generic 66

The respondents were also asked to indicate where teachers should be trained in each of the competency areas. The scale used to determine the preferred site is:

The learning experiences should be. . .

1. field-based experiences only (F)
2. field- and college-based, but more field
3. field- and college-based, but more college
4. college-based experiences only (C)

The mean ratings of the 66 competencies across respondent categories ranged from 1.9 to 2.7 and the mean of the mean ratings was 2.2. These data indicated that respondents felt that all competencies should be developed through a combination of college and field experiences. Competencies that involved interaction with classroom students usually received ratings indicating more field than college based learning experiences. A table presenting the means and standard deviations for the development location of the Generic 66 has not been included.

Factor Structure of the Generic 66

The data generated by the 586 respondents' ratings of the importance of the 66 competencies were submitted to a principal components factor analysis followed by a varimax rotation using the BioMed 03M computer program. This analysis revealed five factors.

When the competency statements within each factor were considered, Factors IV and V were not clearly defined. The principal components factor analysis was repeated calling for only three factors. The results of this analysis provided three clearly defined factors which may be considered principal terminal competencies:

- I. The teacher will design and implement strategies which facilitate pupil learning.
- II. The teacher will coordinate school and community features to sustain favorable learning conditions.

III. The teacher will diagnose educational needs and prescribe appropriate instructional steps.

These three factors, or principal terminal competencies, are general characteristics for all of the competency statements within each factor. Those competencies with a mean importance rating between 1.0 and 1.5 are designated *critical teaching competencies* and are italicized.

The three factors or principal terminal competencies and their component generic competency statements follow.

Factor I. The teacher will design and implement strategies which facilitate pupil learning.

Adjust components of the physical environment to ensure student comfort, health, and safety and facilitate learning. (36)*

Guide research and creative projects that are devised by students. (18)

Prescribe remedial action for diagnosed learning problems. (46)

Demonstrate continuing self-evaluation through selection and application of a variety of resources for this purpose. (54)

Utilize knowledge of physical, mental, social and emotional growth and development to planning learning experiences to meet the special needs of children of various ages. (40)

Apply motivational techniques that are appropriate for the level of the pupils. (25)

Aid students in the selection of, and evaluation of their progress toward, personal goals and objectives. (52)

Provide learning experiences which enable students to transfer principles and generalizations developed in school to situations outside of the school. (50)

Evidence fairness, tact, compassion and good judgment in dealing with pupils. (39)

Incorporate pupil progress data from multiple assessment techniques in planning instruction. (33)

Demonstrate the use of skillful questions that lead pupils to analyze, synthesize, and think critically. (15)

Establish rapport with individual students and make provision for special needs of students according to their ability and background. (42)

*Numbers in parentheses refer to the identification numbers for the Generic 66. See Chapter VIII.

Demonstrate understanding of the limits of one's professional competencies so that other appropriate professional assistance can be utilized to the benefit of the student. (44)

Adapt to varying school situations and conditions. (35)

Maintain an educational environment conducive to developing positive attitudes toward learning. (37)

Establish guidelines for developing and maintaining control in the classroom, including the resolution of individual pupil problems with a minimum of disruption. (29)

Use instructional strategies that lead students to make functional use of the basic study skills. (19)

Demonstrate the knowledge of and commitment to ethical and professional standards regarding the acquisition, handling, and explaining of student evaluation data. (34)

Demonstrate a firm commitment to the ideal that teaching implies compassion and humility with a respect for the dignity of the student regardless of the value system of the teacher. (38)

Provide alternative ways for students to satisfy objectives. (12)

Tolerate and encourage divergent as well as convergent thinking in order to facilitate the functioning of the creative process. (16)

Identify the manner in which the peer group influences each individual in the group (28)

Use feedback to modify classroom practices. (26)

Factor II. The teacher will coordinate school and community features to sustain favorable learning conditions.

Plan and participate in meetings of school and community organizations to assist in developing programs for educational change. (60)

Demonstrate the ability to communicate effectively with members of the school community. (57)

Identify the agencies and agents which affect, make, and implement educational policy at the local, state, and federal levels. (61)

Describe the career patterns of teachers--supply and demand, economic and social status, security, benefits, responsibilities. (62)

Demonstrate cooperation in planning educational activities with colleagues, administrators, supervisory personnel and students. (59)

Describe the organization of administrative, instructional, and service units in designated school systems. (63)

Be aware of the problems and advantages of teacher negotiations as they reflect emerging change in the relationship between teachers and the administrative hierarchy in education. (64)

Describe essential components of school finance at the local, state, and federal levels. (66)

Locate school laws and identify those provisions and legislations essential to the rights, responsibilities and liabilities of teachers, staff, students, and the school as an institution. (65)

Demonstrate an awareness of the relationship of his/her personal ethics to professional ethics and the values of the community. (58)

Exhibit a professional attitude toward assigned and non-assigned responsibilities. (56)

Factor III. The teacher will diagnose educational needs and prescribe appropriate instructional steps.

Demonstrate a knowledge of the techniques for the analysis of an educational issue, problem, or theory. (6)

Prepare comprehensive learning sequences and long range instruction for accomplishing specific educational objectives. (10)

Demonstrate the ability to communicate subject matter, including the objectives and vocabulary in concepts and words appropriate to the level of the pupil understanding. (22)

Demonstrate the ability to apply a variety of instructional patterns and grouping skills. (24)

Demonstrate the application of the latest techniques, methods, and materials in their respective teaching fields. (14)

Select materials from various content areas where pupils apply language arts and reading skills. (20)

Use appropriate evaluative procedures as an integral part of the total learning context. (32)

Select, identify and implement classroom procedures which are consistent with instructional objectives. (11)

Select, evaluate and implement the most appropriate principles of learning currently available to educators. (7)

Use methods of teaching which are defensible in terms of psychological and social learning theories. (13)

Locate, acquire, organize and analyze information in a manner consistent with established standards of scholarships. (5)

Discriminate between normal and deviant behavior and make referrals to the appropriate professional agency. (45)

Create an awareness among students of their individual differences and have them respond accordingly. (41)

1987 02/27

Table 3
Importance of the Generic 66
Means and Standard Deviations

ID#	Generic Competency	No.	Mean	S.D.
	(Note: Competency statements with a mean rating between 1.00 and 1.50 are considered to be <u>Critical Teaching Competencies</u> and appear in italics.)			
1.	Evaluate instructional practices in terms of political, social, economic and religious history of our country.	297	1.87	.72
2.	<i>Exhibit personal characteristics which reflect enthusiasm toward his/her profession.</i>	297	1.13	.41
3.	Demonstrate a knowledge of the techniques for the analysis of an educational issue, problem or theory.	297	1.68	.69
4.	Read, interpret and evaluate research and relate the findings to teaching practice.	297	1.77	.73
5.	Prepare comprehensive learning sequences and long range instruction for accomplishing specific educational objectives.	297	1.64	.71
6.	<i>Provide alternative ways for students to satisfy objectives.</i>	297	1.33	.51
7.	<i>Demonstrate the application of the latest techniques, methods and materials in their respective teaching fields.</i>	297	1.50	.62
8.	Tolerate and encourage divergent as well as convergent thinking in order to facilitate the functioning of the creative process.	297	1.59	.65
9.	Guide research and creative projects that are devised by students.	297	1.60	.67
10.	Select materials from various content areas where pupils apply language arts and reading skills.	297	1.68	.63
11.	<i>Demonstrate the ability to communicate subject matter, including the objectives and vocabulary in concepts and areas appropriate to the level of the pupil understanding.</i>	297	1.52	.59

Table 3 (contd.)

ID#	Generic Competency	No.	Mean	S.D.
12.	Demonstrate the ability to apply a variety of instructional patterns and grouping skills.	297	1.48	.59
13.	Use feedback to modify classroom practices.	297	1.44	.59
14.	Identify the manner in which the peer group influences each individual in the group.	297	1.80	.71
15.	Demonstrate effective use of library facilities, instructional media and other educational technology.	297	1.57	.62
16.	Use appropriate evaluative procedures as an integral part of the total learning context.	297	1.47	.59
17.	Demonstrate the knowledge of and commitment to ethical and professional standards regarding the acquisition, handling and explaining of student evaluation data.	297	1.63	.69
18.	Adjust components of the physical environment to ensure student comfort, health and safety and facilitate learning.	297	1.66	.69
19.	Demonstrate a firm commitment to the ideal that teaching implies compassion and humility with a respect for the dignity of the student regardless of the value system of the teacher.	297	1.40	.68
20.	Utilize knowledge of physical, mental, social and emotional growth and development to plan learning experiences to meet the special needs of children of various ages.	297	1.33	.51
21.	Establish rapport with individual students and make provision for special needs of students according to their ability and background.	297	1.26	.49
22.	Demonstrate understanding of the limits of one's professional competencies so that other appropriate professional assistance can be utilized to the benefit of the student.	297	1.57	.62

Table 3 (contd.)

ID#	Generic Competency	No.	Mean	S.D.
23.	Prescribe remedial action for diagnosed learning problems.	297	1.79	.86
24.	Evaluate and take appropriate steps to clarify with statements many of the cultural biases, myths and generalizations to which they are exposed.	297	1.88	.75
25.	Provide learning experiences which enable students to transfer principles and generalizations developed in a school to situations outside of the school.	297	1.37	.59
26.	Aid students in the selection of, and evaluation of their progress toward, personal goals and objectives.	297	1.50	.58
27.	Demonstrate continuing self-evaluation through selection and application of a variety of resources for this purpose.	297	1.59	.63
28.	Exhibit a professional attitude toward assigned and non-assigned responsibilities.	297	1.36	.65
29.	Demonstrate an awareness of the relationship of his/her personal ethics to professional ethics and the values of the community.	297	1.49	.65
30.	Plan and participate in meetings of school and community organizations to assist in developing programs for educational change.	297	1.69	.77
31.	Describe the career patterns of teachers--supply and demand, economic and social status, security, benefits, responsibilities.	297	2.30	.91
32.	Be aware of the problems and advantages of teacher negotiations as they reflect emerging change in the relationship between teachers and the administrative hierarchy in education.	297	1.83	.85
33.	Describe essential components of school finance at the local, state and federal levels.	297	2.40	.91
34.	Demonstrate knowledge of philosophical implication in the establishment of educational program directions, priorities and goals.	289	1.80	.72

Table 3 (contd.)

