The conference report on competency-based teacher education in Region 5 contains the full texts of 12 addresses by key conference participants: Personnel Development in Occupational Education in Illinois, Sherwood Dees; One State's (Illinois') Approach to Competency Based Teacher Education, William Reynolds; Planning for Personnel Development Within a State (Illinois), William K. Applegate; Vocational Educators and Competence Based Education, Joan R. McFadden; Pre-Service Occupational Program (POP), Franzie Loepp and Alan Johnson; Competency Based Industrial Teacher Education at University of Wisconsin--Stout, Neal Pricichard; Competencies for Professional Education in Home Economics, Phyllis K. Lowe; Two-Year In-Service Teacher Preparation Program to Provide the Essential Professional Competencies Necessary for Teachers of Agriculture, Wayne E. Asche; A Competency-Based Program for Preparing Vocational Teachers, Fred S. Cook and Rita C. Richey; Performance/Competency Based Teaching Methods, Minnesota Style, Roland L. Peterson; Administration By Competency (ABC), Charles Edwards and Wes Habley; and A Cautionary Appraisal of CBTE, H. S. Broudy. The report also contains State task force reports, the Region 5 conference survey results and three appendixes (the conference program, the participant survey, and a list of the participants, presenters, and staff).
A REPORT ON THE REGION V CONFERENCE ON
COMPETENCY BASED TEACHER EDUCATION

Midland Hotel
Chicago, Illinois
March 11-13, 1975

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FOREWORD

As the need for competent, well qualified professionals in vocational education increases, cooperative program efforts and resource sharing among states and regions become critical elements in providing necessary personnel for the school systems of the nation. Information sharing and creative contact among states and different components of the vocational personnel development system are important first steps to achieving these goals of cooperation and sharing.

The primary objectives of the Conference were to share information about personnel development activities and programs currently operating with the six states which are included within Region V and to initiate cooperative planning within and among the states related to vocational personnel development. These objectives, as well as the Conference program, focused on the topic of Competency Based Teacher Education.

This document provides a record of the program and activities associated with the Region V Conference on Competency Based Teacher Education held at the Midland Hotel in Chicago on March 11-13, 1975. It includes addresses presented by key participants, reports of state task force meetings, results of the Conference survey and a list of participants. An evaluation of the Conference was conducted and its findings were summarized in a separate report.
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ACKNOWLEDGMENTS

The Conference was made possible with the support from the Illinois Division of Vocational and Technical Education and the United States Office of Education, Region V, EPDA, Part F, Section 553. The Conference was conducted with the kind help and assistance of many individuals.

Mr. William Lewis and Mr. Daryl Nichols of Region V, USOE, provided important advice and direction from planning through conduct of the Conference. Mr. Sherwood Dees, Mr. William Reynolds, Dr. Charles Hempsted, and Mr. Lonnie Hart of the Division gave support and technical advice which brought the Conference from an idea to make it a productive experience.

The EPDA, Part F, Coordinators of the six states also deserve more than the usual commendation and credit for their active work in offering suggestions on the conduct of the Conference, in managing the details of participant selection and notification, and for encouraging the active cooperation of all who attended.
Everyone seems to be in favor of improving the quality of occupational education in the schools and community colleges of Illinois. However, the question of just how to improve this quality of instruction seems to invoke considerable debate. We in Region V are convinced that considerable attention should be directed toward occupational education teachers, supervisors and directors as a means of improving instruction for each person receiving occupational training.

It is first necessary that the Division of Vocational and Technical Education reflect this priority by designating professional and curriculum development as a major unit within the Division. Illinois was one of the first states in the nation to include professional and curriculum development as a regular and important function of the State. The role of the Division is to emphasize the implementation of professional development activities, to coordinate these efforts, and to demonstrate these activities.

The universities, with responsibility for teacher education, must meet the needs of teachers of occupational education at a time when training for the world of work is the highest priority of all of education. As many of the occupational education areas of instruction are new and different, it means a reorganization of traditional teacher education programs that often were based upon occupations of the past. It means examining and updating traditional curriculum offerings that were not aimed at the objective of entry level skills for the world of work. Occupational education should be an integral part of all of education. It must not be considered as separate and apart from the general or academic program. It should serve as a complement to, not a competitor with, the general or academic program.

The close relationship of business and industry with higher education requires that professional development in occupational education be practical and not theoretical or of textbook emphasis. Practical requires a close relationship between the "taught" and the "real" situation. Emphasis must be given in teacher training to the total occupational education program. It includes special emphasis on the skill training required for each occupation. There is also
a real need for teachers and administrators to understand the relationship of a sequential program of instruction as well as the relationship of occupational clusters. Occupational education is aimed at training individuals with entry level skills for a cluster of occupations, not a specific occupation.

During the past several years, we in Illinois have contracted with universities to develop new programs to produce competent teachers. Many of our efforts and much of the money spent were put into new, innovative, competency-based programs for future professionals in vocational education. These have included programs for teachers, counselors, curriculum personnel, and administrators. These programs have been developed and implemented as part of professional personnel development activities throughout the State.

Some view competency-based teacher education as an educational "fad." As any new educational "fad," competency-based instruction for teachers has its opponents as well as proponents. Both sides of the controversy have strong arguments to uphold their positions. We in the Illinois state office do not have the answers. We feel that we have had some success with the programs I have mentioned, some of which you will hear about during this conference. We do feel that we in education need to listen to the many voices that have been raised by community leaders, and local school personnel regarding the upgrading of the abilities of the persons being certified to teach and administer our vocational programs. Business and industry leaders, the "purchaser" of our products in the public schools, are asking for better-trained individuals. These individuals should enter the labor market with at least entry level skills.

It is impossible to graduate well-trained persons from our secondary and postsecondary occupational programs unless we have well-trained, competent teachers. Competency-based teacher education may fulfill this need.

On the other hand, competency-based teacher education may not be the ultimate answer, but it deserves to be studied. It should be implemented if found to be superior to or a complement to traditional four-year teacher-training programs in our colleges and universities.
ONE STATE'S APPROACH TO COMPETENCY BASED TEACHER EDUCATION, William Reynolds, Presented at Region V Conference on Competency Based Teacher Education, Chicago, March 11-13, 1975.

Prior to 1969 Illinois' approach to teacher education generally took the form of the State Department reimbursing universities for extension type courses which were previously approved by the SEA. Two things were wrong with this practice. First, the universities could, as part of their program, provide these services to the teachers of the State. Secondly, this practice also provided little room for innovativeness or the establishing or fulfilling of priorities for teacher education. As a part of a plan to improve teacher education, the Division went to a method of establishing priorities and then entering into contract with educational institutions, agencies and individuals for the conduct of those services or activities.

This change, along with the establishment of the University Occupational Education Coordinators Council, paved the way for a competency based teacher education program in Illinois. Information regarding the liaison "structure" is described in the ILLINOIS CAREER EDUCATION JOURNAL, Spring, 1974, Volume 31, #3, page 6-9. The University Occupational Education Coordinators Council attempted in 1970 to identify those competencies which persons of different levels and disciplines would need to function in their particular positions. This not only included teachers but also administrators, guidance, and other ancillary or support personnel. After two years of study to identify these competencies, a contract was awarded to two universities on a cooperative basis to better define and delineate those competencies which had been identified by the Council. Drs. Wayne Ramp of SIU-C and Ed Anderson of ISU were identified to undertake this task. The initial year of research was documented in a publication entitled "A Competency Based Model Graduate Program in Occupational Education Administration." This study was limited to the identification of competencies of administrators and was chosen because evaluations throughout the state had indicated the weakest area for program change was focused on the administrative leadership that was being asserted in the state.

Upon completion of this study, the Division issued Requests for Proposals (RFP's) for the development of two competency-based administration graduate program models. The RFP's also indicated that the models would be developed in consortium with students who would help determine
competencies; help to identify alternative programs in which to attain these competencies; and would evaluate and make recommendations to each of the project directors on revisions within the programs. Two contracts were awarded to ISU and SIU-C and project directors were identified. Companion contracts were awarded using EPDA 553, Part F funds which permitted the preparation of personnel at the same time the program was being developed. These two programs were so successful that a preservice undergraduate competency based program was initiated at ISU which would identify the competencies in the "professional areas" at the undergraduate level. This program has been under development for two years and will be completed and field tested by July 1, 1976.

I fully realize, as many of you do, that the terminology "competency based instruction" is not completely palatable to all educators. I, too, have reservations of a totally sterile competency-based program which tests only those cognitive skills of an individual. However, in identifying these competencies, regardless at whatever level they are established, we have at least identified some parameters which should guide teacher education in the future. Competencies should continually be evaluated on the basis of not only the needs of our society but also needs of the individual. Programs developed should be personalized as much as possible and student input into the development of these programs is an absolute must.

Implementing a competency-based program or any additional program to the existing curriculum in our teacher education institutions always creates the problem of seemingly adding on to a program rather than looking at eliminating certain program areas. I think we should be realistic in realizing that many programs in universities today should be looked at very carefully as to their effectiveness and need. If it is found that there are more effective and efficient methods of preparing educators for vocational education, then we should start to eliminate those old programs. No, I think "eliminate" is not the terminology; we should "amputate" those programs. I say this for one reason - to develop new programs and to attempt to hold on to those programs which we have, simply creates chaos and dissension within the teacher-training institutions. It also drains the resources which are necessary in the development of new programs, but mainly we pile more and more onto the students. Instead of looking to producing teachers in less time than the traditional four years, we are actually promoting the lengthening of the time needed to prepare a teacher for vocational education. One of the problems in competency-based instruction is that of measuring the affective domain, and I have read many articles and listened to many distinguished administrators who say that the attitudes of educators cannot adequately be measured. If we subscribe to this concept, then I
think we are admitting that in our regular programs we have not been able to measure the attitudes of students. It is my personal opinion that this is a "cop out" by those who do not want to go to the trouble of looking at alternatives in teacher education.

In the development of the competencies for the administrative program as well as the POP Program, most all of the models, including those of Cottrell and Wayne State, were studied and cross referenced with those which were identified by Ramp and Anderson. I think it is well to note that the most difficult task is to delineate between the competencies which are nice to know vs those competencies which a person must know to function in a particular position or situation.

In addition to the two programs identified above, Illinois has developed other programs through contractual arrangements that are not completely competency based; however, they are alternatives and innovative practices for teacher education. A few of these are the development of a correspondence course developed by Rupert Evans and Wayne Lockwood from the University of Illinois; a capstone program under development by Dr. Eugene Wood at Southern Illinois University-Carbondale; the HOTEP Program which is a capstone program for health occupations teachers at the University of Illinois developed by Dr. Marie Vitteroe and Dr. Lloyd Phipps; and a career guidance program developed by Dr. John J. Cody from Southern Illinois University-Carbondale.

Introduction

The author of a book review in the latest issue of Newsweek magazine compares mystery novels and football games. He states that both satisfy the human need for stylized conventions and a ritualized structure from which emerge winners and losers and a neat finality. Each, the author says, imposes a degree of rationality on something that is essentially irrational.

I sense the author's point and feel that those of us concerned with vocational personnel development often seek winners, predictable organizations and structures and rational processes. While this should assure us of our humaness, it does little by itself to make the system less irrational.

The need for more effective and productive planning in vocational personnel development is very real. In fact, improving that process is a major focus of this Region V Conference. However, adding some rationality to our systems of personnel development requires thought, analysis, creative contact between levels, and conscious cooperative planning. This is not an easy task. Yet the hoped for result of improved practice and product is a worthwhile goal in each of our states.

In recent months, we in Illinois have witnessed the development of several documents focusing upon the need for improving the development of occupational teachers, administrators, and support personnel. Such planning activities have reflected an expressed interest and demand for more and better opportunities for vocational education among all age levels and has resulted in a "heightened awareness of the importance" of this educational orientation. Building personal occupational equity through education and authentic work experience has become a prevalent concern of secondary, post-secondary, and university students alike. In short, the growing emergence of the "vocational student subculture" as described by B. R. Clark and Martin Trow now appears irreversible.

For the educational enterprise to fulfill its responsibilities and to serve student aspirations for employment oriented instruction is no easy task. Yet a substantial opportunity for educational service is contingent upon the preparation and development of qualified educational personnel in this field.
Illinois has sought to find structure within the complex process of vocational personnel development. A long-range plan for higher education in Illinois spoke directly to the need for a master plan for occupational teacher education programs. This intent was actuated through the establishment of a statewide Task Force on the Education of Teachers and its cooperation with the state Advisory Council on Vocational Education to establish a committee to develop a report entitled, "Recommendations to Improve the Occupational Personnel Development Program in the State of Illinois."  

The state Division of Vocational and Technical Education, acting well in advance of common state practice, established in 1969 a vocational education personnel development unit within the Division which employs several full-time personnel to evaluate, plan, and meter personnel development activities. At present, the Professional and Curriculum Development Unit is conscientiously working with a Statewide University Occupational Education Council, other units of the Division, and a comprehensive Three Phase System of Evaluating Occupational Programs in order to establish an information system for personnel development planning to meet the needs for occupational personnel. Additionally, the Division supported in 1971 the planning and development of "A Study for Improving Personnel Development in Occupational Education for Illinois." Predicated on the assumption of accelerating vocational program enrollments in secondary schools and community colleges and the critical need for new systems of personnel development, this report proposed 20 recommendations and more than 60 alternative actions aimed at "improving the nature, components, processes, and products" of the state system of occupational personnel preparation and development.  

Credit for planning should not be given solely to those interested in vocational education. It is most encouraging to observe the efforts of the Illinois Office of Education (formerly the Office of the Superintendent of Public Instruction) to identify the importance of developing improved models of training for occupational teachers. Vocational personnel development is committed to developing all types of personnel for the schools and to support and speed the success of the state in realizing its stated goals for vocational and related education. The "Action Goals for the Seventies" document which proposes future directions for education attempts to marry the important yet too often separatist intents of education-vocational and other than primarily vocational.

Several of the most worthwhile and workable recommendations included in these plans will receive their deserved attention. Selected suggestions are already given promise for eventual
implementation. A statewide management information system detailing manpower requirements in high demand occupations is providing impetus for new teacher training programs. Competency based development of vocational program administrators is a reality in selected universities. And, special financial incentives for inservice personnel development directed to local education agencies has been approved for the coming year.

However, despite these and other encouraging actions, momentum toward implementing a majority of the recommendations of the several plans warrants only limited celebration. Given the sizeable investment of manpower and expertise, the realistic aspirations, and the undeniable needs identified by participants, important consideration must be given to a series of planning questions for personnel development.

