

DOCUMENT RESUME

ED 098 206

SP 008 566

AUTHOR Thompson, Bruce  
TITLE An Analysis of CBE.  
INSTITUTION Houston Univ., Tex. Coll. of Education.  
PUB DATE 27 Nov '74  
NOTE 23p.; For related documents, see SP 008 565-568

EDRS PRICE MF-\$0.75; HC-\$1.50 PLUS POSTAGE  
DESCRIPTORS Instruction; \*Instructional Programs; \*Performance Based Teacher Education; \*Personal Growth; \*Student Attitudes; Student Evaluation; \*Teacher Evaluation

ABSTRACT

This document is an attempt by a former student of the University of Houston Competence Based Teacher Education Program to speak directly to the topic of student evaluation of Competency Based Education (CBE) experiences. The author approaches CBE from three different viewpoints, devoting a section to each. "CBE as an Instructional Process" discusses the impacts of person-centered instruction and the impacts of reality-centered instruction. In the second section, "CBE as an Assessment Process," implications of CBE as an assessment process are discussed, and a strategy for summative assessment is presented. The final section, "CBE as an Encounter Process," stresses the use of CBE to facilitate professional, personal, and social growth. A conclusion lists some dangers in the ways CBE is implemented. The approach in all of the sections is step-by-step and from the student's point of view. (JA)

ED 098266

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

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

## AN ANALYSIS OF CBE

Bruce Thompson

The rapidity of growth of the competency-based education movement has been astounding. A few years ago the term "CBE" did not even exist in the lexicon of the American educator. Today nearly 25,000 college students are enrolled in CBE programs.<sup>1</sup>

Interest in competency-based education has been reflected also in the pages of the education literature. Every day seems to bring publication of yet more writing on both the theory and the practice of competency-based education.

Still, for all the implementation of CBE programs, and even for all the rumination on the causes and consequences of the CBE movement, only little attention has been given to the reaction to CBE by those that the approach is designed to affect. This chapter is an attempt by a former student of the University of Houston CBE Program to speak directly to the topic of student evaluation of CBE experiences.

### CBE AS AN INSTRUCTIONAL PROCESS

As an instructional process, CBE differs significantly from other modes of education. First, CBE implies that instructional goals will both be made public and stated in precise measurable terms. Second, CBE requires that, while the student is to accept responsibility for demonstrating that instructional objectives have been met, the student is also to accept commen-

995 566  
ERIC  
Full Text Provided by ERIC

surate freedom to decide the pace, sequence, and manner in which objectives will be pursued. Given then, that CBE is a unique instructional approach, what are some of the impacts of the competency-based mode of instruction?

It has been suggested that competency-based education has great potential for enhancing student learning. The person-centered and the reality-centered characteristics of the approach militate acceptance of this conclusion.

### IMPACTS OF PERSON-CENTERED INSTRUCTION

In looking initially at the subject of CBE as person-centered instruction, perhaps a bias should be acknowledged. The author believes that teacher-student rapport is vital to the learning process. The competency-based mode of instruction can itself facilitate the growth of such rapport.

Teachers who use the competency-based method of instruction tell students that they care about students as persons. Now, because student growth in learning is so important, no longer are students required to guess what it is that they are supposed to learn from instructional activities. Where students already possess required knowledge or skills, no longer need the students perform activities designed to teach them that which they already know. No longer is the pace, sequence, or manner of student learning as important as the fact that in the end the students do indeed learn. Now, as respected persons, students are given both the freedom and the responsibility for deciding themselves the pace, sequence, and manner in which objectives will be pursued.

Thus, the CBE system of instruction is eminently capable of fostering

student perception of genuine "I care" teacher intentions. But if the CBE system of instruction may facilitate growth of teacher-student rapport, might the approach also have effects of a very different sort?

If teachers really care about students, rather than explicitly stating learning objectives, why don't the teachers structure lessons so that instruction itself entices students into a self-directed discovery of learning goals? If teachers really care about students, then why don't the teachers force students to advance at specified learning rates? Are teachers' decisions to specify learning objectives only attempts to avoid the burden of helping students devise individualized learning programs? Why haven't program learning objectives been formulated in enlightened response to students' individual interests and situations? Most crucially of all, why are teachers presenting these instructional objectives in "Here, Machines, go perform these sacred actions" fashion?