ID#	Generic Competency	No.	Mean	S.D.
35.	Formulate a personal philosophy of education which is both theoretical and practical.	289	1.44	.65
36.	Locate, acquire, organize and analyze information in a manner consistent with established standards of scholarship.	289	1.59	.71
37.	Select, evaluate and implement the most appropriate principles of learning currently available to educators.	289	1.44	.65
38.	Use effectively the tools of research in curriculum planning.	289	1.75	.67
39.	Select, identify and implement classroom procedures which are consistent with instructional objectives.	289	1.36	.52
40.	Use methods of teaching which are defensible in terms of psychological and social learning theories.	289	1.62	.76
41.	Demonstrate the use of skillful questions that lead pupils to analyze, synthesize and think critically.	289	1.31	.52
42.	Promote the development of information organizing skills, e.g., note taking, outlining, summarizing and translating by children.	289	1.69	.68
43.	Use instructional strategies that lead students to make functional use of the basic study skills.	289	1.38	.57
44.	Demonstrate to pupils the interrelationships among subject matter areas.	289	1.50	.64
45.	Employ a variety of techniques, materials and methods which will actively involve each student in the learning situation.	289	1.24	.48
46.	Apply motivational techniques that are appropriate for the level of the pupils.	289	1.32	.57
47.	Demonstrate the ability to direct and participate in group processes in the classroom.	289	1.47	.58
48.	Establish guidelines for developing and maintaining control in the classroom, including the resolution of individual pupil problems with a minimum of disruption.	289	1.37	.59

Table 3 (contd.)

ID#	Generic Competency	No.	Mean	S.D.
49.	Use appropriate school and community resources as well as colleagues and paraprofessionals to facilitate optimum learning for all students.	289	1.56	.66
50.	Incorporate pupil progress data from multiple assessment techniques in planning instruction.	289	1.70	.69
51.	<i>Adapt to varying school situations and conditions.</i>	289	1.47	.66
52.	<i>Maintain an educational environment conducive to developing positive attitudes toward learning.</i>	289	1.30	.51
53.	<i>Evidence fairness, tact, compassion and good judgment in dealing with pupils.</i>	289	1.16	.41
54.	Create an awareness among students of their individual differences and have them respond accordingly.	289	1.71	.85
55.	Identify exceptional characteristics of learners.	289	1.62	.67
56.	Discriminate between normal and deviant behavior and make referrals to the appropriate professional agency.	289	1.70	.73
57.	<i>Identify the problem readers and make appropriate referrals.</i>	289	1.46	.61
58.	Demonstrate how one's environment and culture influences the development of attitudes toward self and others.	289	1.79	.73
59.	Assist students to clarify their values in various learning situations.	289	1.72	.70
60.	<i>Use teaching techniques and strategies that aid students in developing a positive self-image.</i>	289	1.33	.58
61.	Apply the concept of accountability as it relates to the students, their parents and the instructional process.	289	1.74	.86
62.	Demonstrate the ability to communicate effectively with members of the school community.	289	1.58	.72
63.	Demonstrate cooperation in planning educational activities with colleagues, administrators, supervisory personnel and students.	289	1.56	.67

Table 3 (contd.)

ID#	Generic Competency	No.	Mean	S.D.
64.	Identify the agencies and agents which affect, make, and implement educational policy at the local, state and federal levels.	289	2.09	.82
65.	Describe the organization of administrative, instructional and service units in designated school systems.	289	2.13	.91
66.	Locate school laws and identify those provisions and legislations essential to the rights, responsibilities and liabilities of teachers, staff, students and the school as an institution.	289	1.87	.86

CHAPTER VI

1974 PaCBTE Program Report

The 1974 PaCBTE Program is built on accomplishments of the 1973 program, the first year for Federal Title V* funding. Groundwork had been laid in the role competency studies prepared by 1,400 teacher education programs in 83 colleges and universities; the 1973 program culminated in the June Lock Haven Workshop and its trained group of facilitators. The workshop results (Generic 66) have been useful, but the primary benefit has been validation of the Department's grass roots involvement in CBTE. Interest was stimulated by the workshop and over 350 teachers and teacher educators returned to their schools better informed about CBTE. An approach, unusual for a state education agency, was substantiated and the foundation of interested educators provided extraordinary impetus for the current program.

Task Force on Long Range Planning in Teacher Education

The Task Force on Teacher Education was formed in February, 1973, and continued deliberations through the fall of 1973 and the winter of 1974. An interim report in the form of a working paper was presented at the Third Annual Teacher Education Conference in November, 1973. That document is the basis for the final report which is now with the writing committee and which should be ready for the Commissioner's consideration in September.

Generic Teaching Competencies: An Interim Inventory

The report on the June Lock Haven Workshop is the Generic Teaching Competencies: An Interim Inventory. Over 1,800 copies have been distributed since it was first published in August, 1973. Requests have come from all over the United States and Europe.

PaCBTE Consultant Group

Creation of the PaCBTE Consultant Group was perhaps the single most important program development in terms of immediate and long term potential impact. Institutions had been seeking CBTE consulting services from the Department, but the staff size and mandated responsibilities severely limited the extent of services by the Division of Teacher Education. It was clear that an ancillary group available on a part-time basis would meet the need for CBTE advising as well as the need for resource persons for 27 locally administered CBTE projects.

Teachers and teacher educators from different sections of the state and types of colleges were invited to form a consultant group and

*Section 503, Title V, The Elementary and Secondary Education Act of 1965, for strengthening State Departments of Education.

to participate in a three-day planning and development session in February, 1974. The session involved task oriented simulations and discussion, and produced consultant resource materials for workshop development and facilitation. Continued support of the consultant group had included mailings of new CBTE publications and newsletters.

Revised Generic 66, the Generic 22

The Generic 66 was produced by reducing 4,000 competency statements to 403 and then to 66 at the June Lock Haven Workshop. The points of view represented in the Generic 66 are diverse and its theoretical construct is eclectic. The need was broadly expressed for a second generation of the Generic 66 which would represent a consistent theory of education and a desirable format. A writing team of five PaCBTE Consultants undertook the rewriting in March, 1974, and produced the Generic 22.

Multi-State Consortium on Performance-Based Teacher Education

Pennsylvania was extended an invitation to join the Multi-State Consortium on Performance-Based Teacher Education in August, 1974, by a unanimous vote of its membership (Washington, Oregon, Utah, Arizona, Texas, Minnesota, Vermont, New York, New Jersey and California). The Consortium objectives are "(a) to assist each of the participating states in developing management approaches to performance education, and (b) to improve the communication and dissemination of information about PBTE and certification."

Particularly important for Pennsylvanians is the policy guideline stipulating that "no single approach to the improvement of teacher education is implied in the project [Consortium], only consideration about competency (performance) based education as one focus that is worth pursuing." This means that the Commonwealth's membership will not affect the current policy of open experimentation with the concept and its non-legislative approach. The Department anticipates that Consortium membership will enhance the Commonwealth's efforts in CBTE through the exchange of information and the communication of significant Pennsylvania CBTE developments.

PaCBTE Projects

Funding of 27 PaCBTE Projects for professional associations, colleges, universities and school districts across the state has been the main thrust of the 1974 PaCBTE Program. Financial support of locally proposed and administered projects reflects the Department's principle of grass roots involvement. The field's response to the "Request for Proposals" exceeded Department expectations. Proposals were invited in three categories: and the guidelines encouraged projects meeting local needs and involving teachers, education professors, faculty from the academic disciplines, lay persons, and teacher education students. The three categories were:

- A. To write an inventory of specialized teaching competencies.
- B. To develop and plan for the implementation of a CBTE model for in-service teacher education.
- C. To conduct a staff development workshop which would further CBTE expertise among educators in the locale.

A total of 58 proposals was submitted to the Department subsequent to over 100 declarations of intent to develop proposals. Of the 58, 28 were approved for funding and contracts have been completed for 27 projects (one proposal source withdrew its proposal). The total amount funded in 27 projects was \$54,400. The project sources are providing \$82,508 more in direct cash and services for a total of \$135,673. The Department is tremendously pleased with this level of grass-roots support for exploring the potential of CBTE.

Table 4, Receipt and Funding of Proposals for PaCBTE Funds in 1974, presents the funding activity across the three categories for the different types of colleges and universities, school districts and intermediate units, and professional associations. Immediately following Table 4, is an annotated list of the 27 funded projects, complete with contact person names, addresses, and telephone numbers. Upon completion of each project, a summary document will be sent to the Department of Education; all 27 will be edited and published for distribution sometime in 1975. Since the Department does not yet have the project results ready for distribution, please direct all requests for information to the individual project contact persons. Note which projects have been completed. All should be finished by December 31, 1974.

A flow chart outlining the PaCBTE Program over a period of several years follows the annotated project list.

Table 4, Receipt and Funding of Proposals for PaCBTE Funds in 1974

Proposal Sources	Request for Proposal Category								Total	
	A. Inventories Rec'd	Fnd'd	B. In-service Rec'd	Fnd'd	C. Staff Dev't Rec'd	Fnd'd	Rec'd	Fnd'd	Rec'd	Fnd'd
<u>Colleges & Universities</u>	24	3*	7	1	19	20*	50	24	50	24
Private	6	--	2	--	10	8	18	8	18	8
State-Aided	--	--	--	--	1	--	1	--	1	--
State-Related	6	--	1	--	3	3	10	3	10	3
State-Owned	11	2	4	1	5	8	20	11	20	11
Consortia	1	1	--	--	--	1	1	2	1	2
<u>School Districts & Intermediate Units</u>	2	--	1	--	3	2	6	2	6	2
School Districts	--	--	1	--	3	1	4	1	4	1
Intermediate Units	2	--	--	--	--	1	2	1	2	1
<u>Associations</u>	1	1	1	1	--	--	2	2	2	2
<u>TOTAL</u>	<u>27</u>	<u>4*</u>	<u>9</u>	<u>2</u>	<u>22</u>	<u>22*</u>	<u>58</u>	<u>28</u>	<u>58</u>	<u>28</u>

*Some Category A proposals were funded as Category C proposals

Allentown College of St. Francis de Sales

Center Valley, Pennsylvania 18034

<i>Contact:</i>	Raymond J. Pantuso	<i>Grant:</i>	\$1,500
<i>Telephone:</i>	215-282-1100 Ex. 239	<i>Local:</i>	\$1,825

A small liberal arts college presents a special need for interaction between its academic departments and the secondary education department. This project provides a workshop for the liberal arts faculty and follow-up work sessions to interpret the implications of competency-based teacher education in the academic departments. The workshop and follow-up sessions will take place during the fall of 1974.

