

SPECIAL FEATURE—DEBATE THE ISSUES

Competency Based Teacher Education
Reasons for Its Use

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Competency based teacher education (CBTE) has provided institutions preparing students to become teachers of vocational agriculture with a basis for sequencing, unduplicated instruction, relevance, accountability, and some degree of measurability in the development of professional teacher education programs.

The Problem of Traditional Teacher Education

Rightly or wrongly, teacher education programs are being accused of producing inadequately prepared teachers to cope with student needs of the 1980's. Nearly every survey or public opinion poll is filled with implications and innuendoes that teachers are not performing adequately. Over the years, teacher educators in agriculture have implied that they are producing a product better than their colleagues in other fields of education. If that was true at some point in time, it may be well to approach that implication with a great deal of caution today. Graduates from agricultural education programs may not be any stronger than those from other fields. The fact remains, the public and more specifically school administrators, boards of education, and students are not entirely impressed with our graduates. Consequently, one cannot ignore these general displeasures and teacher educators ought to be sensitive to continual program improvement.

The Basis of CBTE

The CBTE movement has become a much talked about development. A review of any index of periodical literature will reveal that since the early 1970's there have been hundreds of articles written on the movement. Rossner and Kay (1974) suggested that the movement did not spring from the federal or state levels or the campuses of colleges and universities. Instead, they contend that it resulted from demands for accountability, relevance, and cost-effective schooling. The behavioral objective movement plus research and development efforts in individualized instruction, computer-assisted instruction, and micro-teaching all focused on specific student outcomes and evaluation set the stage for reform. It is interesting to note that

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state boards of education and state legislatures quickly adopted the movement and very early in its development colleges and universities found themselves struggling with state mandated competency-based programs. Obviously the key to the entire movement is a hoped for improvement in the quality of instruction experienced by students at the elementary, secondary, and post-secondary levels.

Rossner and Kay (1974) also stated that the movement was a process of moving from the ambiguous state of teacher education to a more clearly articulated program of professional education. Scribner and Stevens (1974) summarized the movement most clearly when they suggested that ultimately teacher competency must be defined in terms of student performance.

The movement was not without its critics and those who questioned its basis for existence. Broudy (1975) made an interesting comment when he cautioned that so far as he knew, no program of instruction was deliberately incompetence based. He further stated that the term makes sense only if achieved competency based programs are contrasted with promised competency based instruction. Yarger (1973) argued that no one seems to know what good teaching is and until that issue is faced it is wrong to implement a concept that demands far more than the field is capable of producing. He further stated that competencies come from explicit conceptions of teacher roles and such concepts do not now exist. Recently Moss (1983) continued the argument by suggesting limitations to CBTE. He proposed that CBTE can work well on repetitive tasks and that accuracy in evaluating performance is not sufficiently developed to stipulate in behavioral terms standards for minimal level performance. However, despite the arguments of these critics, the fact remains there is still considerable room for improvement in the preparation of teachers and CBTE has sensitized teacher educators to the reality of clarity, accountability, improvement, and measurement in preparation programs.

The problem of traditional teacher education seems to lie in the arena of building a teacher preparation program around a set of courses. The course based approach typically involves core courses with limited articulation between faculty teaching those courses. Consequently, duplication occurs or confusion reigns over descriptions of the cognitive concepts developed. In short there is no clear attempt to link theory with practice. Students frequently complain that they fail to see how they might apply those principles of teacher education. The thought of integrating theory with practice seems to strike some opponents of CBTE at making education something less than collegiate level. They seem to make an erroneous accusation that there is no opportunity for developing thinking, rationalization, or philosophical development in students functioning under a CBTE program. Just because a program is primarily centered on a set of competencies does not mean it is lockstep. There is ample opportunity for developing a perspective on discipline and integrating S.O.E.P. and FFA into the heart of the program.

What is CBTE? Since its earliest discussion in the literature, Elam (1971), Lanier (1974), Schmeider (1973), and Weber (1973) all suggested that the common components of a CBTE program included

(a) teacher competencies to be demonstrated that are role-derived and specified in behavioral objectives or terms, and (b) assessment of evaluation is specified at the mastery level and the criteria are made explicit. Cox (1979) suggested that the CBTE program is designed to provide students with professional competencies prior to student teaching. Evaluation of the competencies may occur in a micro-teaching setting. He further stated that in performance based teacher education (PBTE) the performance of the teaching competency must occur in an actual classroom situation.