1. Why should there be planning for vocational personnel development?
2. What impedes the progress on these and other public educational planning ventures?
3. How can such public planning activities for vocational personnel development effectively impact to improve both process and practice?

Rationale for Planning

Strong federal level encouragement initiated through the 1968 Amendments to the Vocational Education Act of 1963 is suggested by many vocational educators as a major impetus to comprehensive vocational personnel planning. However, forces unique to Illinois have not only increased the interest but have also precipitated the planning actions cited above.

1. Existence of accelerating needs for vocational education personnel which are unmet due to shortages of trained personnel in selected areas.
2. Emergence of specialized vocational programs in a variety of high demand occupational specialties for which no preparational programs exist.
3. Recognition of frequently duplicated and overlapping efforts in personnel development among public teacher training institutions.
4. Legal responsibility of state education agency(ies) to conduct personnel development activities combined with earmarked state and federal resources to support such efforts.
5. Need to allocate increasingly scarce resources at public teacher training institutions to those most critical high priority areas.
6. Understanding that new educational activities and personnel development programs require policy changes.
7. Acceptance of centralized planning at the state level as a means to focus on important developmental priorities.

8. Inherent belief that currently available resources are not being employed at potential for achieving maximum service.

Support for several of these factors demonstrates the acute nature of the problems. Since 1969, the amount of State and Federal support going to vocational education in Illinois has tripled. This has simultaneously resulted in increased enrollments and a wider variety of program offerings. From 1969 to 1972, the number of vocational programs in secondary schools increased by 130%. In 1972, community colleges were offering 155 different types of occupational programs, whereas in 1969, only 87 were available, an increase of 78%; and the trend continues. During 1971 and 1972, more than 350 new occupational programs were approved in Illinois public community colleges.

Problems Facing Plans

Despite the existence of the several plans for improving vocational personnel development, their suggestions for improving the delivery of personnel improvement, and some rather convincing evidence which supports the need for renewal, action on implementation has not been characterized by the kind of ambition demonstrated in their development. Nothing short of a book-length analysis could identify all of the obstacles to be overcome in the implementation of existing planning statements, however, several important obstacles deserve comment.

System Versus Non-System. Literature in the field of vocational education has recently detailed the need for comprehensive planning for statewide systems of personnel development. Carl Schafer and Darrell Ward along with others have attempted to develop state-centered conceptual models for vocational personnel development. The contention is that with appropriate planning these models provide a format for considering the frequently dispersed, uncoordinated agencies, organizations, and institutions involved in personnel development, as a "system." The problem with successfully conducting the planning needed to improve personnel development in Illinois is that the responsibility for a collective focus on goals, need assessment, resource allocation, program offerings, and evaluation which can enable a "system" to work are dispatched among more than 20 separate agencies, institutions, and departments not to mention schools and colleges which must also act as willing participants. Hence, the "system" actually displays more the characteristics of a non-system, and the task of identifying responsible agents and describing their roles becomes a monumental task in itself.
Honest Commitment for Policy Development. Closely allied to the problem of complexity is the mix of obstacles encountered in achieving convergence on a unified policy to improve vocational personnel development. First, several state agencies or their policy developing boards have demonstrated an aversion to developing important and needed policy. Second, policies must be translated into sequential tactics of implementation. Such a translation moves the policy focus from general goals (overarching values) to specific goals (educational objectives) which must be juxtaposed against present conditions in the state's educational system. So, without an overall organization for governing or supporting consistent policy in the area, commitments for piecemeal policy have to be gathered in a variety of methods from a variety of agencies or institutions based upon their particular inclination at a particular point in time. When policy commitments are not available, planning efforts are reduced to activity ordering and the preference for policy planning is reduced to the practice of activity implementation. This problem is a recurring dilemma for planners and frequently results in the predictable criticism that plans confuse planning with implementation.

The Future as an Extrapolation of the Present. Possibly because of limits on time and resources or because of the lack of a good data base for planning, much of the planning which has taken place is a "simple extrapolation of single variables which oversimplify" the direction and extent of change in vocational education. Plans and thought concerning critically needed policy for personnel development are too frequently predicated upon programs, structures, and in some cases individuals when a more appropriate focus would be issues, values, and goals. Without the considered judgment by planners of where vocational personnel development needs to be, there can be few successful attempts to identify the critical points where policy can intervene to bring about a more desirable future. For example, the continued support of Smith-Hughes type programs of vocational teacher preparation programs in several public teacher training institutions can be a tragic commentary on the responsiveness of such institutions to the apparent new values, issues, and needs confronting vocational programs in secondary schools and community colleges.

Opportunities for Policy Planning

A mandate for a more comprehensive policy in vocational personnel development is not only needed, it should also receive a good deal of support from the agents and institutions presently involved in the state's system of personnel development. Continuation of well intentioned, intelligently conceived, but duplicated, planning can be construed as no planning at all. What is needed is a plan accompanied by practical strategies and supported through a functional policy. There are several places where we might begin.
Consensus on Policy Needs. Future planning initiatives, in order to be effective, need conceptual support from a variety of constituents both prior to and during the development process if functional policy structures are to be forthcoming. Professional organizations, the Division of Vocational and Technical Education, the Illinois Office of Education, the Board of Higher Education, public colleges and universities, local education agencies, peripheral educational agencies, and legislators need not only to be involved, but there must also be a willing subscription to the efficacy of such policy planning endeavors. Subsequent planning actions should also offer both a high degree of participation as well as a high degree of transparency.

Goal Development. A recent report of the Carnegie Commission on Higher Education cautions that while planning development must take place within the content of existing structures and resources, the important consideration must first focus on statements of goals as a basis for educational policy formulation. Such work will need to integrate alternative educational futures with forecasts of alternative societal futures. When the demand (by level and type) for vocational education personnel is relatively constant, the task is much more manageable, however, as the demand accelerates or as requirements for new types of skills emerge, it becomes increasingly difficult to prepare for the unknown. If planning and eventual policy development is to be accomplished, it is essential that one official state document detailing the goals for vocational education and related personnel development concerns be developed with a future orientation based upon values, issues, and key educational needs of students and society.

Convergence of Interest. While private competition might well be considered as one way to encourage improvements in vocational personnel development, current programs are essentially a public enterprise. Eight public universities along with one private university offer all of the formal vocational in-service and preservice programs of personnel development within the state. It is also estimated that more than 70 percent of the certified instructional, administrative, and supportive personnel responsible for the delivery of vocational programs in Illinois have received preservice preparation at one of the state's public teacher training institutions. Recognizing that the public supports vocational personnel development almost exclusively, and that it additionally supports the major controlling agencies to which programs must account makes the development of functional public policy for the area not only more possible but also more important.
A convergence of interest among responsible public agencies is necessary to serve the public interests for efficiency in the utilization of resources and for the effectiveness in improving the efforts of vocational personnel development. For example, through improved public policy statewide resources could be appointed to selected universities to support programs with the capacity to offer a full complement of preservice and inservice personnel development activities. The realities of limited state resources, coupled with critical personnel development needs especially in the inservice area, make it highly questionable for a statewide system of higher education to support multiple programs at the preservice level which are exceedingly similar, possibly outdated, and demonstrate little differentiation of function. In some cases a consolidation of effort may be an appropriate response and in others incentives need to be provided to encourage exemplary efforts for improved service in personnel development even if this means resources must be drawn from less productive efforts at other institutions. This can only be accomplished through the cooperation of public agencies converging their interests to support sound policy development and their willingness to monitor and evaluate through formal means the resulting benefits of programs.

Generating New Alternatives. One key benefit which may result from policy determination for personnel development is a thorough review of the assumptions underlying present practice. With new assumptions frequently come new alternatives in the delivery of service. To date, much of the formal inservice activity for personnel development is contingent upon university delivery of graduate programs either in residence or through various extension education. With more than 75% of the operating budgets for secondary and community colleges being expended for personnel, it is time for responsible agencies, including local schools, to be given financial support or incentives to design, conduct, or solicit inservice activities which produce identifiable results for their own institutions. Such a practice is but one example of new alternatives deserving consideration.

Conclusion

Developing public policy for vocational personnel development is not an easy task. The variety of components and players is numerous, the needs for programs to develop teachers and administrators frequently lack specificity, and the activities of personnel development more often display the characteristics of a non-system than a unified, systematic process. Yet the underlying and apparent demands for expanded vocational education programs push the needs for more and better personnel visibly to the surface. Critical, important considerations for the development of functional public policy require the careful attention and concerted action of responsible agencies and institutions for progress on improving current efforts.
REFERENCES


9. Ibid., p. 15.


My challenge today, as I understand it, is to present an overview of Competency-Based Teacher Education. First, it is necessary to establish the acronym I shall use to refer to the topic for this conference. Which of the acronyms in Table 1 do you prefer? The AACTE monograph Competency-Based Education - The State of the Scene, by Schmieder (1973) lists the first eight in Table 1 while the final one was coined by the American Home Economics Association.

Table 1

Acronyms Used to Refer to Competency and/or Performance Based Education

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<th>CRTE</th>
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<td>PBTE</td>
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<td>CBTE</td>
<td>CBE</td>
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<td>OOTE</td>
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<td>CBPE</td>
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The acronyms in Table 1 refer to the following:

CRTE: Criterion-Referenced Teacher Education and Certification
PBTE: Proficiency-Based Teacher Education and Certification
CBTE: Consequence-Based Teacher Education and Certification
OOTE: Output-Oriented Teacher Education and Certification
CBTE: Competency-Based Teacher Education
PBTE: Performance-Based Teacher Education
CBE: Competence-Based Education and Certification
PBE: Performance-Based Education and Certification
CBPE: Competency-Based Professional Education

The AHEA was not interested in simply coining a new acronym as it might appear for surely eight should be sufficient. The rationale for identifying CBPE was that in home economics we prepare many educators who are not in teacher education, including extension educators, utility company educators, etc. Therefore, Competency-Based Professional Education would be more encompassing and thus more accurate terminology.
For the purpose of this presentation, I shall refer to the subject as CBE. I have chosen CBE first, because it is consistent with my personal philosophy and second because it is as short as one can get on this list. I would like to add one additional word about why I chose competence in preference to performance. Let me assure you I am well aware of the running debate between advocates for competency and those for performance. I personally agree with those who advance "competency-based" on the theory that teachers are not solely performers but rather need competency not only in the "ability to perform" but also in "facilitating learning" and "guiding individuals."

What is CBE?
The AACTE committee on competence based education has taken the position that CBE represents the application of a formal system for managing instruction to the task of educating professionals. Some of the characteristics of this system are inherent with any such management system, while others are unique to educating professionals.

Where Did CBE Come From?
CBE is a concept that has developed over a number of years and which, no doubt has been spurred on by increasing demands for accountability, relevance, and cost-effective schooling. Both the necessary technology (i.e., individualized instruction, mini-courses, computer-assisted instruction) and R & D funds have made the development of a CBE program within the realm of possibility and assisted the CBE program development.

What are the Basic Characteristics of CBE?
According to Schmieder (1973) in his PBTE monograph, Competency-Based Education - The State of the Scene, seven specific characteristics (plus several general characteristics) distinguish the competency programs from other teacher education programs. These are shown in Table 2.

Table 2

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<td>Behavioral Objectives</td>
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<td>Students Accountable for Meeting Criteria</td>
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<td>Mastery Evaluation</td>
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<td>Instructors Accountable for Program</td>
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<tr>
<td>Achievement Constant, Time Variable</td>
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<td>Emphasis on Exit Requirements</td>
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*Common to all CBE programs.*
The specific characteristics or tenets of CBE include:

1. Precise objectives stated in behavioral terms
2. Criteria to be applied in assessing the competencies of students made explicit and public - and negotiable
3. Students held accountable for meeting these criteria
4. Decision-making regarding training needs based on successful mastery of objectives
5. Instructors held accountable for effectiveness of planned programs
6. Achievement held constant and time varied
7. Emphasis placed on exit requirements with considerable flexibility in entrance requirements.

Dr. Judy Lane-Kar (1974) of Michigan State University has said that two of these seven are common to all CBTE programs. They are (1) behavioral objectives and (2) mastery evaluation.

When we delve into the behavioral objective, we find that they include some of the other characteristics in Schmieder's list. In order to be a measurable behavioral objective, for a CBE program, a behavioral objective must not only identify the competency to be demonstrated or performed, but also the acceptable level of the competency that must be performed and the way it will be assessed, commonly known as the criterion measure.

What is Mastery Learning?
Mastery learning is currently being widely promoted in educational circles. The unique feature of mastery learning is that, unlike most of formal education where time was constant for all students in a course and the amount each student learned varied, in mastery the amount learned is constant while the time is varied. In other words, there is a minimum acceptable standard, be it materials or performance, that must be reached by the student before the student completes the objective. The time required to achieve this competency may vary for each student. In theory there should be no time limit and practically no failures. This allows the program to be individually paced for each student.

What Factors Led to the Initiation of the CBE Idea?
Let me suggest that perhaps the need for accountability in education has been provoked. In the May, 1974 "ATE Newsletter" James Dyer reported an example of one case that, when combined with others equally discouraging, may have been in part responsible for the CBE movement. Picture if you will, this situation:
A venerable college professor was sonorously reading a lecture to a large geography class as follows: "Each year the Missouri River deposits 15,000 tons along its banks." Before he could continue, a wildly waving student hand caught his eye and he looked up with a somewhat irritated "yes?" "15,000 tons of what, professor?" asked the student seriously. After leafing back through his yellow-dog-eared notes for a few minutes, the "teacher" responded -- "It doesn't say!"

Unfortunately this is not a single isolated case. I personally know of a few similar cases that have occurred in traditionally taught courses and I expect you do, too. In combination the cases we could site represent a failure on the part of these teachers to be, among other things, humanistic. While some have warned that the PBTE program will become too mechanistic, Dyer (1974) believes that the PBTE program can be more humanistic than traditionally taught courses.

Angelo C. Gillie, Sr., in April, 1974, AVA Journal, examined several factors related to the development of the CBE programs. He suggests there may be some hidden rationale:

Like many movements in education, this one, has two rationales--one announced, the other hidden. The proclaimed rationale emerges from the longstanding goal of vocational teacher educators to prepare prospective teachers in the best possible way for the task of educating students for the challenges of the world of work. Up to now, this goal has been pursued through the traditional certification route at the secondary level, most commonly a blend of work experience requirements and completion of certain teacher education courses. The proponents of the competency-based vocational teacher education movement want to change this traditional practice. They want to define vocational teacher education competencies, examine the teachers in terms of the defined competencies, and grant licensure on that basis. They see this as an exciting approach.