There will be no immediate attempt to comment on the likelihood of these latter perceptions occurring. It is the implication of the perceptions which bears particular emphasis. Competency-based education does not play the proverbial role of knight in shining armor. There are myriad permutations of possible implementations of the approach. All implementations will not magically form themselves into person-centered systems of instruction. Ostensibly any teacher can work within a competency-based approach to education. All implementors of the approach will not mystically become person-centered individuals.

Still, in most instances CBE implementations will probably be person-centered in focus. Since CBE learning goals are both "made public and

and stated in precise measurable terms," thus the approach is inherently behavioristic. But, as previously implied, a behavioristic approach to education may be perceived as being either very mechanistic or very humanistic. Why then the claim that most approach implementations will be at the very humanistic end of the mechanistic-humanistic continuum?

Most CBE approaches will be implemented in humanistic fashion not because of behaviorism *per se*. CBE tends toward humanism because behaviorism makes the approach systematically analytical. Program priorities are hopefully established partially in response to the societal and professional contexts in which programs evolve. Modern existence is increasingly urbanized, specialized, and mechanized. Today, real and deep human interaction at times seems hard to come by. Thus, society as a whole apparently now desires that education become more humanistic. Given these conditions, responsive and analytical approaches to education will probably establish person-centeredness as one of the desired characteristics of program instruction.

### IMPACTS OF REALITY-CENTERED INSTRUCTION

Person-centeredness aside, CBE also tends to facilitate student learning to the extent that the approach is reality-centered. Competency-based education emphasizes the performance of instructional objectives rather than merely participation in learning activities. It is assumed that actual performance of instructional tasks brings optimal learning of knowledge and skills. As a by-product of this assumption, CBE programs often provide students with field experiences different in three ways from those experiences

traditionally offered during practice teaching, counselling practicum, or administrative internship.

First, CBE field experiences may occur in a larger number and a wider variety of school settings. This change is the consequence of a judgment that students should be effective in as many different environments as possible. Again, it is assumed that such flexibility, to the extent it comes, will come largely as a function of exposure to these various settings themselves.

Second, upon entering CBE programs, students may immediately begin field experiences of program-long duration. Students frequently wonder why they should listen to professors who are trying to help them play professional roles.<sup>2</sup> Didn't the students learn as elementary and secondary school pupils how to play the roles of the professionals they encountered? Earlier exposure to field experiences of longer duration is crucial because such exposure paradoxically facilitates on-campus instructional learning. Only the realities of the practicum situation can foster in students an informed awareness of their professional deficiencies and concerns. If students do not feel such concerns, will on-campus classes on pedagogy be considered relevant? More, what will be the consequences of instances where the concerns students feel as learners are radically different from those the students feel once school districts hire them as teachers, counselors, or administrators?

Third, CBE field experience may also be unique in that students may have some say regarding where and with whom they will work. That is, these may be negotiated and flexible agreements. School administrators, counselors,

or teachers choose to work with given students, and vice versa. But any one can at any time terminate these relationships.

There are two important results of giving students a voice in this decision-making process. One result of the strategy is that the "I care" message of on-campus instruction is complemented by a similar message emitted through the medium of off-campus experiences. Field experiences greatly affect students as persons and as young professionals. Therefore, now student preferences as to where and with whom they will work are respected. Students are dealt with in mature fashion. Students have an important voice in the decision-making process, but student preferences do not automatically become reality. Students are respected; they are not pampered.

This placement technique also greatly affects the actual substance of field experiences. Since students can impact placement decisions, now field experiences may be less confined to performance of observational or clerical tasks. Now students will learn more, because now they will learn primarily by doing, and less by merely watching or hearing about.

