

DOCUMENT RESUME

ED 100 900

SF 008 826

AUTHOR Berty, Ernest
TITLE The State of the Art of Competency-Based Teacher Education. A Review of Selected Literature.
PUB DATE Jun 75
NOTE 14p.; Prepared for the Southern States Work Conference (Daytona, Florida, June 1975)
EDRS PRICE MF-\$0.75 HC-\$1.50 PLUS POSTAGE
DESCRIPTORS *Educational Research; *Evaluation; *Literature Reviews; *Performance Based Teacher Education

ABSTRACT

This paper provides a background of the major issues and concerns associated with the concept of competency-based teacher education (CBTE). The tenor of the literature reviewed ranged from confidence in the concept as a catalyst for rebirth in teacher education to widespread pessimism because of inadequate research to justify such a movement. This paper consists of five component parts: (a) "An Overview of Teacher Education," which reveals the absence of any single best approach to teacher education; (b) "Salient Features of CBTE," which describes the competency strategy, (c) "Research and CBTE," which denotes the weak knowledge base associated with the movement; (d) "Evaluation and CBTE," which divulges the rethinking needed in the evaluation phase; and (e) "Other Issues and Concerns." A sample list of teaching characteristics and behaviors, identified by a group of teacher trainers, concludes this papers. A 16-item bibliography is included. (Author)

ED 100903

THE STATE OF THE ART
OF COMPETENCY-BASED
TEACHER EDUCATION

A Review of Selected Literature

Prepared for the Southern States Work Conference

Daytona, Florida

June, 1975

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRO-
DUCE EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGIN-
ATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRE-
SENT OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY

Prepared by

Dr. Ernest Berty
West Virginia Department of Education
Charleston, West Virginia 25305

SP28.8.826

FOREWORD

The purpose of this paper is to provide the reader with a background of the major issues and concerns associated with the concept of competency-based teacher education. The tenor of the literature reviewed ranged from confidence in the concept as a catalyst for rebirth in teacher education to that of widespread pessimism because of inadequate research to justify such a movement. Nevertheless, by bringing the issues to the forefront, the information provides a springboard to dialogue among interested educators which, in turn, can have a significant ripple effect.

This paper consists of five component parts (1) an overview of teacher education, (2) salient features of CBTE, (3) Research and CBTE, (4) Evaluation and CBTE, and (5) other issues and concerns. The first part reveals the absence of any single-best approach to teacher education; the next section attempts to describe the competency strategy; the third part denotes the weak-knowledge base associated with the movement; the fourth section divulges the rethinking needed in the evaluation phase; and, the fifth section highlights some of the other issues and concerns. At the end, a sample list of teaching characteristics and behaviors, identified by a group of teacher-trainers, is shared with the reader for the purpose of facilitating thinking on the aforementioned information.

TABLE OF CONTENTS

	Page
An Overview of Teacher Education	1
Salient Features of CBTE	1
Research and CBTE.	3
Evaluation and CBTE.	4
Other Issues and Concerns.	5
A Sample of Teaching Characteristics and Behaviors	7
References	10

THE STATE OF THE ART OF COMPETENCY-BASED TEACHER EDUCATION

An Overview of Teacher Education

The most predictable characteristic about the art of teacher education is that whatever exists today will be challenged tomorrow. After nearly a century of study in the behavioral sciences, it is surprising how little is actually known about the ways in which schools and teachers affect education. Apparently the numerous factors studied either have not been repeated often enough or with enough precision to become research generalizations. Soar (1970) disclosed that one of the authors, included in his review of the literature on teacher effectiveness, stated in 1950 that if all of the preceding twenty years of research were wiped out, it would make virtually no difference. Educational research has had a grave history of not being much help to teacher education.

With the absence of a good foundation of scientifically arrived at generalizations, passion and politics have played disproportionate roles in establishing directions, priorities, and practice in teacher education. The persistently changing needs and aspirations of people and the negotiated compromises that evolve from competing demands have prescribed what teacher education should be. Thus the search for the ultimate new idea or practice continues. McCarty (1973) suggests that the only satisfactory way to obtain a significant difference in teacher education is to institute wholesale change. McCarty advocates that the widespread implementation of the process of competency-based teacher education will do just that.