One cannot deny its potential advantages ....

But there are negative factors to be considered. First, one should recognize that many advocates of competency-based teacher education want to upset the status quo. In competency-based teacher education, groups critical of teacher education in its present form have a vehicle to assert their values and possibly gain control. Should the movement catch on, it could open the existing control system shared by
universities and state bureaus to teachers and lay groups. Since this has an egalitarian quality, its attractiveness should not be underestimated.

Let me suggest that the CBE program may well be the panacea to eliminate many of the above fears. Vanderpool (1974) suggested the following regarding teachers in the process:

Proponents of C/PBTE must realize that to leave teachers out of the essential steps of planning and evaluating is to doom the effort to failure. Teachers are not obstructionists when they are partners with full voting rights.

To put it in so many words: Since the teaching profession is forced to rely heavily upon reason, logic, and experience in defining teacher competencies, it is obvious that the licensed practitioners should be relied upon to apply their equally productive reason, logic, and experience to the problem. To close them out is to treat two million practitioners as means. As Glass put it, "The philosophy that regards 'changes in pupil behavior' as 'the real thing' about education treats two million adults as means and tends to disregard them as ends in themselves. I would dwell on the need to protect the teachers, but they seem quite able to protect themselves these days.'

To help you establish a mental picture of the CBE program, refer to the illustration of one model designed to depict the competency concept shown in Figure 1. This model was presented in the January, 1974, issue of the Phi Delta Kappan in an article by Benjamin Rosner and Patricia M. Kay.

Figure 1

Basic Structure for CBTE

Competency Identification (1)

Validation by Pupil Outcome (4)

Assessment of Competency (3)

Training for Competencies (2)
Moving from the top of the model, you must begin with (1) identification of competency, along with identification of criterion measure; then (2) instruction; next (3) demonstration of competency, and finally (4) assessment. Then the student must recycle or move on to the next competency.

Rosner and Kay (1974) say "Competency Based Education is not an end in itself. It is a process of moving from the present ambiguous state to a more clearly articulated program." This was simplified at the Fall National Vocational-Technical Teacher Education Seminar in Madison, Wisconsin where CBE was described as a program that initially "moved us from cocksure ignorance to informed confusion."

What is New?
In the Competency Based Education program, the objectives indicate the quality acceptable (course passing is not enough). It is necessary to measure what the student can do that he couldn't do before and to measure what the student can do as a teacher that an aide couldn't do. It is a program where performance competency (What is one able to do with knowledge?) and product competence (What is one able to do with and for learners?) are measured. Therefore, it can be assumed that the changes that occur in learners is a result of what was done.

But as Dr. Judy H. Lanear of Michigan State University said recently, evaluation is one of the major unresolved problems in the CBTE programs.

Robert S. Soar, in the Fall, 1973, issue of the Journal of Teacher Education (12-14) supported Dr. Lanear's position when he indicated concern over assessment:

If the competence of the teacher is to be assessed by measuring growth in pupils, it seems important to measure pupil growth at all levels of the Taxonomy of Cognitive Objectives .... Current evidence suggests the teacher behavior which supports relatively simple-concrete kinds of pupil growth is different than the kind which supports relatively complex-abstract pupil growth. It also would seem important to judge the competence of the teacher on his ability to promote higher level objectives as well as lower level ones.

I trust the evaluation instruments developed by vocational educators will not be like the one described by a slow learner as follows by Preston:

"Yeah, it's something they call an Intelligence Test. It was awful funny. At first I thought it was a joke but it turned out that it wasn't. You had to put crosses on pictures and circles round' em and lines under' em and dots over' em till I got sorta mixed up, so I drew a line right thru the middle of
of them all. There was a sentence to write YES and NO after: sentences like this - "Carpenters build houses." I wrote NO cause my old man is a carpenter and he ain't built a house in four years. He's working on the railroad track. The boy that sat next to me put NO on every other sentence and then filled the rest up with YES. He got a swell mark. I read so slow that I got only four done when the time was up. I get so tired of bein' rushed all the time.

A fish, a tree and a cake of ice. Look at this.
It was so funny that I tore out the page and kept it. See, three pictures, a tree, a fish, and a cake of ice. I'll read what it tells you to do. "John is ten years old and his sister Mary is eight. If John is not Mary's brother draw a line from the fish to the cake of ice. If John and Mary are twins write your middle name under the tree, and if you have no middle name put a zero there. If they are not twins, print your last name in the upper right hand corner of the paper. If they both go to school write your full name on the bottom of the paper." I'm never just sure how to spell my name so I didn't even try that one.

What is the Promise of CBE?
What are the potential outcomes of CBE, if you will?
The almost immediate results include: (1) stronger relationships between teacher educators, schools, and the organized teaching profession; (2) greater student satisfaction with skill-oriented teacher education programs; and (3) increased accountability of teacher education programs.

The short range goals, those that can be expected in 4 years or less include: (1) identification of tentative teacher competencies, (2) preparation of instructional materials and evaluation procedures, and (3) establishment of conditions to validate the teacher education curricula and promote teacher behavior research.

The goals that can be expected between four and ten years; or the immediate range goals would be the preparation of knowledgeable and skillful teachers in a curriculum whose elements have been tested for validity against criteria of school effectiveness. Finally, the long range goals, ones that could be expected after ten years would be the improvement of instruction in the nation's schools as a result or consequence of improved teacher education.

In support of these outcomes and as an example of one method of implementation that is working, Dr. Judy Laneary (1974) made reference to a program that has been initiated at Michigan designed to deal primarily with the issue of the "need for relevance" in teacher education programs. In
this program, local teachers have been provided released time to meet with teacher educators and university content teachers who come out to the schools to work with them in identifying competencies: (1) for student teachers, (2) for content areas, and (3) for secondary programs. This activity also serves as an in-service program for the teachers.

Should we Convert to a Total CBE Program?

This is a concern that has been expressed by many. "How do we go about beginning a CBE program?": Just where to begin is a major facet of this question. Lane has also stressed that it is perfectly legitimate to be operating a teacher education program that is partially performance-based and partly not.

The AACTE Committee on Competence Based Education reports the following potential pitfalls for CBE:

1. A tendency to move too quickly, on too large a scale without adequate preparation and resources yielding superficial results; and a corresponding compulsion to "try to do everything" by a CBE approach.

2. A tendency to adopt too eclectic an approach, identifying numerous unrelated competencies without a guiding conceptualization of the teacher's role, resulting in a badly fragmented view of the teaching task.

3. Too narrow an interpretation of, i.e., restricting to one segment such as pre-service, in-service, classroom teachers, etc.

If we are to evolve a new educational system with new social roles for participants, we must "dare to be different" — to try something other than the traditional.

When told we must go outside the limits of the elements in the figure we are at a loss for a solution. Finding a solution is complicated because our perceptions are hemmed in by habit.

The following story in the Fall issue of the Journal of Teacher Education illustrated a very real paradox in Education:

A professor of English education tells of his experience in preparing lunch for children. It seems he planned soup but found the electric can opener broken. He then tried several other instruments but none of them worked. He finally found an old manual can opener and IT WORKED! The moral of the story: "Sometimes the 'Old Faithful' is more effective than the 'new'."
In other words, don't simply abandon the old without careful review of the new.

Remember that "uncritical lovers smother their programs while unloving critics destroy them." Loving critics are responsible for creating a viable program.

I encourage you to consider the competency approach with an open mind. I trust you were given the opportunity in the three day conference to think about the Competency Based Education program and its implications for vocational education.

References


Lanear, Judy, "Competency Based Education." Third Annual Vocational Supervising Teachers Conference, Purdue University, November 8, 1974.

Preston, R., "The Voice of the Low IQ." Source unknown.


Project Description and Rationale

The movement toward competency-based teacher education programs in this country is founded upon theoretical and pragmatic considerations which are regarded as sound by a substantial number of recognized leaders in vocational education. A primary reason for the initiation of competency-based curricula is "accountability." Institutions become accountable for providing their graduates with those identified knowledges and skills necessary to function adequately in their professional roles. Not only should improvements in instructional efficiency and effectiveness result; but, in addition, the public school occupational students should be better prepared for the world of work.

The State Division of Vocational and Technical Education has demonstrated farsightedness in recognizing the worth of competency-based instruction. Increasingly, Illinois is being recognized for its leadership role in promoting innovative competency programs in occupational teacher education through funded developmental projects. These projects, undertaken at various institutions, have focused on different levels and types of professional needs.

The Pre-Service Occupational Program Project, being conducted at Illinois State University, represents an organized effort to design a competency-based occupational teacher education program for implementation with university settings. The first phase of the project (1973-74) involved the formulation of "terminal behaviors" and related "enabling behaviors" for occupational teacher competencies which had been identified and validated in previous projects. These behaviors, (currently referred to as "performance objectives" rather than "terminal objectives") were organized in topical areas within eleven major categories. The performance objectives have specified conditions and criterion levels. The enabling behaviors (pre-requisite competencies) were listed in performance terms but without conditions and criteria.

The second phase of the Pre-Service Occupational Program Project deals with the preparation of learning modules for specified competencies, stated as "performance objectives" and planned during the initial phase of the project. These modules are being designed for use in a variety of teaching situations to accommodate differences in the structure of university occupational teacher education programs. It is anticipated that they will be used in individualized self-instruction, traditional classroom instruction, and combinations of both.
Each of the learning modules is referred to as a "POP Kit." A Kit consists of a rationale, performance objectives, pre-assessment, alternate learning activities, an evaluation and a bibliography. Every effort is being made to include all necessary reading materials in the Kit. Many of the Kits will have audio-visual materials. Twelve of these POP Kits will be tested in programs presently in operation in seven universities in Illinois. After necessary revisions, they will be presented to university occupational personnel at the teacher education conference scheduled for Spring, 1975. Multiple copies of written materials and limited copies of software will be made available at the conclusion of the project.

Major Phase II Project Objectives

1. Revise performance objectives identified in Phase I of the POP Project so that each performance objective merits "module" status.

2. Develop complete modules called "POP Kits" to include a rationale, performance objectives, pre-assessment, learning activities, evaluation, and references for at least one performance objective in the following areas:
   a. Program Planning
   b. Guidance
   c. Coordination
   d. Youth Organizations
   e. Operational Activities
   f. Public Relations
   g. Professional Role
   h. Program Evaluation

   In addition, "POP Kits" will be developed for all of the performance objectives in the areas of:
   a. Instructional Planning
   b. Execution of Instruction
   c. Evaluation of Instruction

   A total of twenty-nine Kits will be developed.

3. Continue the functions of a general advisory committee with representation from each of five occupational areas. In addition, Illinois State University faculty members from each of the occupational departments who are interested in teacher education will be asked to evaluate the POP materials.
These two groups will be used to help establish the face validity of the materials developed by the project.

4. Pilot test twelve "POP Kits" in established programs at Illinois State University and six other universities in the State of Illinois.

5. Revise modules on the basis of feedback from the advisory committee, occupational education faculty, and/or the pilot tests.
COMPETENCY BASED INDUSTRIAL TEACHER EDUCATION AT UNIVERSITY OF WISCONSIN-STOUT, Neal Prichard, Presented at Region V Conference on Competency Based Teacher Education, Chicago, March 11-13, 1975.

Introduction

Today I will present a summary of two projects in competency based education that have been under development at Stout. These topics have originated with faculty members within the Department of Industrial Teacher Education and have involved the members of the department. One project has been field tested for a year and the other project is in progress at the present time.

Student Teaching Investigation

The first project is an informal-subjective type investigation involving the competencies to be developed for student teachers during their full-time teaching experience in a school for a period of approximately nine weeks. The investigation was begun by asking the cooperating teachers to list on a separate card each activity they felt was essential for our students to learn. The main criterion was, "If he can do this, he can teach." Additional listings were also checked to identify voids.

The activities were grouped into logical categories by a graduate student under the direction of Dr. Lee Smalley, Project Director. The list was then presented to cooperating teachers, student teachers who had completed their off-campus assignments, student teachers preparing to go off campus, and to faculty members in the department. Dr. Smalley completed a pilot investigation during the 1973-74 school year with nine of his twenty student teachers during one quarter. This proved to be successful and with some modifications was prepared for this year. During this 1974-75 school year, over 195 student teachers have used this under the supervision of seven university supervisors. The student teacher summary evaluation form is attached (Attachment 1).

The evaluation on this year-long trial run has been the subjective type involving over 350 cooperating teachers, student teachers and university faculty. Not one person has suggested that this be eliminated and usually the cooperating teachers and student teachers welcome this since it spells out clearly what needs to be completed during their student teaching experience. We have found this to be helpful for the student, the cooperating teacher, and the university supervisor. It does take more university supervisor time to check the progress of the student teacher, but we feel that it is well worth the time.
We are going to make some slight modifications in the program to emphasize some of the competencies more than was done this year. One worth noting is the addition of a "guest" which will force the student into some self-initiated experiences.

Because of the success of this program, the department has decided that this will be the off-campus student teaching program.

Program Development Investigation

This project began during the late 60's when the master's degree committee was developing the program for industrial education majors. They felt that they needed a program development model, a listing of the tasks to be completed by the graduates and an inventory of the courses on the campus to see if the needs were being met. This investigation originated with Dr. Lawrence Wright, Program Director for the Master's Degree in Industrial Education, who is serving as the principal investigator.

The first step in the project was the development of a program model (Attachment 2). This model has been followed throughout the project up through the steps that have been completed to date. Each will be described briefly.

Step one involved the systematic study of societal conditions or problems followed by the rationale upon which programs are developed for the second step.

The work role of the industrial education teacher was limited to junior high, senior-high industrial arts teachers and capstone vocational education teachers (12th grade). Several graduate students assisted Dr. Wright in the development of the role descriptions for this third step.

Analyzing the work roles was a very carefully planned investigation and a major position of this total project. Rather than asking the teachers to list the tasks they performed, it was decided to develop a listing of the tasks and have the teachers validate the listing. Several graduate students assisted in the development and the stratification of the tasks. A total of ten first level tasks, 57 second level tasks and 327 third level tasks were identified. The first level tasks are included in Attachment 3.