## CBE AS AN ASSESSMENT PROCESS

If CBE is a unique instructional process, it is a unique assessment process as well. Examination of CBE as an assessment process will occur within the framework of H. Del Schalock's definition of the terms: measurement, evaluation, and assessment. Assessment differs from measurement and evaluation in that assessment requires construct analysis of data, and "use of information in service of targeted, adaptive decision making."

Schalock's Table 1 specifies the operations required for measurement, evaluation, and assessment.

TABLE 1: THE OPERATIONS INCLUDED IN THE PROPOSED DEFINITIONS OF MEASUREMENT, EVALUATION AND ASSESSMENT.

Operation	Measurement	Evaluation	Assessment
Identification of Data Needed	X	X	X
Collection of Data	X	X	X
Reduction and Synthesis of Data		X	X
Analysis of Data in Relation to Standards		X	X
Analysis of Factors Affecting Data			X
Utilization of Data in Making Decisions			X

All assessment uses data for making decisions, but assessment decisions may be differentiated according to the emphases of the decisions made. Summative assessment utilizes data for the purpose of publicly characterizing a student's professional growth. For example, a data-based decision to certify a student to teach is a summative assessment decision. Formative assessment emphasizes the use of data during "the process of curriculum construction, teaching, and learning for the purpose of improving any of these three processes."<sup>4</sup> Where sanctions are not applied, data-based feedback to a student on a lesson the student taught would be formative assessment.

## IMPLICATIONS OF THE CBE ASSESSMENT PROCESS.

CBE assessment is unique in that all CBE assessment is criterion-referenced rather than norm-referenced. Norm-referenced assessment analyzes performance in relation to the norm of a group's achievement. Criterion-referenced assessment, on the other hand, compares performance against the standard of a program's minimal learning objectives. What are the implications of such a comparison procedure?

First, consistent with the orientation of CBE instruction, CBE assessment is person-centered in focus. All CBE assessment occurs within the context of the CBE "pass-not yet" philosophy. Where they attempt to demonstrate attainment of particular objectives, and succeed, students are given academic credit for their accomplishments. But where attempts to demonstrate competencies fail, students are not penalized for their non-successes. Put differently, in a CBE program, it is the progress of professional growth rather than the passage of time which dictates when assessment will be summative, and when it will be formative.

Because student learning is important, time is held variable while minimal learning requirements are specified and held constant. Because students are individuals, no longer is one student's progress compared with the rate and thoroughness of growth in others. Finally, because students are respected persons, students themselves determine when assessment will occur, while their learning progress determines whether such assessment will be formative or summative.

Second, CBE assessment also facilitates student learning to the extent that, again consistent with the CBE instructional process, the CBE assessment

process is Reality-centered. Assessment has such great potentials for student learning. Most students want very much to do well at playing the professional roles they have decided to fill. So most students value any feedback which others can give them in facilitation of professional growth.

Still, while students do want feedback, feedback in and of itself is no value. Students want feedback which has firm foundation in data. Students want feedback offered by professionals who empathize with them, their deficiencies, and their ideals. Students want feedback offered in an effort to help them grow, not in an effort to make them feel inadequate.

CBE assessment is systematically biased towards just such a reality-centered focus. CBE assessment is formative, except where learning progress dictates that assessment should be summative. Thus, CBE assessment orients students toward the reality of the consequences their behaviors will have for the persons who are their clientele. Further, CBE assessment orients students away from the reality of the sanctions which summative assessment would apply. CBE assessment is reality-centered because the system of assessment does not inherently add threatening sanctions to those imposed by reality itself.

But how reality-centered can an assessment process be if students can't fail? In fact, in a reality-centered program students will fail more than in a non-reality-centered program. There will be more opportunity for failure. The strength of the CBE assessment process is that failure is not permanently noted in the summative record of an academic transcript.

Failure can be such a learning experience. It is recorded and thus punitive experience? Perhaps this anecdote makes the point. A pro-

fessor told it to an undergraduate class once when he failed.

My mother used to tell me that if you lay an egg, cherish it. It's yours. And there is some beauty in it, because it's yours.