A number of elements which are closely associated with CBTE are (a) instruction is individualized or personalized, (b) the program is systematic, (c) instruction is modularized, (d) the program is field oriented or field centered, (e) the instruction utilizes a wide range of media ranging from print materials to audio and video aids, and (f) the program relies heavily on micro-teaching. These elements appear to convey to the critics of CBTE that students work alone, in isolation from one another, and the teacher education staff is not provided an opportunity to interact, challenge, and philosophize with students to develop their abilities to think and express their individualism. This concept is simply not a true reflection of what can take place in a CBTE program.

It would appear that relatively few writers have paid any attention to the differences between PBTE and CBTE. In fact, most seem to equate the two concepts. Though the two concepts have several parallels, the primary difference, according to Cox (1979), is that CBTE attempts to equip students with professional competencies prior to student teaching whereas PBTE is a preparation program in which students develop a teaching skill and demonstrate that skill in an actual classroom situation. PBTE demands more evaluation time and precise measurement than CBTE and when followed closely does "lock-in" a system. Throughout this paper the focus is directed toward the CBTE concept.

The Arguments for CBTE

When reviewing the literature on teacher effectiveness, one is struck with the fact that after considerable research it is still difficult to find research evidence that describes what constitutes effectiveness in teaching. Despite this difficulty Rosenshine (1971) provided a number of patterns of teacher behavior that distinguish between effective and ineffective teachers which are as follows:

1. Clarity (of the teachers presentation)
 - providing student with feedback
 - teaching things in a related, step by step manner
 - orienting and preparing students
 - providing students with standards and rules
 - using a variety of teaching materials
 - repeating and stressing directions and difficult points
 - demonstrating
 - providing practice
 - adjusting teaching to the learner

- providing illustrations or examples
 - communicating so that students can understand
 - causing students to organize materials in a meaningful way
2. Variability
 - the variety of instructional materials,
 - procedures, activities, levels of classroom discourse used by the teacher
 3. Enthusiasm
 - the amount of vigor and power exhibited by the teacher
 - the degree of teacher involvement, interest or excitement of the teacher
 4. Task-oriented achievement and/or businesslike behavior
 - whether teachers wanted students to learn something rather than enjoy themselves
 - the extent to which teachers encourage students to work hard
 5. Student opportunity to learn criterion material
 - are students taught what they will be tested on

These findings closely parallel any list of competencies that are currently in circulation. They simply reflect the importance of an organized, well prepared teacher.

The argument that CBTE is flawed because it only deals with trivia or the miniscule is an old and tiring objection. The operation of an overhead projector is a critical behavior generally abused and misused by most teachers and professional educators. Chalkboard use and organization can also enhance a teacher's orderliness and effectiveness if properly used. The few moments of time spent developing those two skills will return dividends when used in the "whole" teaching situation. Hopefully in a CBTE program those two tasks would not demand the same amount of time as questioning or the preparation and delivery of a lesson.

Good teaching is the performance of a series of pre-specified behaviors. If not, teachers are born not made and there is little use for teacher preparation programs. CBTE does not produce robotic teachers. CBTE merely reflects the basic principles of teaching and learning which develops the parts into a whole performance carefully critiqued at each step. Most learn to perform various tasks by making small steps until, putting them all together, one can perform the whole task. Most CBTE programs do not stop with the isolated steps but require the prospective teacher to put several whole lessons together and teach them under varying circumstances to a peer group. Hence there is ample opportunity to experience the spontaneity, robustness, repetition, and flexibility demanded in the teaching situation.

The argument that teaching is so complex and cannot be parceled out into parts is not well founded. Rosenshine (1971) outlined (ear-

... in this paper) rather specific statements regarding teacher behavior that made a difference in effective and ineffective teaching.