The validation of the work tasks involved teachers and a jury of experts for the fifth step. It was felt that teachers would respond to about 50 items, so the 327 third level tasks were divided into six instruments with either 54 or 55 randomly selected tasks in their form. The 1854 Wisconsin industrial arts teachers received one of the six instruments. The jury consisted of the state consultants—supervisors of industrial arts, the state teacher education officer (person responsible for the certification of teachers)
and ten national leaders in industrial arts. Respondents had to rate the frequency they performed the tasks and judge the importance of the task. The data were analyzed using the median and the interquartile range to obtain the central tendency and the spread. The results of this analysis are available from the author.

A committee of four department faculty members revised the findings from the investigation to determine if any fourth level tasks were required, or if any could be eliminated for step seven. The committee reviewed both the importance findings and the frequency of performance findings. Those items that were rated "not important" and "not performed" were eliminated from the tasks. Some fourth level tasks were felt to be needed, so the committee, along with assistance from other department members, developed those tasks.

Step seven of the model was to determine the education ladder. The ladder developed was in the following divisions:

A. Determine education ladder
B. Upper division instruction
C. First graduate instruction
D. Advanced graduate instruction
E. Highest level of instruction

Faculty members in the department participated in the determination of the minimum performance levels, step eight. Round one was a checking of the ten major tasks in the courses offered within the department. Those that were not included in the courses were eliminated from the composite in an effort to simplify each of the following rounds. Round two was the determination of the first and second level courses in the department; round three included all three levels of tasks. In the final round that included tasks to the fourth level, faculty members responded to the performance level that the student should achieve the task in the particular course being considered. Performance levels were listed in five levels from "an awareness level" to "leadership based on maturity and experience."

The department has just completed this step and is now awaiting the analysis that will provide us with the competencies that are being developed along with the level so that the courses in the department will be properly articulated along with providing the needed level of achievement.

Summary

This brief description of these two studies does not do justice to either of them, but it was felt that it would be good to illustrate different approaches that are being used at Stout: the first study completed in several years that has been very well accepted, and the second study a very thorough procedure for program development that will be an on-going investigation in the department. Few materials are included from the second study because of the complexity and magnitude of the investigation.
| 1.0 Improve Individual Competencies |  
| 1.1 Orientation | U |
| 1.2 Written Communication | U & C |
| 1.3 Oral Communication | U & C |
| 1.4 Visitation Observations | U |
| 1.5 Evaluation of Professional Image | S & C |
| 1.6 Professional File | U |
| 2.0 Design Programs |  
| 3.0 Design Instruction |  
| 3.1 Developing Plans | U & C |
| 3.2 Selecting Teaching Methods | U & C |
| 3.3 Selecting Instructional Aids | S & C |
| 3.4 Designing and Producing Inst. Aids | S & C |
| 3.5 Providing Evaluation Strategy | U & C |
| 4.0 Nurture Humaneness |  
| 4.1 Humaneness with Pupils | C |
| 4.2 Humaneness with School Staff | C |
| 4.3 Humaneness with Parents & Community | S & C |
| 5.0 Facilitate Learning |  
| 5.1 Teaching a Lesson | C |
| 5.2 Presenting a Demonstration | C |
| 5.3 Using Educational Aids | C |
| 5.4 Promoting & Maintaining Safety | S & C |
| 5.5 Using Techniques of Motivation | S & C |
| 6.0 Manage Learning Environment |  
| 6.1 Maintain Physical Conditions | C |
| 6.2 Maintaining Tools & Equipment | S |
| 6.3 Acquiring Supplies & Equipment | C |
| 6.4 Maintaining Records | C |
| 6.5 Organizing Class/Lab Procedures | S |
| 6.6 Responding to Social-Emotional Climate | S & C |
| 7.0 Provide Professional Service |  
| 7.1 Advise and Counsel Pupils | S |
| 7.2 Noninstructional School Duties | S & C |
| 7.3 Offer Professional Advice | S & U |
| 8.0 Utilize Research |  
| 9.0 Evaluate Instruction |  
| 9.1 Constructing Evaluating Instruments | U & C |
| 9.2 Administering Evaluating Inst. | S |
| 9.3 Utilize Information from Evaluation | U |

* University Supervisor - U  
Cooperating Teacher - C  
Student Teacher - S
A MODEL FOR REFORM IN TEACHER EDUCATION

Lawrence S. Wright

1. IDENTIFY PROBLEMS & HUMAN NEEDS
2. PROPOSE SOLUTIONS
3. IDENTIFY WORK-ROLES
4. ANALYZE WORK-ROLES
5. VALIDATE WORK-ROLES BEHAVIORS
6. SELECT WORK-ROLES FOR INSTRUCTIONAL DEVELOPMENT
7. DETERMINE EDUCATIONAL LADDER POSITIONS
8. DETERMINE MINIMUM PERFORMANCE LEVELS
9. ANALYZE INTO EN-ROUTE BEHAVIORS
10. INVENTORY EXISTING INSTRUCTION
11. PROJECT ADDITIONAL INSTRUCTION NEEDED
12. SYNTHESIZE EN-ROUTE BEHAVIORS INTO PROGRAMS
13. CONDUCT INSTRUCTIONAL PROGRAMS
14. CONDUCT FOLLOW-UP STUDIES
15. RE-CYCLE TO MAINTAINED RELEVANCE

CONDUCT FOLLOW-UP STUDIES
SYNTHESIZE EN-ROUTE BEHAVIORS INTO PROGRAMS
DETERMINE EDUCATIONAL LADDER POSITIONS
DETERMINE MINIMUM PERFORMANCE LEVELS
ANALYZE INTO EN-ROUTE BEHAVIORS
INVENTORY EXISTING INSTRUCTION
PROJECT ADDITIONAL INSTRUCTION NEEDED
CONDUCT INSTRUCTIONAL PROGRAMS
RE-CYCLE TO MAINTAINED RELEVANCE
CONDUCT FOLLOW-UP STUDIES
DEFINITION OF FIRST LEVEL TASKS

1.0 Improve Individual's Competencies
   Tasks associated with continual regeneration of the individual's competencies within each domain to maintain relevance to ever-changing problems.

2.0 Design Programs
   Tasks associated with planning programs.

3.0 Design Instruction
   Tasks associated with planning instruction at the course level.

4.0 Nurture Humanness
   Tasks associated with human interaction to the end of prompting maximum learning, growth, and development of each individual.

5.0 Facilitate Learning
   Tasks involved in the learning act with focus upon the teacher as a facilitator of the learning process.

6.0 Manage the Learning Environment
   Tasks related to providing a physical environment to promote maximum learning, growth, and development.

7.0 Provide Professional Service
   Tasks the teacher does as a service which may not be specifically required of him but which contribute both to his students and to his own growth as a professional.

8.0 Utilize Research
   Tasks of consuming and producing research both of an informal and formal nature as they relate to bringing evidence to bear on a systematic manner on professional and technical problems.

9.0 Evaluate Instruction
   Tasks at the instruction level designed to ascertain the extent to which student achievement has taken place and whether course-level goals were reached.

10.0 Evaluate Programs
    Tasks at the program level designed to ascertain the extent to which program-level objectives were reached.
This is to share with you some of the thrusts made by home economists in identifying and working with competencies for professional education in home economics. These home economists have worked in various ways individually, jointly with other staff members at their own institutions, through interdisciplinary teams, in regional groups of home economists from all professional areas, and through cooperative national projects. It is the latter to which most remarks will be addressed.

As professionals engaged in cooperative endeavors at the national level, these people were sponsored at various times by the USOE, AHEA workshops, "friends" of home economics and by their own personal initiative and funds. They tried to obtain both continuity and involvement of as many as possible in the work by seeking the participation of some who had been in previous projects as well as new persons to the movement. For instance, 10 people who were in the first conference called by the Home Economics Branch of the USOE were included in the French Lick Seminar which followed and so on down to the present time. Different geographical areas were involved until at present, every state has had participants at one time or another and many states have hosted the meetings.

From the early 1960's until June, 1974, it is interesting to note that there is a systematic movement from structuring the field to identification of objectives--competencies if you please and more specifically competence based teacher education to competence based professional education. Home economists have come to believe that competence based teacher education is only a part, an important part, of competence based education for all professionals.

A brief look at some of the more pertinent outcomes of these efforts include the excerpt which follows of the structuring of the field of home economics teacher education in 1964.
<table>
<thead>
<tr>
<th>MAJOR CONCEPTS (Supporting Concepts omitted)</th>
<th>COMPETENCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Philosophy of Home Economics Education</td>
<td>1. Integrates philosophy of life, philosophy of education, and philosophy of home economics as a basis for thought and action.</td>
</tr>
<tr>
<td>2. Professionalism - The Home Economics Teacher</td>
<td>2. Identifies and accepts the professional role of the home economics teacher.</td>
</tr>
<tr>
<td>3. Interpersonal relationships in professional environment</td>
<td>3. Establishes and maintains mutually satisfying or acceptable interpersonal relationships in the professional environment.</td>
</tr>
<tr>
<td>4. Home economics program planning</td>
<td>4. Plans and implements effectively the part of the home economics program for which she is responsible.</td>
</tr>
<tr>
<td>5. Organization for teaching-learning</td>
<td>5. Teaches effectively</td>
</tr>
<tr>
<td>7. Interrelatedness of individual, family, school and community for the well-being of families</td>
<td>7. Cooperates as a home economics teacher-citizen in local and expanded community efforts which have significance for individual and family well-being.</td>
</tr>
</tbody>
</table>

Choosing one concept, the first one, "philosophy of home economics education," the concept, objective (or competence) and generalization for the preprofessional preparation of home economics teacher abstracted below gives you an idea of how this structure was developed in 1964.

EXCERPT FROM CONCEPTUAL STRUCTURING OF THE HOME ECONOMICS CURRICULUM (UNDERGRADUATE) 1964

Concept I: PHILOSOPHY OF HOME ECONOMICS EDUCATION
A. Objectives:
   It is expected that upon completion of study the prospective teacher will be able to:

   1. Integrate the philosophies of home economics and education with knowledge of contemporary...
society formulating professional beliefs.

2. Communicate and use an educational philosophy in making decisions as a home economics teacher.

B. Generalizations:

1. An educational philosophy for home economics is based on facts, attitudes and beliefs about life, home economics and education.

2. When the values underlying the role of the home economics teacher are internalized, they become a consistently controlling force on professional behavior.

3. To understand the values of others requires both objectivity and empathy as well as direct and vicarious contacts with those who hold widely differing values and beliefs.

Then you notice that the same general format prevails in 1966 with some refining of the details for the preprofessional level but with the addition of material for the teacher engaging in advanced study.

EXCERPT FROM OBJECTIVES AND GENERALIZATIONS RELATED TO SELECTED CONCEPTS 1966

IT IS EXPECTED THAT, UPON COMPLETION OF THE STUDY THE PROSPECTIVE TEACHER WILL BE ABLE TO:

(Philosophy of Home Economics Education)

9. State beliefs about home economics education based upon study of the philosophies of home economics education and the knowledge of contemporary society.

10. Communicate and use the philosophy of home economics education in making decisions as a home economics teacher.

CONTENT FOR PROSPECTIVE TEACHERS

53. A philosophy of home economics education is based on facts, attitudes and beliefs about life, home economics, and education.

54. When the values underlying the role of the home economics teacher are internalized, they become a consistently controlling force on behavior.

55. Conflicts between one's values are resolved by examining values and deciding relative importance; not all conflicts in one's philosophy are resolved; however, one can continue to function with effectiveness when agree-
56. Individuals and groups can change patterns of belief and values which make up an operating philosophy.

57. To understand the values of others requires both objectivity and empathy, because of the diversity among cultural groups within home economics programs, direct or vicarious, contacts with those who hold widely differing values and beliefs help the home economics teacher recognize implications of own values and those held by others.

58. Contemporary social issues and practices and their underlying values affect the content of home economics education programs.

IT IS EXPECTED THAT UPON COMPLETION OF THE STUDY, THE TEACHER PURSUING CONTINUING OR ADVANCED STUDY WILL BE ABLE TO:

30. Examine assumptions held about the nature of man, the nature of knowledge; the nature of home economics; the nature of contemporary society; and integrate these with experience in teaching home economics to develop a philosophy of home economics education.

31. Analyze own professional behavior in terms of personal philosophy.

CONTENT FOR CONTINUING OR ADVANCED STUDY

131. The actions of a home economics teacher are influenced by her philosophy which is a synthesis of teaching experiences and beliefs about life, home economics; and education.

132. Home economics is a field of study and service which shares with other fields of study and service the common goal for promoting full development of human beings.

133. Because several professional fields make a unique approach to the achievement of the common goal of human welfare and development, the home economist needs to work cooperatively with people in other fields.

134. In order to assess the impact of the changing culture on philosophical orientations of life education, vocational education, and home economics, one needs to identify constants and trends and make hypotheses about the future of the culture.

135. A logical rationale for generating and evaluating a philosophy of home economics is consistent with the ultimate goals of home economics based on reasoned hypotheses drawn from an analysis of the past, present, and future of society and home economics, and provides...
criteria for determining professional responsibility.

Competencies and criteria for the same concept and at both the preprofessional and professional levels are given below as identified in 1974 by the Iowa workshop.

**TOPIC I. Educational Philosophy in Home Economics**

**COMPETENCY A.** The participant will formulate and communicate internally consistent professional beliefs based on philosophies of home economics and of education in the context of contemporary society.

**CRITERIA 1.** Can the participant identify and support basic beliefs about the meaning and scope of home economics?

1. Can the participant identify basic beliefs about the educative process and the role of education in society?

2. Can the participant identify conditions and needs prevalent in contemporary society?

3. Does the participant communicate professional beliefs about the meaning, scope, and function of home economics education?

**COMPETENCY B.** The participant will relate professional beliefs to decision making in varied educational settings.

**CRITERIA 1.** Can the participant relate professional belief to decision making in simulated educational settings?

1. Does the participant relate personal professional beliefs to her/his own decision making in varied educational settings?

The standards used to identify these criteria and competencies are listed below.