The professor's wisdom momentarily aside, however, none of this is to say that a magic assessment process will always optimally facilitate student growth. In the final analysis, the "magic" of CBE assessment is that, if students do perceive reality to be threatening, then it will be the assessor or the assessee and not the assessment strategy which makes reality an enemy.

#### A STRATEGY FOR SUMMATIVE ASSESSMENT

CBE assessment can and should be person-centered. CBE assessment can and should be non-threatening or reality-centered. But under no circumstances should CBE assessment be non-rigorous. Ultimately, all CBE programs should be held accountable for certifying only students who can effectively play their particular professional roles.

Fortunately, the CBE assessment process is eminently capable of applying learning objectives' assessment criteria so as to achieve this assessment product. But a summative assessment procedure is only as valid as the criteria which the procedure applies. Unfortunately, what Barak Rosenshine and Norma Furst say of teaching research is also largely true of research in counseling and administration.

This review is an admission that we know very little about the relationship between classroom behavior and student gains. It is a plea for more research on teaching.<sup>5</sup>

Without substantial information on professionals' behavior - clientele's behavior relations, what criteria can be used to measure the effectiveness of students? This section presents an assessment strategy which will mitigate the effects of this ignorance while maintaining the consistency of the person-centered and reality-centered CBE assessment process.

As a basis for this discussion, note that assessment criteria may be of two types. Performance criteria measure student ability to demonstrate understanding of specified knowledge or ability to perform specified skills. Product criteria measure student ability to achieve specified impacts in a given clientele group.

Some assessment criteria may be hierarchically ordered. For example, measuring student ability to ask probing questions is also partially a measurement of whether or not the student knows what constitutes a probing question. Richard L. Turner's assessment criterion levels,<sup>6</sup> as presented in Table 2, delineate such a hierarchy of criteria foci.

TABLE 2: ASSESSMENT CRITERIA CATEGORIES, CRITERION LEVELS AND THEIR FOCI.

Criteria Category	Criterion Level	Criterion Focus
Performance	6	PROGRAM IMPACTS on student understanding of knowledge or theory
	5	PROGRAM IMPACTS on student behavior, given "unrealistic" conditions
	4	PROGRAM IMPACTS on student behavior, given some simulation of reality (e.g.- role played counselling situation)
	3	PROGRAM IMPACTS on student behavior, given "real world" conditions (e.g.- first grade classroom)
Product	2	STUDENT SHORT-RANGE IMPACTS on clientele group, given "real world" conditions
	1	STUDENT LONG-RANGE IMPACTS on clientele group, given "real world" conditions

Summative assessment of students requires analysis of data in relation to two standards. First, the student must be demonstrably effective in producing specified behavior changes in pupil, client, or other appropriate clientele group. For example, counselors should be demonstrably effective in helping their clients cope with their environments. Second, in achieving their results, students must employ only "appropriate" methods or tactics. Thus, the first standard is a standard of effectiveness. The second standard is an ethical standard.

Regarding assessment of professional effectiveness, at what criterion level should summative assessment occur? For two reasons, summative assessment should occur at criterion level one or two. First, educational research has not yet determined which student behaviors in what situations produce what behavior changes in clientele groups. Until such determinations are made, how can performance criteria be used as indices of a student's productivity? Second, even if it could be determined that given student behaviors evoke given results, perhaps competency-based assessment should still emphasize use of product criteria. If possible, shouldn't students be assessed on the basis of their ability to foster specified behavioral change rather than on the basis of their ability to demonstrate only usually related indicators of such an ability?

Assuming that summative assessment should occur at criterion level one or two, who should specify criteria content? Summative assessment so vitally affects students. Students are respected persons who have a right to represent to others their vital interests. Thus, in a person-centered CBE program, students will have a significant voice in specifying summative

assessment criteria. For example, it should be the teacher education student who specifies that, during one year, pupil reading level must improve by 1.5 grade levels before the pupils have been competently moved toward instructional ends.

Summative assessment should be both fair and valid. The conditions of each student's field experiences will differ widely. Students are very familiar with the constraints and potentials of their individual environments. In a reality-centered program, students will then have the right to specify situation-particular assessment criteria.