Salient Features of CBTE

Competency-based teacher education (CBTE) or performance-based teacher education (PBTE) emerged in recent years as a tentative response to the demand for more accountability in teacher education. Although some educators

distinguish between CBTE or PBTE, the terms should be considered synonymous for the purpose of this paper, and only CBTE will be used hereafter to designate the

To facilitate clarification, it would be appropriate at the offset to define CBTE as follows. In CBTE programs demonstrated competence, not course credits, becomes the salient feature. Huston (1972) denotes that the objectives to be demonstrated by graduates are central to CBTE. These objectives are defined in terms of learner behavior prior to specification of instructional strategies or evaluation modes. Elam (1971) cited that the AACTE Committee in 1971 acknowledged the following as characteristics of the CBTE concept:

1. Competencies (knowledge, skills, behaviors) to be demonstrated by program graduates are derived from explicit conceptions of teacher roles, stated in measurable terms and made public in advance;
2. Criteria for assessing competencies are congruent with specified competencies, make explicit expected levels of mastery under specified conditions and are made public in advance;
3. Assessment of the student's competence is based on his performance, takes into account evidence of his knowledge relevant to planning for analyzing, interpreting or evaluating situations or behaviors and strive for objectivity;
4. The student's rate of progress through the program is determined by demonstrated competence rather than by time of course completion;
and
5. The instructional program is intended to facilitate the development and evaluation of the student's achievements of specified competencies.

Popham (1974) posited that it is important in CBTE programs for teacher educators to select a limited number of competencies which teachers

should acquire, then focus their preparation program's resources on making certain these skills are acquired. Burns (1972) certified that in the main, objectives: 1) are a written public record of what is to be learned, 2) serve to communicate to the learner what he is able to do at the end of the instructional period, 3) serve to help select appropriate instructional activities, and 4) serve to help select valid evaluation activities. According to McCarty (1973) a cardinal tenet of CBTE is the emphasis on individualization. The student helps to plan his own curriculum with his instructors. Each student should have the right to reach each specified objective at his own pace and by a number of alternative routes.

Research and CBTE

Kaplan (1973) reported that the problem with the competency movement in teacher education in America is that very few of those who espouse it or who are preparing to enter into it are well-enough aware of its complexity and demands. Like most educational notions this one has not been fully conceptualized and simulated, yet long lines of educators have jumped aboard the bandwagon. In their review of the literature Burdin and Mathieson (1972) found that although there were numerous papers and articles dealing with CBTE, they consisted mainly of opinions, discussions and descriptions. They corroborated that the research literature on the relation between teacher behavior and student achievement does not provide an empirical basis for the prescription of teacher-training objectives.

On the basis of a detailed analysis of research on teacher education done before and after 1964, Cyphert (1972) came to the conclusion that the preponderant majority of those planning the improvement of teacher education are applying to the reorganization of their programs, their subjective

hunches and hypotheses which had grown out of experience, not research findings.

A similar revelation was made by Heath and Nielson (1974) who found that the conception, design, and methodology of the studies reviewed failed to reveal an empirical basis for competency-based teacher education. In summary, Woods (1974) contends that research needs to answer questions of the following nature before CBTE will have the appropriate research base it needs:

1. How can the crucial competencies of teachers be identified?
2. Who determines the competencies?
3. How can the attainment of the desired competencies be measured?
4. Is it possible to "CBTE" all components of teacher education?
5. Is it desirable to do so?
6. Can evidence be produced which assures that the possession of a given set of competencies on the part of the teacher will result in the achievement of the desired learning outcomes on the part of the student?
7. Is CBTE compatible with a humanistic approach to education?

Evaluation and CBTE

A competency-based education program produces special problems for evaluation. Burns (1972), Getz (1973), Gay and Daniel (1972), and Wentling (1973) concur that CBTE has created a need to rethink the whole area of measurement. Unfortunately, measurement as it relates to the competency strategy has not received the same emphasis given the pre-specification of objectives or the design of instruction. Although there exists a well-tested methodology for instrument development and measurement in the cognitive domain (i.e., the multiple choice recognition items, the true-false items, the short answer items and the essay items), the development of more precise measurement techniques for complex competencies is funda-

mental to a competency-based program.

Undoubtedly, a new type of test is needed, and it is generally recognized as a criterion-referenced test. This is appropriately verified in the following quotation by Quick (1973):

"One might ask, why all the fuss -- aren't paper-and-pencil tests good enough? But how would you answer this question if you were told that the pilot flying you to San Francisco had passed only a multiple-choice test? Or if you were told that the plumber or TV repairman had passed only a paper-and-pencil test about plumbing or TV repairs?"