**STANDARDS FOR EACH COMPETENCY:**

1. Is the competency broad in scope (generic)?
2. Is time required for the participant to develop the competency?
3. Does the competency require some degree of judgment?
4. Can we observe the competency or behaviors indicative of the competency?
5. Can criteria be developed for the competency?
6. Is the competency essential in order to facilitate learning or to meet professional responsibilities?
7. Is the competency suitable to the level for which it is being identified?
STANDARDS FOR EACH CRITERION:
1. Is there a standard against which behavior can be judged?
   Does the criterion contain definitive dimensions by which behavior can be assessed?
2. Can the attainment of the behavior be assessed by level or by some prejudged standard?
3. Does the assessment criterion contain a knowledge/performance component?
Introduction

Professional personnel preparation and development is a service that expresses the prime function of our association as proclaimed in the State Plan for the Administration of Vocational Education under the Vocational Education Amendments of 1968 and Part F of the Higher Education Act of 1965.

The Ohio State Plan for the Administration of Vocational Education describes it as follows:

Pre-Service Training:
Pre-service education of teachers will be conducted through teacher education programs of designated public universities or colleges and may be conducted on graduate or undergraduate level for college credit or certification purposes.

In-Service Training:
In-service training may be conducted by vocational teacher educators, vocational supervisory personnel, or other appropriately designated persons. Such in-service training will be provided through conferences, workshops, and regular programs of supervision by approved teacher education centers, or through contractual arrangements between the Division of Vocational Education and the agency providing the service.

It is a large order. However, Ohio has fully accepted the challenge in agricultural education to provide the essential professional competencies. The "in-service teacher preparation program" to which this topic refers is a two-year competency-based preparation program for agricultural education. Competency-based curriculum refers to instructional content derived systematically from an analysis of tasks performed by teachers in the profession of teaching for which present teachers are being prepared.

Competency-based instruction can provide the essential professional competencies necessary for teachers of vocational education. I propose today to provide the procedure for developing the two-year in-service teacher preparation program for personnel coming from agricultural industries. This program describes the current efforts in Ohio.
Rationale

Developing and using competency-based curriculum in vocational instruction is almost legend; however, since 1938 curriculum constructors in vocational and technical education have looked with renewed emphasis to occupational analysis. The importance of using occupational analysis data in curriculum building is that courses are directed toward instructional program training performance objectives rather than a traditional core of subject matter.

In the area of occupational analysis of vocational education, trade and industrial education claims leadership and perhaps rightfully so. However, along with this vocational service area, agricultural education has notable examples of use of occupational analysis information on professional competencies necessary for teachers of vocational agriculture.

In the past, teacher educators have attempted to develop certain qualities or competencies in their students (prospective teachers) which would prepare them for teaching. The seemingly endless list of competencies includes student control, personality, self-confidence, organization, efficiency, application, interest, cooperation, supervisory, etc. From the historical past of traditional courses to the future, we should address ourselves toward two important questions, namely; (1) What procedure does the teacher educator use in building curriculum for teaching these competencies to students? (2) How does the teacher educator know when he has accomplished his objectives?

Several authors today (example: Mager and Beach) suggest the procedure should be to teach functions. Functions are the performance operations expected of an individual. They are teachable, measurable, and related to individual experiences. This means that the development of qualities for teaching in which we term competencies today, is systematically analyzed, developed, and organized within the instruction around functions required for adequate teaching performance.

It is imperative that a competency-based instructional program, including study guides, be developed to meet the needs of teachers coming from the agricultural industries. In addition, the instructional program developed should provide the professional competencies through courses necessary for college credit required to meet the professional requirements of a four-year provisional certificate. However, the primary mission of teacher preparation in vocational education is to prepare students for becoming productive teachers. The major criterion becomes the successful development of the student in a satisfactory teaching job. The teacher educator should be able to justify his curriculum on the basis of what is being done in the classroom and laboratory by the incumbent teacher. The teacher educator finds himself accountable for process (curriculum content) as well as the type of teacher graduated.
Developmental Activities

Kent State University is nearing the completion of a two-year Educational Personnel Development Act (EPDA) project to develop a model two-year teacher preparation program for non-degree personnel coming from agricultural industries. The project relied heavily upon the expertise of agricultural educators as well as studies done on professional education competencies.

Even though a similar teacher preparation program exists in the vocational service area of trade and industrial education, it was a concern as to whether the training of personnel from industry for vocational agriculture could provide the necessary professional competencies within a two-year instructional program.

The project was proposed and approved by the U. S. Office of Education through Regional Office V and the Kent State Research Center.

Objectives of the project included:

1. Develop a list of professional competencies essential to successful classroom and laboratory teaching for personnel with technical agricultural competencies coming from agricultural industries.

2. Develop a two-year model pre-service and in-service program to prepare potential teachers to successfully perform the teaching competencies.

3. Identify approximately thirty (30) potential teachers with successful occupational experience and technical agricultural competencies in appropriate instructional program areas of agriculture to participate in the development of a model program.

4. Field test the competencies.

5. Prepare instructional guides based upon tested competencies.

In the development of this performance-based instructional program, a list of professional educational competencies were developed by a panel of agricultural educators consisting of members from the State Agriculture Service Staff, The Ohio State University Agriculture Education Staff, and Kent State University Agriculture Education Staff.

Testing and refining the list of professional competencies was accomplished through field testing with agriculture supervisors and agriculture teachers.
The competencies were tested using a pre-test and post-test design. Testing was done during a four-week pre-service workshop, first-year in-service program, second-year follow-up workshop, and second-year in-service program.

The performance based professional competency evaluation instrument was designed to measure four hundred and twenty behavioral statements covering three areas of measurement using a five point scale for each area. The areas of measurement are as follows:

1. The degree of need for the competency.
2. The frequency of use of each competency.
3. The optimum time to provide the instruction.

A copy of the test instrument format is provided in Attachment 1.

These data provided the basis for the development of the two-year in-service teacher preparation model. The data is found on handout material provided for distribution at the Region V Conference.

The instructional program pattern of the two-year in-service model includes pre-service and in-service education. A total of twenty-four quarter hours of professional agriculture education credit is earned upon completion of the two-year program as shown in Table 1.

Table 1

<table>
<thead>
<tr>
<th>Year</th>
<th>Program Schedule</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Year</td>
<td>Four-Week Pre-Service Workshop</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Bi-Weekly In-Service Instruction</td>
<td>6</td>
</tr>
<tr>
<td>Second Year</td>
<td>Two-Week Follow-Up Workshop</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Bi-Weekly In-Service Instruction</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td><strong>Total Quarter Hours</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

The performance-based program places emphasis upon demonstrated competency. To aid the teacher in the development of professional competencies, twenty-four instructional guides are being developed based upon the competencies identified for the program. These guides are performance centered to provide for the development of the teaching competencies. They allow for either individual or small group instruction to be used. It allows for the teacher educator to work flexibly with the individual teacher's need. Each guide contains more than one assignment.
The instructional guide format is standardized and provides the following:

- Preface
- Foreword
- Acknowledgments
- Table of Contents
- Introduction
- Objectives
- Assignments
- Introductory Statements
- Objectives
- Concept
- Central Problem
- Study Questions
- Supportive Materials
- Teacher Activities
- References
- Self-Evaluation
- Teacher Educator Evaluation

Appendix

The guides were reviewed by teacher educators and field tested by thirty teachers in the program. The review and field test included evaluation of the competencies.

Following the critique of the guides, the guides were made ready for the EPDA Final Report. Within the near future, the guides will be made available through the Ohio Agricultural Education Curriculum Materials Service, Columbus, Ohio.

A listing of the guides is found in Attachment 2.

Summary

The model two-year teacher preparation program can provide the essential professional competencies necessary for teachers of agriculture. This approach is doubly significant in view of the present and increasing undersupply of qualified teachers in the specialized instructional program areas of agriculture. However, more effort needs to be made in measurement fronts. It seems likely this performance-based teacher preparation program in agriculture will continue to strengthen its role and facilitate accountability in agricultural education.
Attachment 1

The competency instrument is designed in a checklist format as follows:

(ALWAYS MARK THREE SPACES FOR EACH COMPETENCY)

**EXAMPLE:**

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>NEED</th>
<th>FREQUENCY</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not Applicable</td>
<td>Little</td>
<td>Some</td>
</tr>
</tbody>
</table>

1. Demonstrate self-confidence necessary to teach with calmness and composure.

2. Control outbursts of fighting and aggressive behavior.
Attachment 2

FIRST-YEAR
INSTRUCTIONAL GUIDES

1. Student Control
2. Instructional Techniques
   A. Group Instruction
   B. Problem Solving
3. Audio-Visual Material Preparation
4. Counseling Techniques
5. Role of Agriculture Teacher
6. Coordination of Agriculture Placement
7. Safety Instruction in Agriculture
8. Leadership Through Youth Organization
9. Management of Community Resources
   A. Advisory Committee
10. Adult and Young Farmer Education
11. Individualized Instruction
12. Lesson Planning

SECOND-YEAR
INSTRUCTIONAL GUIDES

1. Agricultural Program Record System
2. Tests and Measurement
3. Agricultural Laboratory Organization and Operation
4. Organization and Management of the Agriculture Education
5. Occupational Analysis
6. Course of Study Development
7. Development of an Individual Student Study System
8. Team Teaching
9. Personality Profile Development and Measurement
10. Community Relations Program
11. Extended Service
12. The Principles of Learning

Alternate
Teaching Disadvantaged Students
A COMPETENCY-BASED PROGRAM FOR PREPARING VOCATIONAL TEACHERS,
Fred S. Cook and Rita C. Richey, Presented at Region V Conference
on Competency Based Teacher Education, Chicago, March 11-13,
1975.

Introduction
Cooper and Weber have defined Competency-Based Teacher
Education programs as those which specify "competencies to be
demonstrated by the student, makes explicit the criteria to
be applied in assessing the student's competencies, and holds
the student accountable for meeting those criteria." Our
intent is to describe some basic program components as
applied in the development and implementation of a vocational
CBTE program.

Development of Vocational and Applied Arts Education
Vocational and Applied Arts Education (VAE) was established
at Wayne State University January 1, 1971, by the Dean of the
College of Education. This was in response to a petition
signed by all the members of the former departments of Business
and Distributive, Family Life, and Industrial Education. The
primary mission of this new department was to "develop a
systems approach for the preparation of teachers, supervisors,
and administrators in Vocational and Applied Arts Education."
The catalyst that led to the VAE faculties development
of a systems model and a competency-based program was the
statement by one of the Deans:

"I would be willing to accept the theoretical
construct that a student could come to your
department, take and pass a series of competency
examinations, pay the appropriate fee, and be
recommended for teacher certification."

Implicit in this statement and the subsequent organization
of a CBTE program were a number of basic assumptions.

Some Assumptions for the Development of a CBTE Program
When designing any program, it is apparent that one
begins with some assumptions. In theory, these should be
stated and agreed upon in advance. In the VAE program, a
number of basic assumptions were implied but have just
recently been explicited. These include:

1. The classroom teacher makes a difference in the
   teaching-learning process.
2. Teacher education can and must make a difference in
teaching performance.
3. The teaching-learning process can be divided into a series of identifiable parts.

4. Decisions concerning revision of any part of a teacher education program should be data based.

5. A partnership should be developed between teacher educators and public school personnel.

6. Each institution should develop its own program. Ultimately, a program must be internalized by a staff if it is to be viable.

Many may want to challenge some of these assumptions. Nevertheless, stating some assumptions prior to, or concurrent with, the development of the program may save a faculty considerable confusion and possible delay.

Program Framework

There are three types of competencies in a typical teacher education program. These include:

1. General education competencies--those knowledges, skills, and judgments included in the first two years or the liberal arts portion of an undergraduate degree.

2. Teaching content competencies--those knowledges, skills, and judgments included in the program requirements in the teaching major and minor.

3. Professional education competencies--those knowledges, skills, and judgments included in the required education experiences.

These latter competencies are the primary focus of this paper. It is not to be assumed that VAE was unconcerned about the first two competency components. Rather, we wanted to concentrate our time and energies on those facets which were the direct responsibility of, and under the direct control of the College of Education.

The VAE Competency-Based Pre-Certification Program has four major phases. Each phase is field-oriented, with minimal field contact in Phase I and maximum contact in Phase IV. The four phases of the program, which must be taken sequentially, are:

Phase I, Introduction to Vocational and Career Education
This is a four-hour course, which enables students to develop an understanding of the role of a vocational teacher and to determine if this is the career choice they want to make.
Phase II, Foundations of Education
This is an eight-hour course which includes educational psychology, school and society, and analysis of teaching.

Phase III, Methods of Teaching
This portion of the program consists of six courses, eight hours for each of the three curriculum areas.

Phase IV, Intern Teaching Block
This phase is a 24-quarter hour block of time. Students are placed in classrooms in their areas of specialization for which they receive 16 quarter hours. They are in a school setting for the entire public school semester and follow the same basic program as their cooperating teacher. In addition, students return to campus one evening per week for a common seminar which is problem-oriented. The theory and application of philosophy of education is also integrated into the seminar.

Thus, the professional education sequence encompasses four phases for a total of 44 quarter hours of credit, all taught by VAE faculty.

Basic Principles of the VAE CBTE Program
There were three basic principles followed in developing this program. First, it was designed and implemented as a total program—encompassing all professional sequence phases. These phases are directed toward common competencies which describe the faculty's perception of a model entry-level vocational teacher. This model is described by 44 competencies and approximately 200 supporting performance objectives.

In many institutions when the term "competency-based teacher education program" is used, it may mean a single course, such as educational psychology or student teaching, for which performance objectives have been written. It is still unique, however, to find a situation in which the faculty has first described, in behavioral terms, the competencies or program goals. This process is much more difficult than writing performance objectives for discrete and often unarticulated courses.

A second principle which governs any teacher education program is a perceived role definition of the prospective teacher. In theory this definition should be stated and agreed upon in advance. In actual practice, this philosophic position is often implied but not specifically explicated. This was the case with the VAE program. Here the role definition was implicit in two major documents:

1. The competency statements.
2. The mission statement.
The mission statement emphasized the development of a systems approach to the preparation of teachers. Two basic ideas are implicit in this concept—planning and management. Both are dependent upon an orderly process of data collection, analysis, and revision based upon experiences. The competencies themselves lead to the ultimate teacher role as a planner and manager. The highest level competency (as determined through a task analysis) is, "Use a systems model in planning and managing a learning environment."

Finally, the VAE program was developed and implemented by vocational specialists—professors and classroom teachers working together. This had undoubtedly influenced the current model because the VAE faculty designed their own program (rather than using generalists to do the work for them). Furthermore, they utilized input from classroom teachers which provided practicality and usability.