Antioch-Putney Graduate School of Education5538 Wayne Avenue
Philadelphia, Pennsylvania 19144

<i>Contact:</i>	Herbert McDuffy	<i>Grant:</i>	\$1,500
<i>Telephone:</i>	215-849-3505	<i>Local:</i>	\$ 730

Four workshops will be conducted in the fall of 1974 to develop common understandings about CBTE leading to continued research and development of competency objectives within the Antioch-Putney Graduate School of Education. Since the Generic 66 was not regarded as adequate, the project will identify a new set of generic competencies through the use of video tapes of actual teaching.

Bloomsburg State College

Bloomsburg, Pennsylvania 17815

<i>Contacts:</i>	William S. O'Bruba	<i>Grant:</i>	\$ 900
	Gorman L. Miller	<i>Local:</i>	\$ 700
<i>Telephone:</i>	717-389-3925		

A proposed workshop, to be conducted in October, 1974, will develop a working understanding of the CBTE concept and its implementation in an elementary education program. The workshop will involve small task forces that will identify, list, and evaluate competencies as they relate to elementary student teaching.

Bloomsburg State College

Bloomsburg, Pennsylvania 17815

Contact: Andrew J. Karpinski Grant: \$ 625
 Telephone: 717-389-3110 Local: \$1,055

The first phase of the project was a workshop conducted in May, 1974, to serve two purposes for the Department of Special Education: the participants were informed about CBTE developments in Pennsylvania and developed skills in preparing behavioral instruction models. A systems specialist was retained to complement the PaCBTE Consultant and to provide the special expertise. A follow-up workshop is scheduled for September, 1974.

California State College (in consortium with Indiana University of Pennsylvania, Slippery Rock State College, Edinboro State College, Clarion State College, and McKeesport School District)

California, Pennsylvania 15419

Contact: Homer R. Pankey Grant: \$6,350
 Coordinators: William R. Benedetti Local: \$2,880
 B. Wayne Walker
 Telephone: 412-938-2281

This project was conducted in June, 1974, in response to the Request for Proposals Category A calling for an inventory of specialized competencies. Four work groups explored the implications of four terminal competencies proposed in the keynote address. Issues surrounding the terminal competencies were identified and sets of enabling competencies for elementary education were written along with implications for learning experiences and assessment.

Carlow College3333 Fifth Avenue
Pittsburgh, Pennsylvania 15213

Contact: Sister M. Immaculee Dana Grant: \$2,000
 Telephone: 412-683-4800 Ex. 337 Local: \$2,340

This proposal involves two workshops five months apart. The first workshop, conducted in May, 1974, informed participants about the theory of competency and performance objectives using data generated at the 1973 Lock Haven Workshop. Since all participants were foreign-language teachers, the implications of the Generic 66 for language instruction were explored. The second workshop will be conducted in October and will develop specific foreign language competency statements and instructional strategies.

Cheyney State College

Cheyney, Pennsylvania 19319

Contact: Ronald C. Watts *Grant:* \$2,500
Telephone: 215-399-6880 Ex. 406 *Local:* \$5,225

Receipt of the Request for Proposals coincided with Cheyney State College's decision to develop CBTE on a college-wide basis. Workshops were conducted in May and in August, 1974, to develop skills in role competency identification in all the college's certification programs. There will be additional follow-up sessions and continued support by the college for full implementation of CBTE.

Clarion State College

Clarion, Pennsylvania 16214

Contact: Kenneth G. Vayda *Grant:* \$3,395
Telephone: 814-226-6000 Ex. 570

This project was designed in response to the Request for Proposals Category A calling for an inventory of specialized competencies. A three-day workshop was conducted in July, 1974, to write a competency list for teachers of the mentally retarded and learning disabled children.

Dickinson College (in cooperation with the Central Pennsylvania Consortium of Dickinson College, Franklin and Marshall College, Gettysburg College, and Wilson College)

Carlisle, Pennsylvania 17013

Contact: Sylvester Kohut, Jr. *Grant:* \$1,500
Telephone: 717-243-5121 Ex. 203 *Local:* \$1,000

A two-day workshop was conducted at Dickinson College in July, 1974, with writing an inventory of specialized social studies teaching competencies as a goal. The participants laid out the implications of CBTE for social studies teaching and developed skills in the use of the Generic 66 in program redesigning.

Duquesne University

Pittsburgh, Pennsylvania 15219

Contact: Jack Livingston *Grant:* \$1,500
Telephone: 412-434-6117 *Local:* \$1,150

The workshop was designed specifically for a closer partnership between college faculty and classroom teachers using CBTE as the medium. Completed in June, 1974, the workshop used the Generic 66 as a basis for discussion.

East Stroudsburg State College

East Stroudsburg, Pennsylvania 18301

<i>Contact:</i>	Thomas J. Rookey	<i>Grant:</i>	\$ 950
<i>Telephone:</i>	717-424-3232	<i>Local:</i>	\$1,672
	717-424-3416		

The proposal provided for translation of the Generic 66 into enabling competencies for the field of reading. The expected result will be a set of competencies adaptable to any college's program.

Edinboro State College

Edinboro, Pennsylvania 16412

<i>Contact:</i>	Martin P. Farabaugh	<i>Grant:</i>	\$3,340
<i>Coordinator:</i>	Milton C. Woodlen	<i>Local:</i>	\$5,360
<i>Telephone:</i>	814-732-2752		
	814-732-2737		

This proposal was prepared in response to the Request for Proposals Category B, which calls for a competency-based in-service teacher education model. A pilot competency-based needs assessment instrument was developed and tested. At a work session in June, the in-service materials available at the college and the needs of an in-service program were reviewed. A second work session produced a needs-assessment instrument. Follow-up sessions will be held in the fall of 1974, when an in-service model is pilot tested.

Gannon CollegePerry Square
Erie, Pennsylvania 16501

<i>Contact:</i>	Robert A. Wehrer	<i>Grant:</i>	\$1,500
<i>Coordinators:</i>	Paul Adams	<i>Local:</i>	\$1,025
	Bruce Payette		
<i>Telephone:</i>	814-456-7523		

A series of three one-day workshops, the last in November, 1974, is directed at writing a competency worksheet for teachers, teacher educators and academic faculty involved in teacher education at Gannon College. The workshop approach begins with the Generic 66; and the resulting instrument will be field tested.

Immaculata College

Immaculata, Pennsylvania 19345

<i>Contact:</i>	Marian William	<i>Grant:</i>	\$1,220
<i>Telephone:</i>	215-647-4400	<i>Local:</i>	\$1,090

The proposed project will develop an understanding of the CBTE concept and build expertise in program design. The specific means of evaluation and the value of innovative approaches to CBTE will be stressed.

Kutztown State College

Kutztown, Pennsylvania 19530

<i>Contact:</i>	William H. Marsh	<i>Grant:</i>	\$2,000
<i>Telephone:</i>	215-683-3511 Ex. 458	<i>Local:</i>	\$2,490

This proposal responds to Category A of the Request for Proposals calling for specialized competency inventories. The communication certification area was the focus. A questionnaire will provide preliminary identification of specialized competencies to be examined at a two-day workshop in October, 1974. This project's results will be cross-validated with a similar project conducted by the Pennsylvania Council of Teachers of English.

Lock Haven State College

Lock Haven, Pennsylvania 17745

<i>Contact:</i>	Harvey N. Sterns	<i>Grant:</i>	\$1,500
<i>Telephone:</i>	717-748-5351 Ex. 253		

The grant is being used for consultant services for three pre-service and in-service education programs concerning off-campus teaching centers, a materials and curriculum center within the teaching centers, and continued development of program competencies. The project will be completed in the fall of 1974.

Mansfield State College

Mansfield, Pennsylvania 16933

<i>Contact:</i>	Richard Finley	<i>Grant:</i>	\$1,200
<i>Coordinators:</i>	Ronald Remy	<i>Local:</i>	\$1,870
	Charles Weed		
	Ralph Garvelli		

The Mansfield proposal provides for two workshops in October, 1974, to develop understanding and expertise with the CBTE concept. Faculty from academic and teacher education departments and teachers from the service area will be involved.

Mercyhurst College

501 East 38th Street
Erie, Pennsylvania 16501

Contact: Peter P. Libra *Grant:* \$1,500
Telephone: 814-864-0681 *Local:* \$1,700

The project proposed by Mercyhurst College will involve classroom teachers and college faculty in four fall, 1974, workshops. The expectations include a partnership model for cooperating school districts and Mercyhurst and increased awareness of the CBTE concept.

Messiah College

Grantham, Pennsylvania 17027

Contact: Daniel Chamberlain *Grant:* \$1,500
Coordinator: Terry Stoudnour *Local:* \$1,235
Telephone: 717-766-2511

The proposal provides for a fall, 1974, staff development workshop involving teachers and college faculty. The affective areas of supervision will be considered at the one-day program.

Millersville State College

Millersville, Pennsylvania 17551

Contacts: Joseph Rousseau *Grant:* \$1,500
 William B. McIlwaine *Local:* \$1,500
Telephone: 717-872-5411

The elementary education certification program at Millersville State College has been working since 1969 toward full integration of field experiences with college instruction in elementary education. This grant supported three workshops in April and May, 1974, which studied an instrument to measure the competencies of elementary education students prior to student teaching.