But what if students specify non-rigorous productivity criteria? This potentiality can be dealt with while assessing the means students employ in pursuing their ends. By what process does the student determine assessment criteria? What are the consequences for the student's clientele of the criteria specified by the student? Are these consequences "good" or "bad?"

Finally, who should specify the methodology by which assessment data will be gathered? For example, who should decide what instruments should be used to measure pupils' reading level achievements? These decisions should be consensually arrived at through discussions among students and their professors. Students should have the option of affecting data-collection methodology because methodology can easily affect results. Professors should be consulted at least for their psychometric input.

Overall, with respect to assessing student professional effectiveness, it has been suggested that summative assessment should occur at criterion level one or two. Students should specify assessment criteria. Students and their professors should together specify data-collection methodology.

If student effectiveness can be assessed, so must student tactics be judged. Is Johnny learning because Ms. Smith has facilitated Johnny's acceptance of self and thus his growth in curiosity to know his now less threatening environment? Or is Johnny learning because Ms. Smith won't let him go to lunch until he passes his spelling tests? Judgments of student tactics are clearly important. How then should student tactics be assessed?

First, who should assess the students' use of instructional, counselling, or administrative tactics? The very best group to assess impacts of tactics is the group toward which the tactics were directed.

Clientele group members are optimally able to judge tactics impacts. A university faculty member cannot always be in the student-teachers' classrooms, the student-counselors' conference rooms, or the student-administrators' offices. Furthermore, university faculty members are not omniscient. Clientele group members are very able to determine how a student's feelings about self, profession, and them affects their growth. This is perhaps least true with respect to younger elementary school pupils. But even here, reliable instruments have been constructed for the purpose of obtaining pupil feedback on student performance.<sup>7</sup> Thus even younger pupils can make some impacts on summative assessment decisions.

Nevertheless, it might be wise to incorporate precautions to insure that clientele group members are applying appropriate judgment values and are openly sharing their conclusions. For example, in some situations the university supervising teacher might discount pupil inputs that Ms. Smith

is "nice to us." Why then won't Johnny get within ten feet of Ms. Smith? Why did Johnny say that Ms. Smith is a nice teacher? What does "nice" mean to Johnny? Probably, however, such discounting of pupil input should occur only in the face of fairly formidable evidence.

But how would an assessor know that clientele group members are openly sharing their conclusions? First, the assessor could examine the clientele group's environment. Does the environment foster openness or regimentation? Second, the assessor could test feedback by measuring the extent to which it concurs with evaluations of supervising university faculty, cooperating teachers, counselors, or administrators, and possibly parents.

This tactics assessment process also has portents for the growth of clientele group members themselves. If a goal of education is to foster self-actualization in pupils, then why not allow pupils to specify whether or not students are attempting to facilitate pupil growth? If it is a goal of education to produce counselors who respond to client needs, then should not clients be asked if their needs are being met? If it is a goal of education to produce administrators who are professional, then shouldn't teacher professionals be asked their opinions of administrative-interns.

Second, what criteria should be employed by persons who assess student use of instructional, counselling, or administrative means? Two sets of criteria should be applied by clientele and professional groups respectively. Clientele group members can tell assessment personnel whether or not students are responding to their needs. College faculty and public school personnel can assess students in terms of student adherence to the appropriate code of ethics. For example, student-teachers might be assessed on the basis of

adherence to the National Education Association's Code of Professional Ethics . . .

Finally, how often should instructional tactics be observed for purposes of assessment? If assessment is to be valid, it must be based on representative observation of student behavior. Clientele group members again have advantages over other evaluators to the extent that they are usually present during student instructional, counselling, or administrative efforts. These considerations also argue for frequent observation of student efforts by both supervising and cooperating professionals.

Overall, with respect to assessing the means students employ to achieve effectiveness, assessment should predominantly but not exclusively be guided by clientele group members' evaluations of student tactics. Two sets of criteria should be utilized for this assessment. Constituents should be given a virtually free hand in determining whether or not students responded to these needs. Professional groups should assess tactics by using the appropriate code of ethics. Finally, if assessment is to be valid, it must originate in a data-base of representative observations of student efforts.