**Competency Identification**

This instructional system has six elements—competencies, performance objectives, assessment, delivery systems, a field component, and program evaluation. Each facet is inter-related, and together they form the basis of a program which provides for accountability.

Competencies provide the framework for a CBTE program. They are the goals toward which all instruction is directed. A competency has been defined as a knowledge, skill, or judgment which the student will demonstrate at a predetermined proficiency level before initial and/or continuing certification. It is a general behavioral statement without criteria.

There are several approaches one could use to identify a group of competencies for a program. The VAE competencies were identified using the base list approach. This involved the following steps:

1. Conduct a literature review to locate possible competencies.
2. Select and analyze base list.
3. Categorize the list by pre-service, in-service, and specialization (e.g., coordination techniques).
4. Add faculty-generated competencies.
5. Edit proposed list.
6. Rate competencies.
7. Delete low priority competencies.
As a result of this process, seventy-five competencies were identified for the VAE pre-certification program. After field-testing and use for two years, the list was reduced to 44. These competencies have been evaluated by over 3,000 individuals representing business, industry, vocational graduates, vocational students, school administrators, vocational, and non-vocational teachers. This data has subsequently been reaffirmed with three doctoral studies and a project which identified competencies for all secondary teachers. It seems apparent from the data available that the competencies identified by the VAE faculty are in substantial agreement with other vocational educators, as well as, a cross-section of persons representing all secondary education.

Performance Objectives

It was necessary to analyze each competency and identify its component parts. These parts became the specific performance objectives for each phase of the program.

The performance objectives are the vehicles by which the competencies are demonstrated in the instructional program. The VAE performance objectives are written in terms of learning content only. They are not written to specify the delivery systems a professor must use. By eliminating reference to the teaching process, the performance objectives form the curriculum parameters of a competency-based system without infringing upon the rights of the professor.

Thus, the variables of student characteristics, faculty expertise, and available facilities, as well as, a desire to try something new can still be recognized. The objectives become the common thread throughout each course offering, regardless of the instructor, or when the course is taught. In this way, specified objectives of the graduating students are always established, but the variety of approaches, an asset of a diverse faculty, is still maintained.

All performance objectives were written as terminal objectives rather than enabling objectives, or sub-steps necessary to achieve an objective. While it is ideal to write these detailed specifications for a program, neither time nor monies permitted this. The latter approach could become so involved and so time consuming, that the implementation process could be seriously delayed. Even with this principle in operation, the program contains 200 performance objectives.

Relationship between Competencies and Performance Objectives

Competencies and performance objectives are related. By our definition, all competencies must have two or more supporting performance objectives. So the mastery of several performance objectives enables students to demonstrate a competency.
To illustrate, below is one of the competencies of an effective VAE teacher, and two of the fourteen performance objectives, that must be mastered to demonstrate this competency.

**Competency:**

Teach a lesson.

**PERFORMANCE OBJECTIVE:**

The student will demonstrate his skill in applying:

a. a behavioral objective
b. a seven step structure

These skills will be applied in two ten-minute teaching episodes. One is in a 1 to 1 format and the other in a 1 to 3 grouping. The attached checklist will be used for critiquing.

Given an observation checklist, the student will evaluate a series of lessons taught by his peers. The checklist will have a scale of 1 to 7 with 7 as the highest point on the scale. Attention will be focused on the following areas of the lesson presentation:

a. beginning of the lesson
b. clarity of presentation
c. pacing of the lesson
d. pupil participation
e. ending the lesson
f. selection of content
g. selection and use of supplementary materials
h. evaluation procedures utilized
i. relationship of planning and performance

Thus, the competency is general and program related and the performance objectives are specific, course related, and provide the steps required to achieve a competency.

Both competencies and performance objectives can be changed to reflect new trends, emphases, or even just to improve the statements. However, the changes should be made according to a specified process devised and approved by the faculty. This process should allow for the examination of the entire program to determine the effect of the proposed change.
Assessment

In the VAE competency-based program, there are three key testing points—tests for exemption, prerequisite skills, and program exit. The exemption test, given before instruction, can determine which performance objectives the student has already mastered. If the student can demonstrate a portion of the skills, instruction will be provided for the remaining skills. If the student demonstrates his mastery of all of the objectives, then he can immediately exit from that part of the system and receive credit without putting in "seat time."

The test of prerequisite skills is the next major category of pre-instruction diagnosis. Before a student begins any portion of the instruction sequence, he must demonstrate that he possessed those skills upon which the instruction is based.

The exit test is given after instruction and, like the exemption test, is the means by which students demonstrate their mastery of the course’s terminal performance objectives.

This three-faceted approach to student assessment is used in each phase of the program, as well as, in any instructional modules which might be used. The only deviation to this is in the intern teaching exemption test. While it is possible to take the exemption test, it is not administered on a regular basis because of two constraints: length of time to administer the exam (ca. four weeks), and the need for a cooperating field site. Typically, a person who would be approved is currently teaching under an emergency or a special certificate.

All VAE test items are criterion-referenced, and are written in a standard format with four parts—the related performance objective, directions to the student, directions to the evaluator, and the indication of mastery. Reliability and validity studies are being conducted for each test item.

Delivery System

No attempt has been made to standardize the delivery systems used in the instructional program. These are the prerogative of the individual professors. The design of the instructional system allows for the use of many teaching modes. However, the faculty has agreed implicitly and explicitly that the competencies need not be attained through formal courses.

At this time, several new delivery systems are being tried out. Some professors are managing their classes on an individualized basis using self-instructional learning modules they have developed. Some professors are combining the individualized approach with some large group class meetings for discussion and interaction. The entire VAE program, however, is not modularized. It has been recommended that modules be available for students who need
to recycle through previous instruction. In many of these cases, it is MORE EFFECTIVE if these modules are self-contained.

Another advantage of modules is the ability to build alternative learning activities into the program to accommodate a variety of student cognitive styles. It seems that cognitive style mapping of both students and faculty is a logical next step for further program development. Then modules could be provided which would match the student's most efficient learning process. At this stage, the delivery system would become the prerogative of the learner.

Field Component

The VAE program is field-oriented rather than being a total campus experience. Many CBTE programs are field-based; students spend the bulk of their time in a public school situation. In the VAE field-oriented program, students spend a limited number of days in Phases I through III involved in public school activities. These activities have been jointly identified by the classroom teachers and the university faculty.

Each field experience provides the opportunity for immediate application of those concepts taught in the campus classroom. Or the activity taught serves as a primary learning experience which is then reinforced in the campus classroom. In either case, the field activity has been chosen specifically because it supports a performance objective, rather than on the premise that all field experiences are inherently valuable.

To operationalize the field component of the VAE program, six Target Centers were established in the Detroit metropolitan area. Each center is a suburban school district or a Detroit region. Students are clustered in Target Center schools working with one or more teachers. The Phase III (methods) experiences are completed with the classroom teacher who will be supervising that student during intern teaching.

With the students clustered in centers, VAE faculty members can provide more supervision by spending at least two full days each week in that center. In this way, interns and pre-interns can receive help and instruction in the school. The faculty representative can also provide appropriate in-service training for the district's teachers; and can build a working relationship with a larger cadre of cooperating teachers; and, can work to minimize problems between the public school and the university.
Evaluation

VAE program evaluation consists of three major processes:

1. gathering formative evaluation data throughout the program from students, faculty, and classroom teachers,
2. a follow-up of the student as he demonstrates competencies on the job; and
3. a follow-up of the pupils of our graduates.

Throughout each quarter, students answer questions relating to the instruction, the relevance, and the tests for each performance objective. This growing bank of data provides information for the revision of performance objective test items and teaching methods.

Faculty and cooperating classroom teachers jointly review content and operating procedures of the field component. This provides direction for the continuous field development, and makes the program responsive to the needs of faculty and teachers.

The design of the follow-up procedures for the VAE Pre-Certification Program is still in progress. This is a longitudinal development process that has three key phases:

1. design and use follow-up instrument
2. observe graduates
3. test pupils of graduates

First, is the design of a follow-up instrument. This phase in itself has a longitudinal development plan. The initial step is to interview graduates (using trained interviewers) using an open-ended instrument. The major topics covered in this interview are:

1. student perceptions of the program (including reactions to the design, goals, and activities)
2. impact of the program on student attitudes toward teaching as a career
3. impact of the program on their own teaching

Ultimately, the instrument will be revised for use as a mailed device.

However, this type of follow-up gathers only secondary evidence. In order to actually measure the primary effect of a program, one must do two things—(1) observe the graduate in a teaching situation, and (2) measure the effects of the graduate's teaching on pupil behaviors. While this
has not been attempted to date, instruments and procedures are being devised which will facilitate this phase of the follow-up.

Summary

The basic components of this CBTE instructional system are not unique to VAE. These components include: competencies, performance objectives, assessment, delivery systems, a field component, and program evaluation.

What perhaps is unusual is the strong programmatic emphasis in the design and implementation. This emphasis was demonstrated through the development of operational definitions of "program" and competency.

What perhaps is also unusual is the combined efforts of specialists to form a program for the training of specialists. This has brought the traditional "foundations of education" content into focus on the needs of vocational teachers. This has also caused four separate service areas to cooperatively develop a comprehensive professional education sequence.

This paper is a description of the development and implementation of a VAE CBTE program. It may not be the model for other programs. However, it may provide some products and processes which might be modified for use in other settings—vocational and non-vocational. More detailed explanations are contained in a series of publications available from the authors at cost.
Literature Cited


2 We are defining "program" as: an organization of subject matter and inter-related learning experiences designed to lead students to achieve prespecified goals and objectives in a systematic manner. A program consists of two or more courses.

3 Students in Phases I, II, and Phase IV Seminar enroll in a common section. In Phase III students work with a specialist in their curriculum area.

4 A systems approach is analogous to commonly accepted steps used in scientific problem solving.

5 The VAE faculty used the first Cottrell list of 255 competencies which resulted from a project at the Ohio State Center for Vocational and Technical Education. See Calvin J. Cotress, et. al., Model Curricula For Vocational and Technical Teacher Education: Report No. II - General Objectives - Set I, (Columbus, Ohio: The Center for Vocational and Technical Education, 1971).

6 These competencies were identified by participants of the Michigan COAST Project (Competencies of all Secondary Teachers). This project was funded by the Michigan Department of Education and Wayne State University from February, 1974, through January, 1975. Co-directors were Fred S. Cook and Rita C. Richey.
A high school principal recently stated that: "If teacher educators do not improve the quality of teachers they are sending to us, we've a good notion to stop hiring graduates of colleges of education and initiate a program to prepare teachers. Frankly, beginning teachers in my opinion, just do not know how to teach."

It is also obvious that occasionally state department of education personnel infer that they would like to prepare teachers. Community and citizen groups in consulting with colleges of education frequently state that they know the type of preparations teachers should receive. As a result the number of alternative schools, employing or using teachers with a wide range of qualifications have emerged.

Teacher organizations are offering, and in some instances seemingly dictating, that they could easily map out the education required for teachers. These developments should cause some rather serious thinking among teacher educators. However, teacher educators have been thinking and doing some interesting work in new designs for teacher education. Elam, in a paper on the state of the art in teacher education, suggested that performance-based teacher education is by no means a fledgled movement in the early 1970's. He stated, however, that a reform movement of tremendous potential is emerging. Hopefully, as Elam further suggested, the movement will continue to generate on the basis of an enlightened leadership, resources and the research to expand on a dangerously thin knowledge base. Along with the new developments in teacher education has emerged performance-based teacher certification. A review of the literature, particularly a report of Schmieder, revealed that state legislatures and certifying agencies seem to be passing enabling legislation or just plain demanding by law that teachers become certified on the basis of performance criteria.

One of the primary problems facing teacher education seems to be in just what is meant by performance-based teacher education. It is obvious from a brief perusal of the literature that probably a dozen different titles are in usage across the country. Perhaps the A.A.C.T.E.'s Committee on Performance-Based Teacher Education has identified the elements which distinguish performance or competency-based teacher education from other programs. The elements are as follows:

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1. Competencies (knowledge, skills, behaviors) to be demonstrated by the student are:
   - derived from explicit conceptions of teacher roles,
   - stated so as to make possible assessment of a student's behavior in relation to specific competencies, and
   - made public in advance;

2. Criteria to be employed in assessing competencies are:
   - based upon, and in harmony with, specified competencies,
   - explicit in stating expected levels of mastery under specified conditions, and
   - made public in advance;

3. Assessment of the student's competency:
   - used his performance as the primary source of evidence,
   - takes into account evidence of the student's knowledge relevant to planning for, analyzing, interpreting, or evaluating situations or behavior, and
   - strives for objectivity;

4. The student's rate of progress through the program is determined by demonstrated competency rather than by time or course completion;

5. The instructional program is intended to facilitate the development and evaluation of the student's achievement of competencies specified.

Elam further noted that only professional teacher education programs that include all of these elements fall within the A.A.C.T.E. Committee's definition of performance-based teacher education. From a review of the literature, it would appear that the terms performance-based teacher education (P.B.T.E.) and competency-based teacher education (C.B.T.E.) have the same overall definition.

One additional aspect of performance-based teacher education was referred to by Elam as implied characteristics of the program, these characteristics are:

1. Instruction is individualized and personalized.
2. The learning experience of the individual is guided by feedback.
3. The program as a whole is systematic, as the essential elements required.
4. The emphasis is on exit, not on entrance, requirements.
5. Instruction is modularized.
6. The student is held accountable for performance, completing the preparation program when, and only when, he demonstrates the competencies that have been identified as requisite for a particular professional role.4

In reviewing the implications for teacher education, Houston stated that "... teachers tend to model their teaching on selected teaching practices they have experienced."5

The age of objectives, management systems and accountability for use of financial resources and accountability for the quality of product are key factors in our day that have become means for encouraging the development of performance-based teacher education.

Only piecemeal performance-based efforts are presently underway in agriculture education. Agricultural educators seem to be willing to meet the rigors of performance-based teacher education in some aspects of the preparation program but are reluctant to go all out. Hopefully state mandated certification requirements will not force the issue.

What actually happens to students when teachers close the door of their classrooms and teach? Teacher educators may feel they have "graduated" a very good group of beginning teachers or just completed an excellent in-service program, however, the real impact of their efforts depend solely upon the interaction of the teachers and students when the teacher returns to the classroom. Consequently, efforts to enhance the effectiveness of teachers may be of relatively little value if teachers cannot or will not perform in the desired manner in the classroom.