The Pennsylvania State University

University Park, Pennsylvania 16802

Contacts: Warren E. George *Grant:* \$1,450
 Harlan E. Hoffa *Local:* \$6,694
Telephone: 814-863-0418
 814-865-5601

The movement toward CBTE by the faculties of the University's Art Education Department and Music Education Department is being initiated by this project. Three days of workshop activity in the fall of 1974 will orient faculty to CBTE, will develop competency statements for an interdisciplinary (art and music) approach to the arts, and will produce competency statements for selected courses. Music and art supervisors in area schools will be involved so they can contribute to the relevancy of identified competencies.

Pennridge School District1300 North Fifth Street
Perkasie, Pennsylvania 18944

Contact: Patricia A. Guth *Grant:* \$ 1,500
Telephone: 215-257-5011 *Local:* \$27,336

The Pennridge School District has made a firm commitment to the concept of educational flexibility for pupils, staff members and curriculum organization. The Request for Proposals was received at a time when the district was looking for a way to develop a cadre of teachers who would train other teachers. A two-week summer workshop was designed to develop CBTE skills in the leadership cadre.

Pennsylvania Council of Teachers of English

c/o May M. Ireland, President
 Pennsylvania Council of Teachers of English
 Lock Haven State College
 Lock Haven, Pennsylvania 17745

Contact: John E. Fiorini, Jr. *Grant:* \$5,000
 Intermediate Unit #17
 Lycoming County Courthouse
 Williamsport, Pennsylvania 17701
Telephone: 717-323-8561

The four-phased project began in August, 1974. A team of eight persons was created to conduct interviews and mini-workshop sessions across the Commonwealth to generate a preliminary list of competencies. The proposal

was prepared in response to the Request for Proposals, Category A, which called for writing specialized competencies. The Council is concerned with the Communication certification area, which includes speech, theatre, library, film, computer, linguistics, journalism, educational TV and English. As noted above, the results will be cross-validated with those of a similar, but independent, project at Kutztown State College.

Pennsylvania State Education Association

c/o Edward J. Smith, President
 Pennsylvania State Education Association
 400 N. 3rd Street
 Harrisburg, Pennsylvania 17105

Contact: William A. Cornell *Grant:* \$3,500
Coordinator: William Gaskins, Jr. *Local:* \$1,525
Telephone: 717-236-9335

The Association's Instruction and Professional Development Council has been concerned about the future of CBTE and possible implications for teacher evaluation and in-service education. The project is designed to explore CBTE issues and the problems of identifying teacher competencies. Four models for in-service programs on CBTE were developed at a three-day workshop in August, 1974. The project was submitted in Category B of the Request for Proposals.

Shippensburg State College

Shippensburg, Pennsylvania 17257

Contact: Paul E. Beals *Grant:* \$1,495
Telephone: 717-532-9121 Ex. 354 *Local:* \$3,786

This project involves four workshops in September, October, November, and December, 1974. The objectives include (a) determination of CBTE assumptions, goals, and objectives; (b) outlines of strategies for producing statements of assumptions, goals, and objectives for specific certification programs; and (c) recognition of bases for affective orientation toward CBTE.

Temple University

Department of Educational Media
 Philadelphia, Pennsylvania 19122

Contact: Minaruth Galey *Grant:* \$ 475
Coordinator: John J. Newhouse *Local:* \$ 100
Telephone: 215-787-8402
 215-787-8401

This project was the first step in a major departmental effort to move the foundations of instructional technology and communications course to a

competency-based format. The project's workshop was designed to present an overview of CBTE and to involve the participants in a series of competency-based learning experiences.

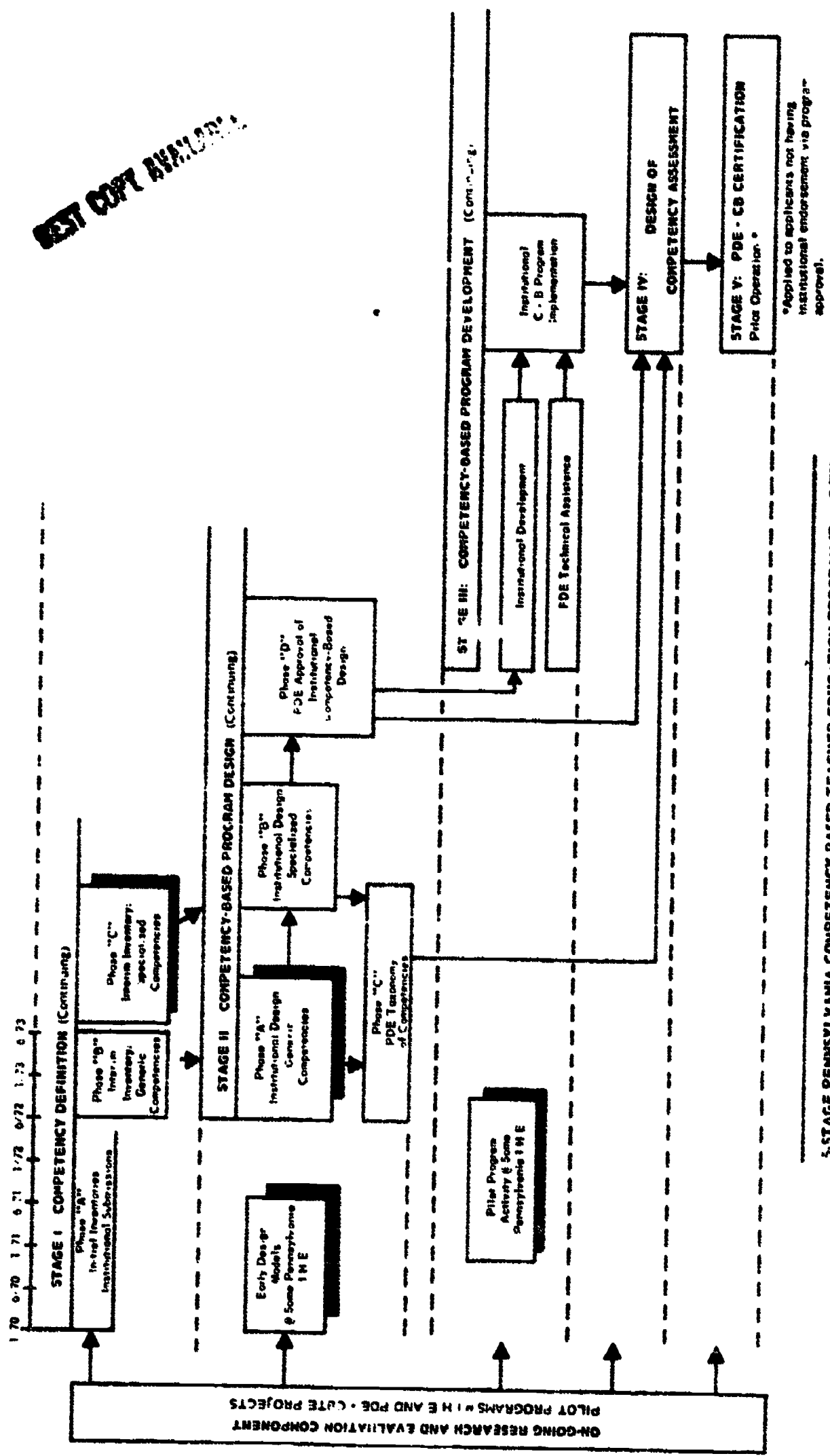
Temple University

Department of Elementary Education
Philadelphia, Pennsylvania 19122

<i>Contacts:</i>	David L. Fitzgerald	<i>Grant:</i>	\$3,000
	David E. Kapel	<i>Local:</i>	\$6,700
<i>Telephone:</i>	215-787-8036 .		

The Department of Elementary Education has been developing a CBTE model and through this project intends to gain critical evaluation in its formative stages. A two-day workshop involving teachers and teacher educators will evaluate the model and examine several delivery systems.

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5-STAGE PENNSYLVANIA COMPETENCY-BASED TEACHER EDUCATION PROGRAM (Rev. 5/75)



CHAPTER VII

Pennsylvania Competency Assessment Certification Program

This chapter was prepared by Wallace M. Maurer, Coordinator of the Pennsylvania Competency Assessment Certification (PaCAC) Program. This program is administered through the Bureau of Teacher Certification and is independent of the PaCBTE Program in the Bureau of Academic Programs, Division of Teacher Education. Dr. Maurer was the first coordinator involved in the early stages of the PaCBTE Program and served as the coordinator for the 1973 funded project which produced the June Lock Haven Workshop. He is the principal editor for Generic Teaching Competencies: An Interim Inventory (Pennsylvania Department of Education, 1973).

The PaCAC Program was initiated by the Bureau of Teacher Certification in July, 1973, to develop and to implement a plan for evaluating and certifying persons who are not graduates of approved teacher education programs in Pennsylvania. Presently these certification candidates are served by the transcript review process and interstate reciprocity agreements. The PaCAC Program's plan for competency assessment and verification is an alternative procedure.

A PaCAC Advisory Committee of teachers, professors, administrators and Department of Education staff was appointed by the Commissioner of Higher Education to conduct research into the problems and feasible alternatives for competency assessment by the Department on a large scale. Approximately 20,000 out-of-state applicants, almost equal to the number of candidates recommended for certification by Pennsylvania approved programs, would be served each year by the resulting alternative certification procedure. The committee's findings will be reported soon to the Secretary of Education in A Proposed Alternative Process for the Certification of Professional School Personnel: Certification Through Competency Assessment and Verification.

PaCAC Program Design

Phase I. The first phase has involved organization of the program, creation of issue awareness, information collection and analysis, and shared involvement and planning.

Phase II. The Department of Education will review the Committee's report on Phase I and submit any necessary certification regulation changes to the State Board of Education for consideration. Acceptance by the Secretary of Education of the report's rationale and strategies for the alternative certification process will provide the PaCAC Program with the necessary support; and it will be able to complement the PaCBTE Program efforts.

Phase III. The third phase involves research and development activity for developing verification procedures and assessment instruments and strategies.