## CBE AS AN ENCOUNTER PROCESS

CBE can be a person-centered and a reality-centered approach to education. But the approach is somehow more than the sum of these parts. CBE is also an encounter process. Encounter is "an intuitive reversal of roles, a realization of the self through the other; it is identity, the rare unforgotten experience of total reciprocity."<sup>8</sup>

But why implement CBE so that it is basically an encounter process?

There are two reasons for implementing CBE with such an encounter focus. First, the encounter process facilitates professional growth. Education students play several roles. On campus, students play the role of "learner." Will "learners" perceive classes on pedagogy to be pertinent if they are concerned more about their personal than their professional adequacy? During practicum periods, students play the role of "professional." Exactly how will students play their professional roles if insecurity rather than reason guides their behavior?

Before students will either effectively learn professional pedagogy or effectively play their professional roles, students must first recognize the existence of their concerns. Encounter is a process of intensive interaction with environment and others. Do people come to know themselves only by interaction with others? Will Fred really feel his love for Nancy until he speaks to her of his love? Interaction is an encounter process, because interaction requires analysis of one's own thoughts and feelings. CBE programs which structure in heavy personal interactions force students to better know themselves. This program emphasis is possible where students work mostly with the same professors and classmates throughout program involvement, and where field exposure to clienteles are longer and more intensive.

But knowledge alone is not the key to effectiveness. Before students will effectively learn or effectively play their professional roles, the students must first cope with their concerns. Here CBE programs can create a very special tension. Structured-in encounter implies decision-making. Students with concerns about self as person may find encounter interaction