Criterion-referenced measurement according to Wentling (1973) gives us information regarding the student's behavior as compared to a standard. All of us have used a criterion-reference, possibly without being aware of the construct. A good example of criterion-referencing is the driver's license test required by most states. It makes no difference how a person compares to others taking the driver's test either at that point in time or in a norm group as a whole. The person must meet a predetermined standard.

In addition to the task of measuring the attainment of the course objectives in CBTE is that of management. It is assumed that any given program will include a large number of teacher competencies. Thus the record keeping task alone will be considerably magnified, as data must be kept on achievement of individual competencies rather than on courses completed or credits earned.

Other Issues and Concerns

Obviously, not all educators have embraced the competency movement. Critics have challenged the efficacy of CBTE primarily because many decisions connected with the implementation of the strategy are simply based

upon professional judgment, and the judgments are influenced by the biases, background, and experience of the program architects. McCarty (1973) harbors the fear that it can well lead to a single set of objectives that results in a rigid program in which students will be expected to emerge from the same mold. A similar concern is also expressed by Gay and Daniel (1972) who allege that a real danger exists that only those competencies which are easy to identify and measure will be selected. Kaplan (1973) speculates, that in time, the movement will fail because it will suffer the consequences of the educational equivalent of Gresham's law: that which is of lesser value tends to drive out that which is of greater value. Devotion to performance and practice will divert our attention from the importance of theory. Additional concerns focused on the problem of determining the level or criteria of competency for particular teacher performances and the fear that the administrative and financial burdens of the strategy will eventually become intolerable.

A SAMPLE OF TEACHING CHARACTERISTICS AND BEHAVIORS

Henney and Mortenson (1973) reported the following sample of teaching behaviors of eight elementary teachers which were identified during a particular set of reading instruction periods. The authors emphasize that this is only a partial list that reflect the personal teaching philosophies and opinions of the eight panel members used to evaluate the teaching in their study. The authors indicated that although the behaviors were identified by studying teachers and classrooms during reading instruction, it is possible that certain of these behaviors may be applicable to other teaching as well.

Knowledge of Content

1. Has a good grasp of skills to be taught and a variety of teaching methods.
2. Correctly pronounces words and uses skills himself.
3. Knows long-range goals and content so can take advantage of the teachable moment for profitable learning.
4. Uses detailed lesson plans as a guide.
5. Is able to operate audio-visual equipment appropriately.
6. Is aware of his mistakes and corrects them; does not become upset by them.

Methods of Presentation of Lessons

1. Is well organized, but not too structured; everything has purpose.
2. Participates in activities with the children.
3. Uses the teacher's guide as a resource; is not dependent on it; does not carry it around during lessons.
4. Plans alternate activities in case children are not ready for what was originally planned.
5. Concludes group session with effective closure; gives an assignment but also builds interest in what to look for.
6. Takes advantage of the teachable moment; not part of lesson plan.
7. Varies types of activities; does not spend whole period in same activity.
8. Uses logical pattern or sequence of questioning to teach a specific concept.
9. Gives children time to talk; does not monopolize instructional time with teacher talk.
10. Guides and encourages children to do activities rather than having them just listen and watch the teacher do them.

Activities During Lessons

1. Draws attention to the feelings of characters in the story.
2. Uses blackboard games and homemade games and aids to make skills-learning fun.
3. Diagnoses mistakes children make while reading orally.
4. Asks questions to emphasize the senses as part of comprehension of the story.
5. Encourages children to use word attack skills and be independent readers.
6. Does not discuss after every page since this causes children to lose interest and destroys continuity of the story.
7. Allows children to have a general understanding of rules rather than requiring specific wordings.
8. Does not have one child read aloud while others follow the same print in their books.
9. Does not use many ready-made worksheets with all children, but gives practice assignments to each child according to needs.
10. Concentrates on children's right answers, not wrong ones.

Learning Atmosphere

1. Allows children to sit where they will be most comfortable, move about the room, and talk with each other.
2. Provides many activities to involve children.
3. Encourages child-child interaction.
4. Corrects student but minimizes failure; gives corrective feedback.
5. Provides interest centers and teaches children how to use them for discovery learning.
6. Accepts children's ideas even when unrelated to the topic.
7. Expects all children not in reading groups to be constructively involved in learning activities of various kinds.
8. Is aware of children's attitudes toward work assigned, and adjusts plans when overall response is negative.
9. Shows equivalent interest in working with children of all ability levels.
10. Speaks to children as he would to a friend; does not use one voice for children and another for adults.