Phase IV. The instruments and procedures developed in Phase III data will be pilot tested. Pending the findings, there will be departmental transition steps including staff assignments and training, collection of data for plan evaluation, and phasing out of the transcript review process for applicants who are not graduates of Pennsylvania approved teacher preparation programs.

Continuous Research Phase. Research will be conducted throughout the program to determine the reliability and validity of the assessment instruments, to identify those teacher characteristics which have high correlation with teacher effectiveness in terms of pupil performance and school effectiveness in relation to the Ten Quality Goals of Education (Pennsylvania's Educational Quality Assessment program).

On-Going Coordination Phase. There will be constant effort to maintain communication and continuity between the PaCBTE and the PaCAC Programs, the Pennsylvania Department of Education and the certification agencies of other states, and the PaCAC Program and non-Pennsylvania teacher-preparing institutions. Common use of data developed by competency-based programs and interstate reciprocity agencies will be a major consequence of this coordination phase.

A list of PaCAC Advisory Committee members follows on page 65.

PaCAC Advisory Committee

Cecil R. Trueblood (The Pennsylvania State University),
Committee Chairperson
Wallace M. Maurer (Pennsylvania Department of Education),
PaCAC Program Coordinator

Subcommittee for the Identification and Selection of Criterion Competencies

Theodore Ruscitti (Moon Area School District, Coraopolis),
Subcommittee Chairperson
Mary D. Atkins (Susquehanna Township High School, Harrisburg)
Helene C. Broom (Harrisburg City Schools)
Verma Carroll (Carlisle Area Schools)
Anthony J. Fredicine (Oley Valley Schools)
Ward L. Myers (Muncy Area Schools)
Benjamin Wiens (The Pennsylvania State University, College of
Education, Continuing Education)

Subcommittee for Identification and Recommendation of Strategies for Competency Assessment and Verification

Raymond Bell (Graduate School of Education, Lehigh University),
Subcommittee Chairperson
Joseph Bellisario (Tredyffrin-Easttown School District, Berwin)
William L. Charlesworth (Pennsylvania Department of Education,
Director, Bureau of Teacher Certification)
Ronald J. Corrigan (Pennsylvania Department of Education, Chief,
Division of Certification)
K. Frederick Mauger (Bellefonte School District and Pennsylvania
State Board of Education)
I. B. Nolan (Central Intermediate Unit #10, Philipsburg)

Subcommittee for Research Activities

Clifford Burket (Albright College, Reading), Subcommittee
Chairperson
Lillian Jennings (Department of Psychology, Edinboro State College)
Peggy Stank (Pennsylvania Department of Education, Division of
Research)
Cecil Trueblood (The Pennsylvania State University, College of
Education)

CHAPTER VIII**Interim Inventory of Generic Teaching Competencies (Generic 66)**

The Generic 66 appeared originally in Generic Teaching Competencies, An Interim Inventory (Pennsylvania Department of Education, 1973), a report to the field on the Pennsylvania Competency Based Teacher Education Project. The 66 competency statements resulted from over 50,000 competency statements submitted by 1,400 programs in 83 Pennsylvania colleges and universities. The task was massive, yet particular care was exercised to preserve the original data's integrity and to apply the best professional judgment.

The first step separated generic competencies (common to teaching in all areas, subjects, and levels) from specialized competencies (applicable only to a particular area, subject, or level). The Department of Education contracted with Human Response Associates, Inc. (Spring House, Pennsylvania and Columbia, Maryland), who processed the 50,000 statements, deleted similar statements and arranged the remaining 4,000 into categories for the June "action" workshop. In the meantime, Human Response Associates, Inc., met with 30 pairs of group leaders from the colleges and universities for three days in April and three days in May to develop group process techniques, workshop procedures and selection criteria for determining the interim inventory.

The June workshop for over 350 participants opened on Sunday, June 3, 1973, at Lock Haven State College with addresses by Pennsylvania's Commissioner of Higher Education, Jerome Ziegler, and Karl Massanari, Director of the American Association of Colleges for Teacher Education's Performance-Based Teacher Education Project. Later in the evening the participants formed 26 groups of 10 to 15 members with pairs of leaders. Each group, given approximately 250 statements, was charged with reducing the number through selection criteria. As a reliability check, each set of 250 was processed independently by two groups and the results combined. By Wednesday afternoon, the 4,000 were reduced by rejection or rewriting to 403.

The group leaders remained Wednesday and Thursday, after other participants left, to draft the interim inventory and to provide guidance for the subsequent steps in the Pennsylvania Competency-Based Teacher Education Program. Through the efforts of a committee of 12 group leaders, the 403 were reduced further to the final number of 66, the Generic 66.

The Interim Inventory of Generic Competencies (Generic 66) is just that! It represents the best efforts to refine and to reduce the competency statements submitted by colleges and universities in 1972. It is incomplete, is dated by authorships prior to 1972, is not "Harrisburg dicta" prescribing teacher education, and is, above all, a working document. As such, it was presented for validation, revision and possible implementation

by educators through pre- and in-service programs on college and university campuses and in elementary and secondary schools.

Since the interim inventory is a research and development instrument, it is not a standard by which teacher education programs will be evaluated for program approval or by which the quality of teaching in elementary and secondary classrooms will be assessed. Educators may want to use the Generic 66 to compare intended results of their own teacher education programs with the collective thinking of those who participated in the June workshop and then possibly introduce changes. Gaps are apparent, and additions or changes are likely. Caution must accompany its use.

Each competency statement is numbered. The Generic 66 will retain these numbers for reference throughout this handbook. The numbers for the Generic 22 should not be confused with and convey no relationship to, those of the Generic 66. All Generic 22 numbers are preceded by "R," such as R1, R2, R3, . . . , R22.

Reference
No.

Theoretical Knowledge of Educational Concepts

Philosophical and Historical Concepts

1. The teacher will demonstrate knowledge of philosophical implications in the establishment of educational program directions, priorities, and goals.
2. The teacher will evaluate instructional practices in terms of political, social, economic, and religious history of our country.

Personal Philosophy, Attributes, and Characteristics

3. The teacher will formulate a personal philosophy of education which is both theoretical and practical.
4. The teacher will exhibit personal characteristics which reflect enthusiasm toward his/her profession.

Use of Information

5. The teacher will locate, acquire, organize and analyze information in a manner consistent with established standards of scholarships.

**Reference
No.**

6. The teacher will demonstrate a knowledge of the technique for the analysis of an educational issue, problem, or theory.

Implementation of Theoretical Concepts and Information in the Classroom

Learning Theory

7. The teacher will select, evaluate, and implement the most appropriate principles of learning currently available to educators.

Educational Research

8. The teacher will read, interpret, and evaluate research and relate the findings to teaching practice.
9. The teacher will effectively use the tools of research in curriculum planning.

Planning

10. The teacher will prepare comprehensive learning sequences and long range instruction for accomplishing specific educational objectives.
11. The teacher will select, identify and implement classroom procedures which are consistent with instructional objectives.
12. The teacher will provide alternative ways for students to satisfy objectives.

Teaching Methods and Techniques

13. The teacher will use methods of teaching which are defensible in terms of psychological and social learning theories.
14. The teacher will demonstrate the application of the latest techniques, methods, and materials in their respective teaching fields.

Developing Students' Abilities

Developing Students' Thinking Skills

15. The teacher will demonstrate the use of skillful questions that lead pupils to analyze, synthesize, and think critically.

BEST COPY AVAILABLE**Reference
No.**

16. The teacher will be able to tolerate and encourage divergent as well as convergent thinking in order to facilitate the functioning of the creative process.
17. The teacher will promote the development of information organizing skills, e.g. note taking, outlining, summarizing and translating by children.

Encouraging Students' Creativity

18. The teacher will guide research and creative projects that are devised by students.

Developing Basic Skills

19. The teacher will use instructional strategies that lead students to make functional use of the basic study skills.
20. The teacher will select materials from various content areas where pupils apply language arts and reading skills.

Widening Students' Comprehension

21. The teacher will demonstrate to the pupils the inter-relationships among subject matter areas.
22. The teacher will demonstrate the ability to communicate subject matter, including the objectives and vocabulary in concepts and words appropriate to the level of the pupil understanding.

Teaching Technique**Widening Students' Comprehension**

23. The teacher will employ a variety of techniques, materials, and methods which will actively involve each student in the learning situation.

Grouping

24. The teacher will demonstrate the ability to apply a variety of instructional patterns and grouping skills.

BEST COPY AVAILABLE**Reference
No.****Motivational Technique**

25. The teacher will apply motivational techniques that are appropriate for the level of the pupils.
26. The teacher will use feedback to modify classroom practices.
27. The teacher will demonstrate the ability to direct and participate in group processes in the classroom.
28. The teacher will be able to identify the manner in which the peer group influences each individual in the group.
29. The teacher will be able to establish guidelines for developing and maintaining control in the classroom, including the resolution of individual pupil problems with a minimum of disruption.

Use of Resources**Media**

30. The teacher will demonstrate effective use of library facilities, instructional media, and other educational technology.
31. The teacher will use appropriate school and community resources as well as colleagues and paraprofessionals to facilitate optimum learning for all students.

Evaluating and Measuring Students' Progress**Use of Test Results as Feedback**

32. The teacher will use appropriate evaluative procedures as an integral part of the total learning context.
33. The teacher will incorporate pupil progress data from multiple assessment techniques in planning instruction.

Ethical Use of Evaluation Data

34. The teacher will demonstrate the knowledge of and commitment to ethical and professional standards regarding the acquisition, handling, and explaining of student evaluation data.

BEST COPY AVAILABLE**Reference
No.****Adapting to Surroundings**

35. The teacher will adapt to varying school situations and conditions.
36. The teacher will adjust components of the physical environment to ensure student comfort, health, and safety and facilitate learning.
37. The teacher will maintain an educational environment conducive to developing positive attitudes toward learning.

Relating to Students

38. The teacher will demonstrate a firm commitment to the ideal that teaching implies compassion and humility with a respect for the dignity of the student regardless of the value system of the teacher.
39. The teacher will evidence fairness, tact, compassion and good judgment in dealing with pupils.