The Moss (1983) model which criticizes PBTE again attempts to force the CBTE approach into a simplistic behavioristic stimulus/response model. Anyone who has spent time using the CBTE approach will quickly realize that having every prospective teacher perform each behavior identified will not be using the simple stimulus/response mode. Prospective teachers in micro-teaching situations quickly show their individualism even though they start with a standard base. One can thank CBTE for finally providing a standard base rather than having each inexperienced prospective teacher try to find their own base. The CBTE model has ample room for expressing individualism.

Finally the argument that PBTE has no research base is no doubt a valid criticism. However, when one begins to examine the literature on teacher effectiveness it becomes clearly evident that much of teacher education is without a solid research base. Consequently, one needs to exercise care in being critical of an approach to teacher preparation when research on teacher effectiveness is lacking regardless of the system. The Committee on Criteria of Teacher Effectiveness of the American Educational Research Association commented regarding early research on teacher effectiveness by stating that:

... after 40 years of research on teacher effectiveness during which a vast number of studies have been carried out, one can point to few outcomes that a superintendent of schools can safely employ in hiring a teacher or granting him tenure, that an agency can employ in certifying teachers or that a teacher education faculty can employ in planning or improving teacher education programs. (p. 657)

Dunkin and Biddle (1974) suggested that early research failed because of (a) a failure to observe teaching activities or teachers in action in the classroom, (b) a theoretical impoverishment or research development on a shotgun basis using available tests whether or not appropriate, and (c) seldom employed student learning as a criterion. More recently Peterson and Wahlbery (1979) stated that based on research evidence of teacher effectiveness, it is obvious that this enterprise has operated without any firm research base.

Is it any wonder that state departments of education, state licensure bureaus, state boards of education, and legislatures jumped on the CBTE bandwagon and passed competency oriented legislation. The traditional course based approach with so-called ample opportunity for cognitive development has also not produced clear answers for teacher effectiveness. In light of a lack of research evidence, Hightet (1950) advanced the argument that teaching is an art similar to painting or writing rather than a science. Gage (1964) replied to this argument by stating that the arts of painting, writing, and composing have an inherent order and lawfulness that can be subjected to theoretical analysis. He further stated that the artist whose lawfulness are revealed does not become an automaton and ample opportunities still exist for subtlety and individuality. Teaching can be

subjected to scientific scrutiny and the possibility of studying the order or patterns of teaching is feasible so that generalizations can be made. CBTE is not contrary to any of these viewpoints from the literature. In fact, it would appear that CBTE focuses right on these varying perspectives.

The Contribution of CBTE

Competency based teacher education has sensitized teacher educators to considering sequencing, relevance, accountability, and unnecessary duplication. To some degree, specific measures to improve the quality of a prospective teacher's performance have also emerged as a result of CBTE.

It is interesting to note that CBTE has caused numerous institutions to indicate that they were practicing CBTE even though they had made little effort toward meeting the criteria of a CBTE program. Could it be that they were made aware of the need for change?

The movement generated a massive list of teacher behaviors which provided a basis for program development or at least a standard by which an institution could measure the relevance of its course based approach. Further, students in teacher education programs could clearly see what was expected of them before completing the degree program.

The movement certainly generated teaching materials, audio and video taped models, and an emphasis on micro-teaching.

The movement also has the potential for providing a research benchmark. The identified competencies parallel proven existing teacher effectiveness factors. What remains is for researchers to relate those teacher behaviors to long term student learning. Consequently, CBTE has provided a basis for measuring the effectiveness of teachers in relation to their behavior and the gains in student learning.

The Ultimate Goal

The ultimate goal of a teacher education program is to prepare teachers of vocational agriculture who in turn will develop students to their maximum potential. Nolan (1918) stated that the most important factor in education is the teacher. He further stated that if agricultural education is to be effective, if the faith of the people in agricultural education is to be maintained, we must have efficient agriculture teachers prepared well to teach the subject matter of agriculture.

Hopefully these professional developments have triggered more self analysis, more searching for new directions, more confusion and uncertainty, more excitement and hopefulness, more work, more chal-

lenges, and more effective teachers of vocational agriculture. The bottom line is secondary, post-secondary, and adult students who are knowledgeable and enthused about production agriculture and agribusiness and solid leading citizens in their communities. To that end, CBTE has challenged the professional preparation of teachers of vocational agriculture.

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