Relationship to Children

1. Is open; does not remain aloof.
2. Sits on same level as children.
3. Has eye contact with individual children.
4. Mingles with children.
5. Has close physical contact with children.
6. Is concerned about each child; helps each child feel important.
7. Is not too directive with children.
8. Encourages children to be cooperative.

Awareness of and Provision for Individual Differences

1. Has time to listen to each child.
2. Has different groups doing different things according to needs.
3. Gives instruction to one child alone rather than in a group when more appropriate.
4. Keeps records of each child's needs, what he has done, and what he needs to do next.
5. Has a variety of activities available for those children who need more or need a change of pace.
6. Uses a variety of techniques to motivate children.
7. Is aware of the rest of the class while working with a group.
8. Is continually diagnosing each child's strengths and weaknesses.
9. Responds to each child somewhat differently according to the situation and the child's needs and performance.
10. Does not spend time on what children already know.

Provision for Challenging Thinking

1. Does not expect a pat answer.
2. Uses questioning which requires two- and three-step reasoning.
3. Stimulates thinking with open-ended, provocative questions.
4. Does not give answers away through form of questions or intonation.
5. Waits for children to answer questions; does not answer own questions.
6. Does not ask questions with obvious answers.
7. Encourages children to initiate their own ideas and questions.
8. Uses a variety of question types and levels of thinking.

Provision for Building Independence

1. Establishes guidelines for independent work.
2. Provides extra activities to challenge creativity.
3. Allows children to check their own work.
4. Uses inductive teaching to guide children to use reasoning and form their own conclusions.
5. Stresses inferential and critical comprehension as well as literal.
6. Leads children to use resource books to gather information.
7. Helps children learn to evaluate their own learning.
8. Has children read directions for an assignment rather than reading to them.
9. Encourages children to assume leadership roles and responsibilities; to lead games, activities, and discussions.
10. Uses children's ideas to develop a lesson topic.

1. Burdin, J.L., and Mathieson, M.B., "A Review of the Research on Performance-Based Teacher Education". Educational Technology, 1972, 12, 61-66.
2. Burns, Richard W., "Behavioral Objectives for Competency Education", Educational Technology, 1972, 12, 22-25.
3. Cyphert, F.R., "An Analysis of Research in Teacher Education", Journal of Teacher Education, 1972, 23, 141-151.
4. Elam, S., "Performance-Based Teacher Education: What Is the State of the Art?", Bulletin of the American Association of Colleges for Teacher Education, 1971, 24, 9.
5. Gay, Lorraine R., and Daniel, K. Fred, "Accreditation and Performance-Based Teacher Education", Educational Technology, 1972, 12, 45-50.
6. Getz, H., Kennedy, L., Pierce, W., Edwards, C., and Chesebro, P., "From Traditional to Competency-Based Teacher Education", Phi Delta Kappan, 1973, 5, 300-302.
7. Heath, Robert, and Nielson, Mark, "The Research Basis for Performance-Based Teacher Education", AERA Review of Educational Research, 1974, 4, 463-484.
8. Henney, Maribeth, and Mortenson, W. Paul, "What Makes a Good Elementary School Teacher", The Journal of Teacher Education, 1973, 4, 312-315.
9. Huston, Robert, "Developing Competency-Based Programs", University of Huston Competency-Based Teacher Center, Huston, 1973.
10. Kaplan, Leonard, "Survival Talk for Educators", The Journal of Teacher Education, 1973, 4, 319-321.
11. McCarty, Donald, "Competency-Based Teacher Education", School Management, October 1973, 30-38.
12. Popham, James W., "Minimal Competencies for Objectives-Oriented Teacher Education Programs", The Journal of Teacher Education, 1974, 1, 68-73.
13. Quick, Thomas J., "Performance Tests for Beginning Teachers: Why All the Fuss?", Educational Technology, 1973, 5, 14-16.
14. Soar, Robert S., "Research Findings from Systematic Observation", Journal of Research and Development in Education, University of Georgia, 1970, 1, 116-122.
15. Wentling, Tim L., "Measuring the Achievement of Competencies", Educational Technology, 1973, 5, 49-50.
16. Woods, Bob G., "Designing Programs for Teacher Educators", Theory Into Practice, 1974, 3, 174.