Knowledge of Growth and Development**Individual Differences and Needs**

40. The teacher will utilize knowledge of physical, mental, social and emotional growth and development to planning learning experiences to meet the special needs of children of various ages.
41. The teacher will create an awareness among students of their individual differences and have them respond accordingly.

Special Problems

42. The teacher will be able to establish rapport with individual students and make provision for special needs of students according to their ability and background.
43. The teacher will identify exceptional characteristics of learners.
44. The teacher will demonstrate understanding of the limits of one's professional competencies so that other appropriate professional assistance can be utilized to the benefit of the student.

Reference
No.

45. The teacher will discriminate between normal and deviant behavior and make referrals to the appropriate professional agency.
46. The teacher will prescribe remedial action for diagnosed learning problems.
47. The teacher will identify the problem readers and make appropriate referrals.

Awareness of Cultural Diversity

48. The teacher will evaluate and take appropriate steps to clarify with statements many of the cultural biases, myths and generalizations to which they are exposed.
49. The teacher will demonstrate how one's environment and culture influences the development of attitudes toward self and others.
50. The teacher will provide learning experiences which enable students to transfer principles and generalization developed in school to situations outside of the school.

Clarifying Values

51. The teacher will assist students to clarify their values in various learning situations.
52. The teacher will aid students in the selection of, and evaluation of their progress toward, personal goals and objectives.
53. The teacher will use teaching techniques and strategies that aid students in developing a positive self-image.

Professional AttitudeSelf-Evaluation

54. The teacher will demonstrate continuing self-evaluation through selection and application of a variety of resources for this purpose.

Reference
No.

BEST COPY AVAILABLE

Accountability

55. The teacher will apply the concept of accountability as it relates to the students, their parents and the instructional process.
56. The teacher will exhibit a professional attitude toward assigned and non-assigned responsibilities.

Relating to Community

57. The teacher will demonstrate the ability to communicate effectively with members of the school community.
58. The teacher will demonstrate an awareness of the relationship of his/her personal ethics to professional ethics and the values of the community.
59. The teacher will demonstrate cooperation in planning educational activities with colleagues, administrators, supervisory personnel and students.
60. The teacher will plan and participate in meetings of school and community organizations to assist in developing programs for educational change.

Knowledge of Educational System and Structure

61. The teacher will identify the agencies and agents which affect, make, and implement educational policy at the local, state, and federal levels.

Career Patterns

62. The teacher will describe the career patterns of teachers -- supply and demand, economic and social status, security, benefits, responsibilities.

School Systems

63. The teacher will describe the organization of administrative, instructional, and service units in designated school systems.
64. The teacher will be aware of the problems and advantages of teacher negotiations as they reflect emerging change in the relationship between teachers and the administrative hierarchy in education.

Reference
No.

BEST COPY AVAILABLE

School Law

65. The teacher will be able to locate school laws and identify those provisions and legislations essential to the rights, responsibilities and liabilities of teachers, staff, students, and the school as an institution.

School Finance

66. The teacher will describe essential components of school finance at the local, state, and federal levels.

APPENDICES

Appendix A: A Glossary of Competency-Based Education

Appendix B: PaCBTE Consultant Group

APPENDIX A

A Glossary of Competency Based Education

This appendix is a reprint of definitions excerpted from "Appendix B: A Glossary of Competency Based Education," in Allen A. Schmieder's, Competency-Based Education: The State of the Scene (Washington, D.C.: American Association of Colleges for Teacher Education, ERIC Clearinghouse on Teacher Education, and National Center for the Improvement of Educational Systems, 1973), pp. 49-67. Permission has been granted.

See the list of AACTE PBTE publications listed at the end of this chapter.

Accountability

The responsibility of educators at all levels to account in measurable terms for the effectiveness of their programs--especially in terms of outcomes. The concept is central to the educational reform movement and has evolved in part from systematic efforts to relate educational procedures to educational results at all levels. Accountability of the United States Office of Education and its various bureaus and national centers is measured in terms of (1) the quality of their response to national priorities and to the school/community site and (2) improvement achieved in the performance of educational personnel and their students. (See also Accountability Model)

Affective Objectives (See Objectives)

Alternative Learning Strategies

Alternative routes or programs for achieving a given set of expected outcomes in contrast to the common practice in American education of presenting single strategies or approaches to the achievement of curriculum objectives. Competency-based education programs place high emphasis on the development and accommodation of a variety of alternative learning strategies within a single unit or curriculum. (See Performance-Based Teacher Education)

American Association of Colleges for Teacher Education Committee on Performance-Based Teacher Education (Karl Massanari, Associate Director, AACTE, Director, PBTE Project, One Dupont Circle, Suite 610, Washington, D.C. 20036)

Focus on training personnel regarding performance-based teacher education through developing and disseminating publications, sponsoring conferences and workshops, maintaining a PBTE clearinghouse, and disseminating information about PBTE. The Committee has broad and diverse representation from colleges and universities, teacher organizations, state departments of education, student groups, and liaison representatives from other organizations. (See page 89 for a listing of AACTE's special series on PBTE)

Behavioral Objectives (See Objectives)

Cognitive Objectives (See Objectives)

Competency-Based Education

1. A system of education which places high emphasis on the specification, learning, and demonstration of those competencies which are of central importance to the effective practicing of a given profession or career.
2. A term used by some to identify the current national movement in "competency-based education and certification." The term has two outstanding advantages:
 - a. it encompasses all major educational constituencies; and,
 - b. it includes all of the professions, e.g., education, law, medicine.

(See Competency-Based Teacher Education, Performance-Based Teacher Education)

Competency-Based Teacher Education (CBTE)*

1. A system of teacher education which has its specific purpose the development of specifically described knowledge, skills, and behaviors that will enable a teacher to meet performance criteria for classroom teaching. Presumably, each competency attained by the preservice teacher is related to student learning and can be assessed by the following criteria of competence:

*Please refer to the Introduction to the PaCBTE Handbook for the definition of CBTE followed by the Pennsylvania Department of Education, page 1.

- a. knowledge criteria that assess the cognitive understandings of the teacher education student;
 - b. performance criteria that assess specific teaching behaviors; and,
 - c. product criteria that assess the teacher's ability to examine and assess the achievement of his or her pupils.
2. Any teacher education program having the following characteristics:
- a. Competencies (knowledge, skills, behaviors) to be demonstrated by the student which are:
 - 1) derived from explicit conceptions of teacher roles;
 - 2) stated so as to make possible assessment of a student's behavior in relation to specific competencies; and,
 - 3) made public in advance.
 - b. Criteria (to be employed in assessing competencies) are:
 - 1) based upon, and in harmony with, specified competencies;
 - 2) explicit in stating expected levels of mastery under specific conditions; and,
 - 3) made public in advance.
 - c. Assessment of the student's competency
 - 1) uses his performance as the primary source of evidence;
 - 2) takes into account evidence of the student's knowledge relevant to planning for, analyzing, interpreting, or evaluating situations or behavior; and,
 - 3) strives for objectivity.
 - d. The student's rate of progress through the program is determined by demonstrated competency rather than by time or course completed.
 - e. The instructional program is intended to facilitate development and evaluation of the student's achievement of specified competencies.

[Stanley Elam, "Performance-Based Teacher Education: What is the State of the Art?" Washington, D.C.: American Association of Colleges for Teacher Education, 1971.]

Delivery System (Delivery Mechanisms)

A means, vehicle, or system which facilitates the rapid and effective introduction of validated research products into the mainstream of the American educational system. Any systematic arrangement for disseminating educational products to the client. Teacher centers, workshops, institutes, conferences, and publications can be vehicles for delivery of new ideas, techniques, and materials to the educational consumer. (See Teacher Center)

Elementary Models (Comprehensive Elementary Teacher Preparation Models)

Designs and specifications for some alternative, systematic, educational programs for elementary school teachers. Ten such models were designed and given initial feasibility tests during 1968 and 1969 with funding from the National Center for Educational Research and Development (NCERD) of the Office of Education. These models focus on institutional realignments, comprehensive planning, training for specific competencies, field-centered training activity, modularized and personalized training programs, a merger of pre- and in-service training, the use of systematic management techniques, and an emphasis on cost effectiveness. Each project includes exemplary competency-based teacher education programs for preparing teachers, with detailed specifications for the teaching competency to be acquired and for each of the numerous related subsystems and components of the proposed programs. Specifications for these models and feasibility studies are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C.

Enabling Objectives (See Objectives)

Evaluation

The systematic generation of statistical, descriptive, and analytical information on program (project) activities. Evaluation facilitates decision-making in a specific context within a given time frame:

1. *Discrepancy Evaluation:* a method of assessing the gap between explicit promise and systematically assessed performance of a set of activities. The discrepancy between stated goals or expected outcomes and actual results is a measure of the effectiveness of program activities and is a way of pinpointing the areas of both strength and weakness in program design.
2. *Formative Evaluation:* the ongoing assessment of the efficacy of a program during its development and implementation in terms of the degree of accomplishment of pre-stated goals and objectives. The observation, analysis, and interpretation of indicators of progress toward specified program objectives provide the justification and direction for revision of programs while still in

their developmental phase. The consequence of formative evaluation is a better product or program in a shorter time.

3. *Process Evaluation*: a procedure of assessing means. Generally, evaluation calls for the measurement of performance against the standard or level specified in the objectives. Process evaluation assesses the effectiveness of the processes undertaken in achieving objectives. Most evaluation of national education programs in recent years has been of this type.
4. *Product Evaluation*: product or impact evaluation assessing the capability of a product to bring about intended changes specified by the goals (objectives) of product use. The increasing demands for greater accountability in education programs have generally called for more of this type of evaluation.
5. *Summative Evaluation*: the assessment of final product and process effectiveness in terms of degree of attainment of prespecified program goals and objectives.