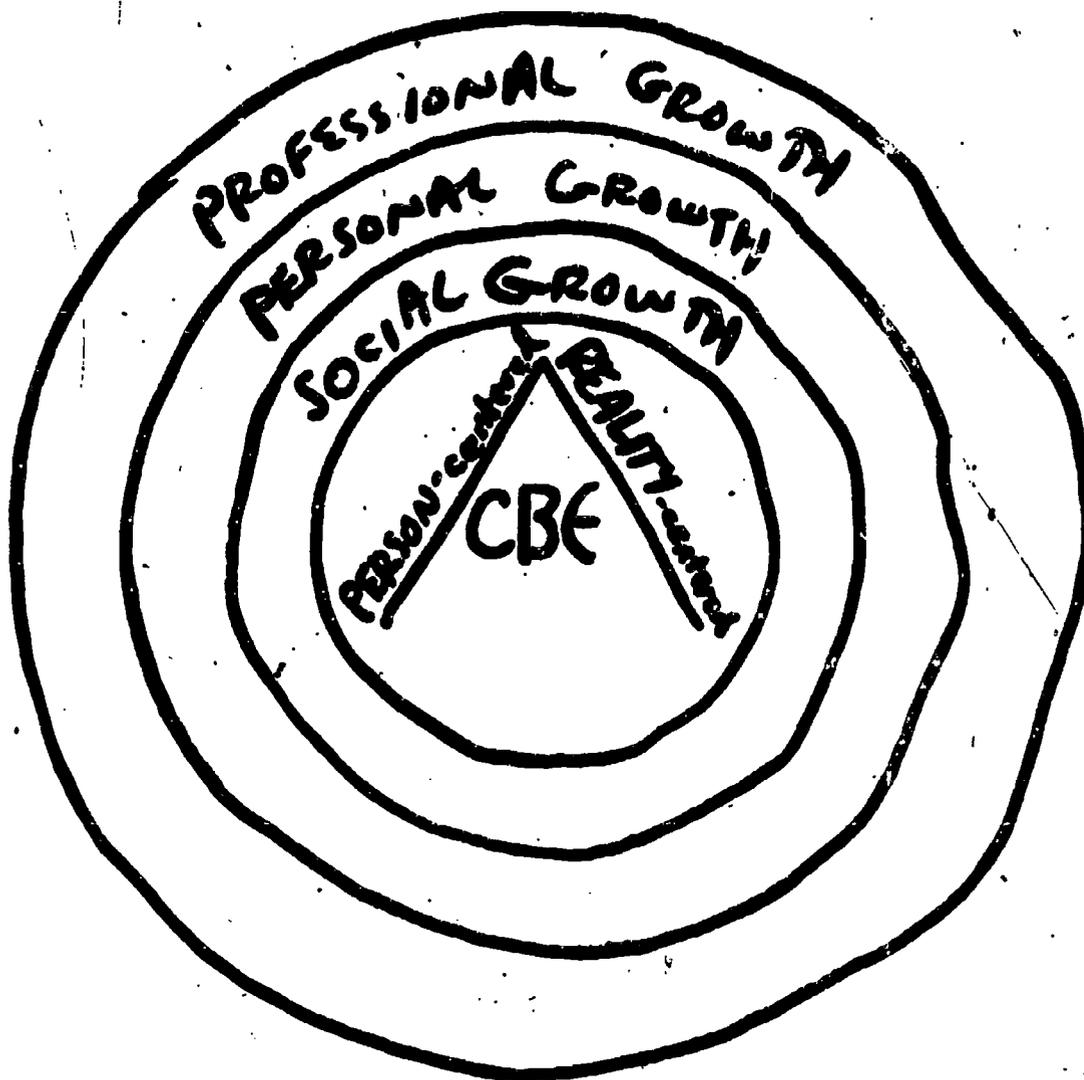


FIGURE 1: AN OVERVIEW: THE CONSEQUENCES OF THE CBE ENCOUNTER PROCESS

discomforting. Students with concerns about self as professional may find exposure to field experience to be painful. Maybe such persons will choose to de-select themselves from CBE programs which force them to recognize their concerns.

Or maybe such persons will choose to grow and change. Fortunately, encounter need not be only a process of concerns recognition. It can also be a process supportive of concerns resolution. In a humanistic CBE program students will be able to say to each other, "Hey, I have that concern too. Maybe I'm not that unique after all. I accept my concerns. I will cope with them. And I accept you and your concerns. They are a part of you, too." Thus, CBE can create tension between deciding to exit CBE programs, or deciding to grow and overcome professionally debilitating concerns.

There is a second reason why CBE should be an encounter process. True, encounter does make CBE more effective in creating the product of effective professionals. But process as well as product can be an end of education. Even if growth did not improve professional effectiveness, shouldn't CBE still emphasize encounter? Shouldn't all education efforts try to facilitate student growth? Just because education students are becoming professionals, isn't the growth of these persons still valuable in itself?

To say that encounter improves professional effectiveness of students is not to say that student growth is in itself not valued. A point bears special emphasis. Where CBE programs structure-in interaction only for the purpose of facilitating professional growth, this interaction may not become encounter. Encounter is personal and empathic. CBE programs with only product orientation are mechanistic and dehumanizing. Students must per-

believe program personnel as emphasizing empathy for the sake of process before interaction will become encounter.

## SOME FINAL CONCERNS

CBE is not valuable only because the approach can so effectively foster professional growth in students. Nor is CBE valuable only because the approach can facilitate deep, important personal growth in students. CBE is valuable because the approach can optimally facilitate personal and professional growth so that both types of growth support and reinforce each other.

Nevertheless, for all its potentials, there are zero guarantees that CBE will not be implemented in a distorted and thus ineffective fashion. Potential implementation distortions must be recognized and avoided if the approach is to achieve its fullest potentials. As suggested earlier, effective CBE approaches must generally emphasize person over product. Where product is emphasized, such emphasis must have its genesis in genuine concern for people. It is a paradoxical but real truth that such emphasis on person brings better product. If this is such a patent truth, where are the potentials for distorted approach implementation?

First, there is the danger that CBE may be implemented in response to perceptions that society desires more individualization in education. This is only partially accurate. The development of CBE is largely the result of societal desire for more humanness in education. Humanization of education requires both individualization and personalization of education processes. Personalization of education does imply individualization, but

Individualization does not necessarily imply personalization. The thrusts are not inherently reciprocal. Why individualize instruction if not to acknowledge the human differences in the people who are learners? Will instruction be perceived as mechanistic if it is individualized only for reasons of efficiency?