It is not an uncommon occurrence to hear experienced teachers and/or administrators discuss the question of how to teach with a beginning teacher. Generally, they come forth with a statement to the effect that "now is the time to forget whatever those teacher educators told you in your education classes and do it your way." This statement may be followed by an inference that teacher educators just don't know what kids are really like because they have not taught for so many years. We really only talked about how to teach in our college courses. It is not uncommon to have a student teacher state something to the effect that the supervising teacher that they observed never used one.

What the teacher does in the classroom depends to some degree upon his approach to the learning situation. In visiting secondary and post-secondary schools, one noticeable practice utilized by teachers is to observe them lecturing, frequently from college notes, and students idly listening or conversing with a classmate. It seems the question could
be raised, why are students disinterested? Could it be that we now have a generation of disinterested students? Or in our quest for the ultimate in curriculum and flexibility in scheduling, could it be that interest of students has been lost because the teaching methodology is not particularly challenging or directed toward students? Possibly as educators have engineered courses, people may have been forgotten.

With these observations and questions facing agricultural educators at the University of Nebraska and later at the University of Minnesota, it was determined that a real need existed to identify some basic performance areas in teaching methods. Ultimately this was an attempt to assure those employing teachers that they could perform effectively in a teaching situation.

With this background in mind, it was felt that teacher education courses in teaching methods should focus on providing prospective teachers with the essential skill to utilize the five basic problem-solving teaching methods. Rather than talk about a wide range of teaching techniques, and the merits of using each technique, it was felt that focusing primarily on what student teachers will be able to do was a more critical issue. Thus, an individualized competency-based performance-oriented teaching methods course was developed. This course was designed to provide accountability in an agricultural education teaching methods course. The central purpose of the course was to produce teachers with the ability to enter teaching with the capability to simply prepare lesson plans and teach students in an effective manner. Which rather surprisingly was not happening with sufficient regularity.

In becoming accountable for specific behaviors in a beginning agriculture teacher, a group of experienced teachers and teacher-educators identified behaviors they felt were critical for a beginning teacher to possess so far as teaching methods were concerned. These behaviors or performance areas were then arranged into a hierarchy which began with simple behaviors and then the more complex. Twenty-nine performance areas were identified as critical behaviors for the beginning teachers to possess. Consequently, these 29 performance areas became the basis for 29 individualized instructional modules. Each module was organized into a worksheet around a format which included: (1) Module Title, (2) Introduction, (3) Objectives, (4) Pre-assessment, (5) Learning Activities, (6) Learning Resources, (7) Assignment, and (8) Worksheet Section. Each module directs the student to listen to an audio-tape recorded discussion and/or the reading of materials pertinent to the performance area. Following those experiences, the student may observe a video-taped demonstration teaching situation which utilizes one of the problem-solving methods or a teaching technique.
Finally each student must perform each of the required tasks. This results in each student developing a minimum of 12 lesson plans and actually teaching each of them one time. Each teaching performance is evaluated on a satisfactory or an unsatisfactory basis. Each student is videotaped on at least two or three of his micro-teaching experiences. If a performance is not acceptable, it is repeated until it can be performed satisfactorily. The modules included in the 29 performance areas are as follows:

| Module 1: Operating Audio-Visual Equipment and Learning Resources |
| Module 2: Filing of Teaching Materials |
| Module 3: Teacher-Pupil Planning |
| Module 4: Five Problem-Solving Teaching Methods |
| Module 5: Identifying Student Problems to the Problem-Solving Teaching Methods |
| Module 6: Utilizing a Daily Lesson Plan Form |
| Module 7: Writing Behavioral Objectives |
| Module 8: Motivational Activities and Techniques |
| Module 9: Reinforcement Techniques |
| Module 10: Questioning Techniques |
| Module 11: Concluding a Discussion |
| Module 12: Utilizing a Supervised Study Time |
| Module 13: Handling Discipline Situations |
| Module 14: Constructing Objective-Type Tests |
| Module 15: Constructing Subjective-Type Tests |
| Module 16: Constructing Performance Evaluation Instruments |
| Module 17: Grading Student Performance |
| Module 18: Writing and Teaching a Lesson Using the Steps and Key Points Teaching Method |
| Module 19: Writing and Teaching a Lesson Using the Possibilities and Factors Teaching Method |
| Module 20: Writing and Teaching a Lesson Using the Advantages and Disadvantages Teaching Method |
| Module 21: Writing and Teaching a Lesson Using the Present Situation vs. Ideal Situation Teaching Method |
| Module 22: Writing and Teaching a Lesson Using the Question-Answer-Discussion Teaching Method |
| Module 23: Preparing Individualized Study Materials |
| Module 24: Utilizing Resource Personnel |
| Module 25: Utilizing Games and Simulated Situations |
| Module 26: Utilizing Field Trips |
| Module 27: Team Teaching |
| Module 28: Utilizing Discovery Teaching Techniques |
| Module 29: Teaching the First Day of School |
The performance areas covered attempt to begin with developing teacher-pupil planning skills so that a beginning teacher can develop the ability to acquire the problems and concerns of students and then formulate these problems into meaningful lesson plans. This is followed by developing skill in utilizing critical behaviors in teaching and finally putting it all together by developing these problems into a complete lesson plan and actually teaching it.

This list of performance areas obviously does not address itself to a number of behaviors through critical by some for teachers to possess. It is the writer's contention that for too long teacher educators have tried to infuse too much into an undergraduate program resulting in considerable teacher-educator talk but relatively few actual teaching skills being developed by student teachers. Consequently, the decision was made to attack some key areas and develop the student teachers' ability to perform the essential teaching skills.

As a result of utilizing this system with approximately 140 students at the University of Nebraska and Minnesota, some encouraging observations have been readily visible. Students have expressed satisfaction with the teaching methods course. First of all, they appreciate the individualized approach to the class plus the fact that they are able to organize a unit of instruction, prepare a lesson plan and teach it to a group of students. They feel a degree of confidence in their ability to teach prior to student teaching. Supervising teachers have expressed that they now feel the student teachers are more capable of handling a class in a group situation than those student teachers prepared in an earlier, more traditional teacher education (lecture-discussion) program.

A follow-up study was conducted at the University of Nebraska which utilized a paired-comparison technique with the State Department of Education Agriculture Supervisors serving as a jury to rate beginning teachers' performance. In this study, 21 beginning teachers were rated, each against all others, as to who were the most effective classroom teachers. Of the 21 beginning teachers, 10 had been taught a teaching methods course in a traditional lecture-discussion system and 11 had been taught teaching methods utilizing the individualized competency-performance-based system. The supervisors were not aware of which system the teachers had been taught. They only knew them as beginning teachers. As a result of their comparison, 8 of the top 10 beginning teachers listed as the best prepared were in the competency-based individualized system. With these evidences, it seemed something other than mere chance was involved in improving the quality of beginning teachers.
Hopefully, as a result of utilizing this system of teacher education, secondary and post-secondary teachers are better prepared for teaching. When they close their classroom doors, there appears to be evidence that students are being taught in an effective manner. The system has provided a means of making agricultural teacher educators in Minnesota and Nebraska more accountable for the quality of their product. The attitudes, skills and behaviors of student teachers ultimately touches the lives of hundreds of elementary, secondary and post-secondary students that is an awesome responsibility that must receive serious thought and action by teacher educators. Skill in utilizing teaching methods does make a difference.

Bibliography


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ADMINISTRATION BY COMPETENCY (ABC), Charles Edwards and Wes Habley, Presented at Region V Conference on Competency Based Teacher Education; Chicago, March 11-13, 1975.

The Administration By Competency Project has existed at Illinois State University since the fall of 1971 as the result of cooperative agreement between the United States Office of Education, the State of Illinois Division of Vocational and Technical Education and the Department of Educational Administration at the University. During this time period, the program has grown from exploratory research into competencies required for the administration of occupational education to a field-tested competency-based model which is integrated with traditional coursework in educational administration, industrial technology, home economics, agriculture, business education and health occupations.

During the first year, the pilot phase conducted by Southern Illinois University and Illinois State University identified 158 competencies through consultation with occupational personnel at both of the campuses. In addition, statewide assistance was sought from practicing administrators. The resulting 158 competencies formed the basis for continued work on competency based occupational education administration at each of the schools.

During the second year, project staff and student participants at Illinois State further delineated and expanded upon the original competencies. The competencies were evaluated and in some cases consolidated. Through this process, the project staff identified the conditions, the actions and the criteria used for the measurement of each competency as well as listed possibilities for the achievement of the competency.

With the work of the first two years of the project providing a firm foundation, the third year of the project saw the recruitment and selection of 16 full-time masters degree candidates. The responsibilities of these 16 participants were two-fold. First, they assisted in the further refinement of the competency packages by providing on-site field testing. In addition, the 16 project participants assisted the project staff in the development of total learning packages. Each of the 42 learning packages was to develop into a self-contained unit which included a general competency statement, a set of instructional objectives, a pre-assessment test, a set of viable learning activities and a proficiency test. The viable learning activities were arranged in several different categories: classwork, videotapes, audio-tapes, tape-slide presentations, filmstrips, internships, simulations, reading, and field experiences. The
The final outcome of the third year of the project was the development of a competency notebook with 35 complete learning packages covering five major areas of administrative interest. The five areas and packages contained in each are listed below.

**AREA 1  GENERAL ADMINISTRATIVE**

1.01 Organization Structuring
1.02 Record Keeping
1.03 Gathering & Interpreting Data
1.04 Problem Solving
1.05 Management by Objectives
1.06 Scheduling
1.07 School Plant Planning

**AREA 2  PROGRAM PLANNING**

2.01 Using External Resources
2.02 Meeting Program Approval Budget Requirements
2.03 Planning, Programming, Budgeting Systems
2.04 Preparing the One and Five-Year Plan
2.05 Implementing Career Education Programs
2.06 Evaluating Programs
2.07 Constructing Vocational Surveys
2.08 Developing Cooperative Programs

**AREA 3  PERSONNEL**

3.01 Developing Job Descriptions
3.02 Ranking Candidates
3.03 Interviewing and Hiring
3.04 Orienting Staff
3.05 In-Service Training
3.06 Evaluating Instruction
3.07 Identifying Legal Requirements for Personnel Dismissal
3.08 Resolving Grievances

**AREA 4  PUBLIC RELATIONS**

4.01 Involving Advisory Groups
4.02 Enlisting Community Support
4.03 Disseminating Program Information
The Administration By Competency Project is charged with two major responsibilities for the current year. The first responsibility is the continuation of field-testing of the 35 competency packages. This year's project participants, funded from ERDA money are 12 in-service full time vocational instructors and guidance counselors from throughout the State of Illinois. The students are enrolled in the competency-based course "Career Education and the Administrator" for three hours credit in addition to a second traditional three hour course in the Department of Educational Administration. All participants have taken part in a Division of Vocational and Technical Education evaluation team and most are involved with some type of administrative internship tailored to meet their specified training needs.

During the summer of 1975, the project participants will be on campus as full time graduate students taking nine hours of coursework. As a result of their affiliation with the project, the students will have attained 21 hours of graduate credit, nine of which are in competency-based instruction. These students will qualify for the State of Illinois Level II endorsement upon completion of the masters degree, and thus will be able to occupy administrative positions in the Illinois public schools. The second responsibility of the current year's project staff is the completion of learning resources for each of the competency packages. This task includes the evaluation of commercially available resources as well as the development of completely new software to meet the requirements of the competency packages. The software phase of the project is scheduled for completion on June 30, 1975, and the training phase will be completed on August 31. At the present time, the project staff along with other members of the Department of Educational Administration are studying methods for incorporating the Administration By Competency model into the mainstream of graduate programs in the Department beginning in the fall of 1975.
A CAUTIONARY APPRAISAL OF CBTE, H. S. Broudy, Presented at Region V Conference on Competency Based Teacher Education, Chicago, March 11-13, 1975.

When asked to address this meeting on competency-based teacher education in a cautionary—if not critical—spirit, I was puzzled for two reasons: vocational education in general and the preparation of vocational teachers in particular, it seems to me, has always prided itself on being competence-based. It has been recommended as a wholesome alternative to academic education, which notoriously has been vague about competence. Vocational education is consistently prescribed as the cure for the lack of interest of the non-bookish student in the conventional conceptual and linguistic curriculum of the schools. The 1974 Gallup poll on the schools confirms this. It would seem, therefore, that a movement to make vocational education competence-based smacks of carrying coals to Newcastle or teaching one's grandmother to suck eggs. But no less puzzling is why vocational teacher educators should entertain doubts or reservations about a movement, of which they have been the steadfast advocates and successful exemplar.

Surely vocational education does not need the promotional assistance of the competence-based slogan. To an outsider, at least, students at the secondary and post-secondary levels are anxious to get into some form of vocational preparation, and it is my impression that there is no oversupply of teachers in the vocational fields. Indeed, colleges of liberal arts are casting about—some desperately—for ways in which the standard college studies in the arts and humanities could be linked into some form of career preparation.

I then voiced timid suspicion that perhaps a critique of the competence-based movement might be part of the familiar ritual of professional organizations, especially those in education, to have the "other" side of an issue presented, even though there is no intention of converting the membership. Being open to criticism is one of our organizational virtues. However, I was assured that my doubts on all the aforementioned counts were groundless, and that some of you were really concerned about the meanings and consequences of this movement for vocational teacher education. I think you should be and in large part because the values of the competence approach that have been achieved in vocational education may very well be diluted and trivialized by the current CBTE/PBTE bandwagon.
There is no doubt that CBTE has potential advantages. An Advisory Report by the New Hampshire Council for Teacher Education issued in March, 1974 lists the following, which I have summarized:

1. The attempts to define and behavioralize goals will help teacher education institutions to clarify and justify their priorities and eliminate overlapping components of their programs.

2. Attempts to define essential teaching competencies should lead to greater analysis and possibly better understanding of the teaching process; this may lead to the discovery of new instructional methods.

3. Specification of goals in terms of behavior should help the student and the public see what the educational program hopes to achieve and to evaluate these efforts.

4. More attention would be directed to the relation of theory to practice by the emphasis on "clinical" experience.

These advantages, however, are no more than one would expect from a commonsense effort to clarify the mission of an educational program. There is nothing new about writing objectives and goals or devising lesson plans in which procedures are set forth and sequenced. Nor is evaluation in terms of these goals a novel doctrine or practice. What then gives the movement its drive? What has been added that makes it distinctive and so appealing to accrediting bodies and to legislators?