Expected Outcomes

Intended behavioral changes as opposed to unintended changes. When applied to human behavior, expected outcomes must be considered jointly with unexpected outcomes, both of which follow behavioral intervention. That which one hopes to achieve through the implementation of a system may be expressed as goals and objectives. "Goals" tend to be used for larger, generic concerns and "objectives" for more precise delineation of expectations. (See also Output-Oriented Program)

Feedback

A way of giving help; a corrective mechanism for learning how well behavior matches intentions. Some criteria for useful feedback are:

1. It is solicited rather than imposed. Feedback is most useful when the receiver has formulated the kind of question that those observing him can answer.
2. It is descriptive rather than evaluative. By describing one's own reaction, it leaves the individual free to use it or to not use it as he sees fit. By avoiding evaluative language, it reduces the need for the individual to react defensively.
3. It is specific rather than general. To be told that one is "dominating" will probably not be as useful as saying something like, "just now when we are deciding the issue upon _____ you did not listen to what others said, and I felt forced to accept your arguments or face attack from you."

4. It is directed toward behavior which the receiver can do something about. Frustration is only increased when a person is reminded of some shortcoming over which he has no control.
5. It is checked to insure clear communication. One way of doing this is to have the receiver try to rephrase the feedback he has received to see if it corresponds to what the sender has in mind.

Feedback Loop Mechanisms

Processes built into programs to provide systematic and regular feedback regarding quality and effectiveness. Such processes not only provide an opportunity for all program participants to have an ongoing input into program development, but also provide the data base that is necessary to make regular adjustments in program strategies and operations. (See Feedback, Formative Evaluation)

Goal

A statement in broad, descriptive terms of the desire and expectations of the developer and/or consumers of an educational program. (See also Expected Outcomes, Objectives)

Individualized Instruction

Instructional activities designed to attend to expressed needs of the individual learner, taking into account each learner's accumulated knowledge, skills, and attitudes, his potential and his rate of learning. Programmed materials are often appropriate for individualized instruction. (See Personalized Instruction)

Instructional Modules (See Module)

Management by Objectives (MBO)

The directing of planning and implementation operations on the basis of the philosophy, strategies, and outcomes specified explicitly in prestated objectives of an organization. An educational program managed by objectives demands, for example, that instruction be carried out on the basis of explicit and coordinated sets of objectives. (See also Objectives, Expected Outcomes)

Materials (See Integrating Materials, Protocol Materials, Software, Training Materials)

Mini Courses

1. A specific set of learning experiences, often self-instructional, designed to teach a single skill or a cluster of related teaching skills in a relatively short period of time. Micro-teaching, self-analysis, and reteaching are typical elements in each unit.
2. A line of instructional products produced at the Far West Laboratory for Educational Research and Development, Berkeley, California.

Module

A package of integrated materials or an identifiable and related set or sequence of learning activities which provides systematic guidance through a particular learning experience or specific program. Competency-based educational programs generally base their instructional content on modules. Modules are of many shapes and styles and may require activities ranging in time from less than an hour to a year or more. Typically, modules include rationale, prerequisites, objectives, strategies, resources, and criteria tests. The use of modules allows a much greater variety of experiences than standard "courses" and provides a far better basis for personalized instruction. (See also Mini Course, Protocol Materials, Training Materials)

Multi-State Consortium on Performance Based Teacher Education
(Theodore Andrews, Director, Division of Teacher Education and Certification, New York State Department of Education, 99 Washington Avenue, Albany, New York 12210)

A consortium of eight states in the fore of the competency based education movement which is concerned with the implications of CBE for state certification and training programs, with inter-state sharing of information, materials and personnel, and with helping member states to develop management systems for the development and use of performance-based approaches to teacher education and teacher certification.

Needs Assessment

A process--usually a collaborative effort of all the educational constituencies--to examine the gap between specific goals and an existing situation. The evaluative program is essentially one of identifying the felt needs of students, of the community, and of society and assessing the degree to which those needs are being met by the current efforts or accomplishments of the educational system. On the basis of this assessment, the decision maker is able to select those problem areas which most need attention or modification and to design possible means of satisfying those needs. One example of a Needs Assessment Model is that devised by the Houston Teacher Center:

1. Determine that a needs assessment will be conducted.
2. Identify the assessment leadership, the target area, and the referent groups.
3. Conduct training for the model leadership.
4. Implement the model to assess programmatic needs and establish priorities within those needs.
5. Determine discrepancies between priorities and actual outcomes of present existing efforts.
6. Utilize the data on priorities and discrepancies to identify needed program thrusts.
7. Identify teacher competencies which need strengthening.
8. Relate teacher competency needs with identified program thrusts.
9. Establish teacher training experiences based on the priority needs, program thrusts, and needed teacher competencies.

(See also Accountability Model)

Objectives

Specified outcomes in terms of which programs are carried out and evaluated:

1. *Affective Objectives*: Objectives designed to reinforce or change human attitudes central to behavior in educational activities (values and feelings, appreciations, interests, etc., toward ideas, persons, or events). It is important to note that affective objectives are usually cognitions about effective events.
2. *Behavioral Objectives*:
 - a. Statements of educational goals (general or precise) in terms of the observable behavior of the learner as a measure of achievement. Usually, behavioral objectives are expressed in a three-part format: (1) descriptive statement of the goal, (2) the conditions under which the goal is to be reached, and (3) the level of mastery expected.

- b. Objectives designed to reinforce or change specific behaviors in order to improve an individual's contribution to the educational activities in which he is involved. The increased use of such objectives has resulted in considerable controversy. Those who support behavioral objectives maintain that educators generally behave in ways that do not strengthen the educational process and need to "change their ways" if any improvement is to take place in the system; others feel that attempts to influence behavior represents inhuman "control" devices and are contrary to the basic nature of the education process. In addition, some hold that not all objectives can be stated in behavioral terms, e.g., the objectives of an instructional seminar.
3. *Cognitive Objectives*: Educational objectives which specify behaviors of the learner relating to perceiving, understanding, processing, or using of knowledge. These objectives together with affective, performance, and product objectives, form the basis for competency-based educational programming.
 4. *Enabling Objectives*: Objectives which describe those knowledges, skills, and attitudes which a learner must attain at some intermediate point if he is to acquire the terminal objective.
 5. *Instructional Objectives*: Those purposes and expected outcomes that guide the learning activities.
 6. *Terminal Behavior Objectives*: Objectives which state what the learner is to be able to do at the end of instruction. They specify the standard levels of performance in behavioral terms.

Performance-Based Teacher Education (See Competency-Based Teacher Education)*

Performance Criteria

Standard for measuring evidence of achievement. In answering the question, "What is a professional teacher?", it is important to find acceptable evidence of successful performance by a teacher. Examples of such criteria are those set forth by Richard Turner of Indiana University:

*Editor's Note: Although a distinction can be made between Performance-Based Teacher Education (PBTE) and Competency-Based Teacher Education (CBTE), the differences are moot. The terms are interchangeable and the PaCBTE Program will continue to use CBTE in place of PBTE. --Sam B. Craig, Jr.

Criterion Level 6 is concerned with the effects of a training program on improvements in teacher knowledges and understanding. Criterion Levels 5 and 4 are concerned with the effects of teacher training on improvement in pedagogic skills under laboratory or simplified training conditions. Criterion Level 3 addresses itself to the effects of training on a teacher's behavior under actual classroom conditions. The concept of pupil change as a criterion of teacher effectiveness is introduced at Criterion Levels 2 and 1. Criterion Level 2 is concerned with changes in pupil behavior that can be effected in a relatively short time period (one to two weeks) under actual classroom conditions. Criterion Level 1 is concerned with the long-range effects of teacher behavior on changes in pupil achievement and well-being.

There are fundamental differences between Criterion Levels 6 through 3 and Criterion Levels 2 and 1. Criterion Levels 6 through 3 focus directly on the impact of training on teacher behavior. Criterion Levels 2 and 1 are concerned with both the effects of training programs on teacher behavior and with the effects of teacher behavior on pupil performance.

Performance Standards

The criteria in behavioral terms by which actions are judged to be effective or ineffective in meeting intended outcomes. (See Performance-Based Teacher Education, Performance Criterion)

Personalized Instruction

Instruction which is designed to meet the specific needs of learners. Education is personalized when assessment, objectives, strategies, and evaluation are planned with the learners and tailored to the learner's individual needs, level, rate, values, and choices. Although personalized learning experiences most often occur in individualized or small group situations, they may take place within large groups--as long as the above criteria applies. (See Individualized Instruction)

Process Evaluation (See Evaluation)

Product Evaluation (See Evaluation)

Protocol Materials

Reproductions (visual, auditory, or printed) of behavior that portray concepts in teaching and learning. The immediate purpose of protocol production is to provide the raw material or data for interpretation of classroom behaviors. The ultimate purpose is to facilitate the development of interpretative competencies in teachers. Such competencies include:

1. The ability to demonstrate a functional knowledge of some psychological, philosophical, and sociological concepts that are relevant to the teacher's work.
2. The ability to interpret behavior situations in terms of significant educational concepts.
3. The ability to use interpretations to formulate alternative plans for teaching and other activities such as conferences with parents and interaction with administrators.

(See also Integrating Materials, Training Materials)

Software

Instructional systems and processes, curriculums, written or printed educational materials, guides, books, tests, worksheets. They may stand alone as learning packages or units or they may be accompanied by media or other hardware. (See also Hardware)

Strategy

A deliberate plan of action characterized by rational planning, for achieving an objective or set of objectives.

Summative Evaluation (See Evaluation)

Taxonomy

A hierarchically ordered classification system. Such conceptual schemes are useful for arranging and selecting priorities, for specifying objectives, and for evaluating programs and practices. Familiar to educators is the Taxonomy of Educational Objectives by Bloom, Krathwohl, and others.

Teacher Performance

All the things which a teacher does in the classroom to produce intended changes in learner behavior. The more important aspects of teacher performance include:

1. teacher's ability to control his own behavior;
2. the effect of teaching behavior on pupil attitudes and feeling; and,
3. the effect of teaching behavior on what youngsters learn cognitively and how they learn it.