How can program implementors foster student perceptions that individualization efforts have genesis in concern for person? Students can be given both the freedom to make decisions and the responsibility for accepting the consequences of their decisions. CBE implies student freedom to determine rate, sequence and method of attaining learning objectives. The untapped potential for humanizing education lies in allowing students to also affect the content of program learning objectives. Competency content should partially be determined through negotiation among individual students and individual professors. Negotiation is a humanistic decision-making process, because negotiated decisions are decisions consensually achieved through discussion among persons who as persons are equals. Summarizes H. Del Schalock:

Individualization of instruction refers generally to the provision of options in learning experiences at different rates and in different sequences, etc. Personalization of instruction assumes in addition an opportunity to negotiate that which is taken from a program, to assess continuously the relevance or meaning of that which is taken, and to increase understanding of one's self so that judgments as to ends and the selection of means can be done with as much sensitivity as possible. Expressed in other terms, *the personalization of instruction requires its individualization; the humanization of instruction requires its personalization.*<sup>9</sup>

There is a second significant danger for distorted CBE implementation.

Certification personnel must not represent criterion-referenced re-certification assessment of in-service personnel as being competency-based education. Such assessment may be a viable response to societal desire that salary resources should be allocated commensurate to each person's professional effectiveness. But an assessment process becomes education only when joined with an instruction process. Moreover, such assessment will only be criterion-referenced, and not competency-based, unless in-service professionals are given time to overcome identified deficiencies.

Third, modules must be used to increase professor-student interaction, and not to reduce it. Modules are only outlines of minimal learning objectives and suggestions of ways to achieve these objectives. Thus there is plenty of room for vital professor involvement in the learning process. Modules should be used to free instructors to work more with students who are having special problems. Modules should also be used to allow students and professors the opportunity to get to know each other as persons.

CBE has such potential for facilitating growth of more effective and humanistic professionals. Whether CBE achieves this potential will depend on how the education profession responds to the social forces which have brought the evolution of the CBE movement. Hopefully, approach implementations will place a consistent and undistorted emphasis on person and reality. After all, what emphases are more compatible with the purposes and processes of education?

#### FOOTNOTES

1. Susan S. Sherwin, Performance-Based Teacher Education: Results of a Recent Survey (Princeton: Educational Testing Service, 1973), p. 7.
2. Frances F. Fuller, Personalized Education for Teachers: An Introduction for Teacher Educators (Austin: The Research and Development Center for Teacher Education, The University of Texas at Austin, July, 1970), p. 9.
3. H. Del Schalock, "Notes on a Model of Assessment that Meets the Requirements of Competency-Based Teacher Education," Exploring Competency-Based Education, W. Robert Houston, ed. (Berkeley: McCutchan Publishing Co., 1974), In press.
4. Benjamin S. Bloom, et al, Handbook on Formative and Summative Evaluation of Student Learning (New York: McGraw-Hill Book Co., 1971), p. 117.
5. Barak Rosenshine and Norma Furst, "Research on Teacher Performance Criteria," Research in Teacher Education: A Symposium, B. Othanel Smith, ed. (Englewood Cliffs: Prentice-Hall, Inc., 1971), p. 37.
6. Richard L. Turner, "Rationale for Competency-Based Teacher Education and Certification," The Power of Competency-Based Teacher Education: A Report, Benjamin Rosner, ed. (Boston: Allyn and Bacon, Inc., 1972), pp. 3-7.
7. For example, see Ruth Haak, et al, Student Evaluation of Teacher Instrument, II (Austin: The Research and Development Center for Teacher Education, The University of Texas at Austin, 1972).
8. J. L. Moreno, "The Viennese Origins of the Encounter Movement, Paving the Way for Existentialism, Group Psychotherapy and Psychodrama," Group Psychotherapy, XXII (1969), p.
9. H. Del Schalock and J. Garrison, "The Personalization of Teacher Education Programs," New Directions in Teacher Education: Problems and Prospects for the Decades Ahead (unpublished manuscript), p. 35.