(See Competency-Based Teacher Education, Competency-Based Education)

Terminal Behavior Objectives (See Objectives)Training Materials

"Packaged" and thereby sharable or distributable learning experiences that have a known degree of reliability in getting a learner to execute a particular skill or set of related skills at a stated performance level. The demonstration context may be simulated (for example, a micro-teaching situation), or it may be a real-life situation. In either case, practice and corrective feedback, two essential elements in skill training, must be provided.

Those aspects of training materials that deal with the practice and corrective feedback will assume the form of instructions and suggestions rather than substantive materials with which to interact. (See also Modules, Protocol Materials)

Training Modules (See Modules)

AACTE Special Series on PBTE

Educators may find some of the following AACTE publications useful. They are available in libraries or may be purchased directly from AACTE (Order Department, Suite #610, One Dupont Circle, Washington, D.C. 20036).

PBTE
Series
Number

- #1 "Performance-Based Teacher Education: What Is the State of the Art?" by Stan Elam @ \$2.00
- #2 "The Individualized, Competency-Based System of Teacher Education at Weber State College" by Caseel Burke @ \$2.00
- #3 "Manchester Interview: Competency-Based Teacher Education/Certification" by Theodore Andrews @ \$2.00
- #4 "A Critique of PBTE" by Harry S. Broudy @ \$2.00
- #5 "Competency-Based Teacher Education: A Scenario" by James Cooper and Wilford Weber @ \$2.00
- #6 "Changing Teacher Education in a Large Urban University" by Frederic T. Giles and Clifford Foster @ \$3.00
- #7 "Performance-Based Teacher Education: An Annotated Bibliography" by AACTE and ERIC Clearinghouse on Teacher Education @ \$3.00
- #8 "Performance-Based Teacher Education Programs: A Comparative Description" by Iris Eifenbein @ \$3.00
- #9 "Competency-Based Education: The State of the Scene" by Allen A. Schmieder (jointly with ERIC Clearinghouse on Teacher Education) @ \$3.00
- #10 "A Humanistic Approach to Performance-Based Teacher Education" by Paul Nash @ \$2.00
- #11 "Performance-Based Teacher Education and the Subject Matter Fields" by Michael F. Shugrue @ \$2.00
- #12 "Performance-Based Teacher Education: Some Measurement and Decision-Making Considerations" by Jack C. Merwin @ \$2.00
- #13 "Issues in Governance for Performance-Based Teacher Education" by Michael W. Kirst @ \$2.00
- #14 In process

**PBTE
Series
Number**

- #15 "A Practical Management System for Performance-Based Teacher Education" by Castelle Gentry and Charles Johnson @ \$3.00
- #16 "Achieving the Potential of PBTE: Recommendations" by the AACTE Committee on Performance-Based Teacher Education @ \$3.00

APPENDIX B

PaCBTE Consultant Group

The PaCBTE Consultant Group was assembled by the Pennsylvania Department of Education to provide resource persons for CBTE activities across the Commonwealth. Each consultant participated in an intensive planning and development session especially designed for the group and its intended services. Although coordinated and compensated by the Department when working on PaCBTE funded projects, the consultants express their own professional positions. They share a concern for competency-based approaches to teacher education and are aware of the Department's interest in exploring CBTE's potential.

The consultants, grouped in this directory by geographic region, have had some experiences working together as a team. Institutions desiring the services of a consultant should make all arrangements directly with the person(s), including payment of the honorarium (\$100/day) and expenses. Please feel free to discuss the selection of a consultant with the Division of Teacher Education (Sam B. Craig, Jr., 717-787-3470) in order to achieve the best possible match between an institution's needs and a consultant's abilities. Ordinarily, subject matter expertise should not be a selection criterion. The consultants should be viewed as generalists with abilities in workshop leadership and competency-based education design.

In addition to the consultants listed in this directory, the staff of the Division of Teacher Education is available to advise on CBTE matters as part of the Commonwealth's services. This consultation is possible to the extent that time and schedules permit.

Southwestern Pennsylvania

DeFigio, Nicholas F.

Associate Professor of Elementary Education, University of Pittsburgh,
Pittsburgh, Pennsylvania 15260. (412-624-6170)

*Fountain, Hiawatha B.

Assistant Professor and Research Associate, University of Pittsburgh,
Pittsburgh, Pennsylvania 15260. (412-624-4786)

Morgan, Lorraine

Associate Professor (Elementary Education) and Chairperson, Department
of Education, Chatham College, Pittsburgh, Pennsylvania 15232.
(412-441-8200)

*Dr. Fountain recently accepted a position with the University of Alabama at Birmingham and will be unable to continue as a consultant in 1974-75.

Neuhard, Robert F., Jr.
Associate Professor (Secondary Education), The Pennsylvania State University, McKeesport Campus, McKeesport, Pennsylvania 15132.
(412-678-9501)

Northwestern Pennsylvania

Morgan, Don L.
Associate Professor (Secondary Education) and Assistant Director of the Research-Learning Center, Clarion State College, Clarion, Pennsylvania 16214. (814-226-6000)

*Morrison, George S.
Professor of Elementary Education and a Director of the Life Experience Center, Edinboro State College, Edinboro, Pennsylvania 16412. (814-732-2800)

**Salesses, William
Professor of Education (Secondary Education) and Associate Dean, School of Education, Indiana University of Pennsylvania, Indiana, Pennsylvania 15701. (412-357-2482)

Vayda, Kenneth G.
Professor of Education (Special Education) and Chairperson, Department of Special Education, Clarion State College, Clarion, Pennsylvania 16214. (814-226-6000)

Southcentral Pennsylvania

Beals, Paul E.
Professor of Elementary Education, Shippensburg State College, Shippensburg, Pennsylvania 17257. (717-532-9121)

Blake, Joseph F.
Professor of Education (Secondary Education and Library Science) and Chairperson, Department of Educational Media, Millersville State College, Millersville, Pennsylvania 17551. (717-872-5411)

Kocher, Frank
Teacher of Secondary Mathematics, Northern Lebanon School District, Fredericksburg, Pennsylvania 17026 (717-865-5401)

Maurey, James E., Jr.
Professor of Education (Educational Psychology) and Dean, Division of Teacher Education, Millersville State College, Millersville, Pennsylvania 17551. (717-872-5411)

*Dr. Morrison is out of state on sabbatical leave, 1974-75.

**Dr. Salesses recently accepted an appointment as president of Mary Manse College, Toledo, Ohio, and will be unable to continue as a consultant in 1974-75.

Northcentral Pennsylvania

Bell, Paul E.

Associate Professor of Education (Science Education), The Pennsylvania State University, College of Education, 179 Chambers Building, University Park, Pennsylvania 16802. (814-865-2161)

Selfridge, Marilyn A.

Reading Specialist, Clearfield Area School District, Clearfield, Pennsylvania 16830. (814-765-5511)

*Stanton, Paul E.

Professor of Teacher Education (Reading and Counselor Education) and Dean, School of Education, Lock Haven State College, Lock Haven, Pennsylvania 17745. (717-748-5351)

Trueblood, Cecil R.

Associate Professor of Education and Chairperson, Department of Elementary Education, The Pennsylvania State University, College of Education, 148 Chambers Building, University Park, Pennsylvania 16802. (814-865-2430)

Southeastern Pennsylvania--I

Ginn, Diane

Teacher of Kindergarten, Chester-Upland School District, Columbus School, 10th and Fulton Streets, Chester, Pennsylvania 19013. (215-876-8191)

Schantz, Betty B.

Professor of Curriculum and Instruction and Assistant Dean, College of Education, Temple University, Philadelphia, Pennsylvania 19122. (215-787-8488)

Yoas, Stephen E.

Professor of Education (Secondary Education) and Director of Student Teaching and Pre-Professional Experiences, Cheyney State College, Cheyney, Pennsylvania 19319. (215-399-6880)

Womack, Herbert H.

Associate Professor of Education (Elementary Education and Administration), Cheyney State College, Cheyney, Pennsylvania 19319. (215-399-6820)

Ziegler, Carlos R.

Professor of Elementary Education and Chairperson, Department of Elementary Education, West Chester State College, West Chester, Pennsylvania 19380. (215-436-2944)

*Dr. Stanton recently accepted an appointment as Dean, Coastal Carolina College, Conway, South Carolina, and will be unable to continue as a consultant in 1974-75.

Southeastern Pennsylvania--II

Bruce, Matthew H.

Professor of Secondary Education (Science Education), Department of Secondary Education, College of Education, Temple University, Philadelphia, Pennsylvania 19122. (215-787-8039)

Clabaugh, Gary

Associate Professor of Education (Secondary Education and Foundations) and Chairperson, Department of Education, LaSalle College, Philadelphia, Pennsylvania 19141. (215-848-8300)

Coleman, Catherine

Professor of Education (Elementary and Secondary Education) and Dean, Division of Graduate Studies, Cheyney State College, Cheyney, Pennsylvania 19319. (215-399-6880)

Finney, James C.

Professor of Elementary Education and Director of Summer Sessions, Cheyney State College, Cheyney, Pennsylvania 19319. (215-399-6880)

Garberina, James

Reading Specialist, Philadelphia City Schools, Knights and Fairdale Roads, Philadelphia, Pennsylvania 19114. (215-637-2200)

Northeastern Pennsylvania

Bryden, James D.

Professor (Speech and Language Pathology) and Chairperson, Department of Communication Disorders, Bloomsburg State College, Bloomsburg, Pennsylvania 17815. (717-389-2217)

Burkhouse, Barbara

Associate Professor of Education (Elementary and Science Education and Foundations of Education), Marywood College, Scranton, Pennsylvania 18509. (717-343-6521)

Loftus, James J.

Teacher of English and Social Studies, Scranton City Schools, 1200 Luzerne Street, Scranton, Pennsylvania 18504. (717-343-4488)

Moore, J. William

Professor of Education (Secondary and Science Education) and Chairperson, Department of Education, Bucknell University, Lewisburg, Pennsylvania 17837. (717-524-1324)

Pantuso, Raymond

Associate Professor (Secondary Education and Science Education) and Chairperson, Department of Education, Allentown College of St. Francis de Sales, Center Valley, Pennsylvania 18034. (215-282-1100)