The new element, I suggest, is the hypothesis that all teaching and learning can be organized and evaluated on the model long familiar in the training of technicians. Roughly, it calls for breaking down a complex operation into its component simpler sequences, and practicing each component to some criterion of quality specified in advance. This approach was very successful in many aspects of military training, and I am told that it has had no less success in many forms of industrial and business training, as well as in the technical components of many professional curricula.

However, this approach is "new" and radical when advocated for all phases of elementary and secondary schooling and for the training of teachers. It challenges two basic assumptions of traditional schooling: one, that although instruction may be directed toward a prespecified goal, e.g., the doing of long division or reading or selling dry goods, the pupil learns as a whole person and the teacher teaches as a whole person; two, that the teaching-learning act cannot be analyzed without remainder into observable performances $P_a + P_b + P_c + P_n$. If it should turn out that these assumptions are correct,
CBTE taken seriously and applied rigorously could be a mischievous bandwagon indeed.

First of all, and as a general preliminary caution, one might suggest examining the connotations of the term "competence-based". Logically it makes no sense, because so far as I know no program of instruction is deliberately incompetence-based. The term makes sense only if achieved-competence-based programs are contrasted with promised-competence-based programs. In an achieved-competence-based program, the learner culminates the program by performing the task that has been taught. For example, an achieved-competence-based swimming program is completed by the pupil swimming 50 yards, while a promised-competence-based swimming program might culminate in the pupil receiving a certificate saying that he has passed the swimming course with a grade of C.

It is this connotation of competence-based that gives the term and the movement their political power; it carries a politely veiled threat that promises of competence will no longer be acceptable for accountability; that only performances as specified in advance will be taken as legal educational tender.

There is also some ambiguity about whose competence is the criterion for judging teacher competence. One school of thought holds that teacher competence is demonstrated if and only if the teacher executes Performances A, B, C, ... N to the satisfaction of the examiner. Another school of thought argues that the teacher has not demonstrated competence until his pupils have executed specified Performances X, Y, Z, ... N. Are Performances A, B, C, ... N the same as X, Y, Z, ... N or are they the necessary and/or sufficient conditions for Performances X, Y, Z, ... N? I think you can see why this is a troublesome ambiguity. If the pupil performs X, Y, Z, ... N, then whether or not the teacher performs or can perform A, B, C, ... N is irrelevant. If the 14 members of the swimming class or the carpentry class all end up swimming and carpentering, who cares what the teacher did or did not do? If, on the other hand, pupils do not perform X, Y, Z, ... N, then the teacher having performed A, B, C, ... N is held to be irrelevant or proof of ineffectiveness. It is only when we have dependable evidence that A, B, C, ... N and only A, B, C, ... N produce X, Y, Z, ... N that we can demonstrate the relevance and efficacy of any set of teacher competences for pupil success. Unfortunately, we have no evidence for such a tight causal relation between teaching and learning behaviors in the ordinary classroom transactions. We cannot identify, let alone control, all the variables that operate in the transaction.
We do approach the ideal model when in an apprenticeship program the pupil is the apprentice doing what the master does as he does. A, B, C, ... N and X, Y, Z, ... N do in fact coincide. But as a matter of fact, the apprenticeship model is not quite true to the competency-based assumptions, for in imitating the master deals with clients and the members of his family and these are not specified skills. The CBTE approach, on the contrary, operates on the assembly-line model of production, i.e., breaking down a task into smaller and smaller segments and each mastered separately or in modules.

However, if I am not mistaken, vocational education programs and vocational teacher education programs came into being precisely because the apprenticeship system was unable to meet the demand for vocational training. Just as individual tutoring gave way to group instruction, so apprenticeship has to be supplemented by group vocational training. In both fields this development necessitated a shift from performance-based programs to promise-based programs. In other words we looked for teaching behaviors of a certain sort that were supposed to produce pupil performances in the future of a certain sort, i.e., the A, B, C, ... N became promises for X, Y, Z, ... N.

How do these two series differ? Primarily in that teaching behaviors are made up of a content to be transmitted to the pupil or what we have called X, Y, Z, ... N plus a number of teaching with factors. For example, a teacher does not recite all he has learned or remembers about learning theory when he teaches reading or arithmetic or anything else (unless he happens to be teaching educational psychology). Nor does the teacher make explicit in some overt act his views about the proper relationship between a pupil's interests and troubles and the tactics he uses in the classroom on a given day. His understanding of the culture, of the structure of the school, and of the value system are other items that one almost inevitably teaches with but not necessarily to the pupil.

Now many, if not most of these teaching with factors, cannot be observed in the behavior of the teacher or of the pupil. Sensitivity, intelligence, understanding, interpretation, and many phases of judgment are not characteristics of the observable behavior but of the person who is behaving. We observe that the pupil uses the correct procedures for measuring his materials, but we infer, we do not observe, carefulness. We observe that a teacher listens to the requests or complaints of a pupil, but what characteristic of listening can be observed that makes it patient or sympathetic listening? Much of the deserved ridicule that has greeted the yard-long inventories of behavioral objectives and performance criteria has been occasioned by the attempt to analyze the properties of persons into properties of behavior.
We are led to the conclusion, therefore, that if the conceptual and personal factors that constitute the resources for teaching with are important, the criteria of observability so essential to CBTE may have to be relaxed.

This is not to say that we cannot judge or discover what the teacher teaches with, but merely that we do not find this out by figuring out what physical movements shall count as indubitable signs of the presence or absence of these components and then asking the teacher to display the signs. In brief, where persons are concerned, it takes one to know one, and where the competent teacher is concerned, it also takes one to know one. The attempt to create a laundry list of performances or behaviors that will enable a machine or the layman to make this judgment is about as futile as trying to make a layman into a connoisseur of fine wines by giving him a manual on viniculture.

The more the outcomes of schooling or teacher education are phrased in terms of personal qualities of mind, character, and personality the less applicable the formula Competence = Pa + Pb + Pc + Pn becomes.

Accordingly, how far vocational teacher education can go with it depends on how broadly it conceives its outcomes to be---both for the teacher and for the pupil. It depends on how much it wants to invest in teaching with as part of the teacher education program, on the one hand, and how broad the outcomes envisioned for the pupil, on the other.

Another set of reservations about CBTE has to do with styles of teaching. We can distinguish at least three very different types of teaching: didactics, heuristics, philletics. The first is used to transmit knowledge and to form skill directly. The goals are prespecifiable and the sequences for achieving them can be identified and to a large extent evaluated. The pupil in effect replicates the teaching input on demand, if the didactician is effective.

Heuristic teaching emphasizes discovery by the pupil either by induction from instances, Socratic dialogue, projects, etc. Here neither the goals nor the steps for reaching them can always be prespecified; very often the goals are intellectual operations and not specific products.

Philletics teaching aims at producing satisfying human relationships between teacher and pupil; pupil and pupil; the pupil and his concept of himself. The procedures for such teaching are more like those of psychological counseling than of instruction. The criteria for success in each of these three modes are different; the skills for each vary considerably---almost radically---and the chances for an individual teacher being equally talented in each type are small.
If vocational education intends to utilize all three types of teaching, the PBTE approach will be virtually useless for two of them. PBTE almost inevitably puts a premium on didactics and puts heuristics and philetics at a discount. Does vocational education and vocational teacher education need anything other than didactics?

I shall not presume to advise you on these matters of educational policy. It occurs to me, however, that as vocational education becomes more and more popular, either as career education or as training for specific occupations, it will have to take over more and more of the other functions of schooling that are now regarded as the province of general education, viz., civic competence and personal adequacy. Training for work may then have to include the education for how to live with one's work in the community and the family and with oneself; as well as forming the skill of doing one's work. If work should become the organizing core of education, as it so often is of life itself, then vocational education will have to broaden its perspective; it will not be a matter of occupational training in the morning and work in the school subjects in the afternoon, but rather the implementing of a curriculum that is dictated by the demands of the job but also the life of the worker as a citizen and as a human being. This in turn, is going to put a greater strain on the resources of the teacher of vocational education and on those preparing vocational teachers.

The complexity of the task is exacerbated if the job cannot be the center of the individual's life—if it is too routine, too undemanding, too dehumanizing and dehumanizing. This dissatisfaction, I dare say, is most vocal in assembly line jobs, but even in many service areas and professional fields such unhappiness is not wholly absent. Life in a technological society reduces the cognitive strain on the individual because it mass-produces so many goods, ideas, and values for him. But such a culture makes genuine individuality, personhood, and the satisfaction all that much harder to achieve. It can be done, but it takes a disproportionate effort of mind and will to do so. The current depression merely accentuates the lavish bounty that our culture has bestowed on so many of us with a minimum of labor and effort on our part.

In this connection one must also mention the sort of vocational education that provides the greatest flexibility for changes in national employment patterns. Whatever else it means, flexibility means breadth; it means providing the individual with knowledge and attitudes general enough to be adapted to a variety of circumstances. If vocational education takes flexibility of employability seriously, it broadens its goals for the students and their teachers. And as it does so, the difficulty of applying the competence-based approach in any strict sense of that term increases.
Finally, the usefulness of the CBTE depends on how far along the professional line the vocational teacher is expected to go. At one end is the model of the teacher as a technician training others to become technicians. Somewhat further along is the practitioner who has had experience in the occupation and is recruited for teaching. The man or woman who has worked in industry or business—in the real world, so to speak—is asked to train others. Some of these men and women are not especially interested in schools or schooling; they may be persuaded to come and "do their thing" in the schools as some artists are persuaded to come to the university campus and "do their thing" in the presence of students. That they will ever become involved with curriculum, problems of instruction, guidance, valuation or the general structure of the schools is not a foregone conclusion; some do, many don't. Their home is the industry or the business, not the school, and often they return to it if the school climate turns out to be uncongenial.

The fully professional teacher is a member of the school establishment who may on occasion enjoy a sojourn in industry or business, but whose home is the school. For this type of teacher, many aspects of educational theory, history, philosophy are relevant as context builders; necessary for teaching with. For the teacher as technician, they are probably unnecessary, and for the teacher recruited from industry they be on the irrelevant side—tuned as he is to the practical considerations of the real world of work.

CBTE, therefore, is not good or bad simpliciter. If vocational teacher education programs are vague as to their goals, if there are overlapping outcomes and duplications, if they cannot make their mission clear to the public or the board of education or to the taxpayer or to the pupil, then CBTE offers an exercise in clarification and self-understanding. Presumably those who are pushing the states into mandating such an approach must believe that the vocational teacher education programs suffer from these disabilities, and that those in charge of these programs must be forced to shape up.

The exercise, however, need not go to the extreme of trying to behavioralize every conceivable goal of teaching and learning to the point of trivialization and silliness—not to mention the nausea of those who have to try to write hundreds of behavioral objectives.

The trouble arises when the competency-based approach is taken as more than a sensible device for clarification, but is elevated to a theory of instruction and of teacher education. When this is done, it automatically redefines
the goals of schooling as well as the methods of instruction so that they will fit into the theory of behavior modification. It then has to withstand the theoretical and practical critiques that have been leveled against it, and it cannot evade those critiques by calling them quibbling or hair-splitting.

However, unlike general education, which must be broad in scope and complex in methods, vocational education, does have some choice as to breadth of outcome and can justify paths of various widths in its various programs and for various cadres of students.

These special circumstances, it seems to me, enable vocational teacher educators to scrutinize the competence-based drive more objectively and dispassionately than can other teacher education programs and, by dealing with it in this way, can do the whole educational enterprise a great service.

Bibliography

2. The Report goes on to list the possible disadvantages of which are incorporated in the discussion in this presentation.
STATE TASK FORCE REPORTS

The Conference provided an opportunity for the participants from each of the six states to meet together in groups representing each state.

Each state group was charged to develop suggestions and recommendations related to the questions stated below and/or other topics of importance to them relative to competency based teacher education.

1. How can we improve statewide planning for vocational teacher education and development?

2. What, if any, steps should be taken to improve the coordination of vocational teacher education and development in your state?

3. What are the most important research and curriculum development needs within our state related to vocational teacher education and development programs?

4. What, if any, changes need to be made to improve the process of certifying vocational teachers?

5. What role should the state education agency/agencies play in encouraging competency based programs for vocational education and development?

6. What are the most critical inservice needs of practicing vocational teachers within our state?

7. If we want to prepare more effective vocational teachers, what changes should we make in our preservice teacher education programs?

After the completion of this activity, each state presented a 10-minute summary to the Conference on its suggestions and recommendations in these areas. Each state's summary report of its task force session follows.

ILLINOIS

Suggestions made regarding dissemination of information concerning vocational teacher development included (a) conferences such as the present one as a continuing process; (b) a newsletter being sent to individuals every two months; (c) coordination of information between the various disciplines—not just agriculture, home economics, and distributive education; (d) establishment of a regional research coordinator in order to avoid duplication of effort and as a central means of information dissemination;
and (3) the development of a Curriculum Materials Center bulletin to be sent to teacher educators on a regular basis throughout Region V.

Discussion dealing with the effectiveness of the competency based approach to teacher education concluded with suggestions that the competency based approach has many meanings to different persons and programs and little research has been done to support the fact that certain competencies mastered in college may or may not necessarily be functional when needed on the job at a later date.

The Illinois task force suggested that the need for articulation across courses is great and there needs to be prioritization of what students learn and what they need to learn resulting in needs assessment and comparative studies to determine what makes a good teacher as steps needed to be taken in order to improve competency based models for teacher education.

Cooperation between states could take the form of (1) intra-state investigation of different forms of instruction using the same assessment form for several states' instruction or the comparison of one state's vs another state's assessment resulting in the unbiased validation of competencies which should have been taught; (2) certification of vocational teachers on a regional basis rather than by state or institution as is presently the case; and (3) communication between states should be fostered by the use of a newsletter, including information about coming events, new materials, and new ideas.

**INDIANA**

Suggestions were made indicating (1) that the Curriculum Materials Center should serve as the major source of information dissemination, and (2) a need for an inservice activity within the Region to explain materials developed and disseminated. This might be accomplished by using this as a priority item for EPDA funds for inservice personnel development in Region V.

Effectiveness of competency based programs cannot be measured accurately or with much validity at this point, resulting in a need for product measurement devices to be developed and implemented, carrying us away from value judgment into more precise measurement of competency based teacher education programs and outcomes.

A model for competency based teacher education can be improved by identifying those competencies unique to vocational education.
Cooperation among the states within Region V can be enhanced by the continuation of planned and expanded meetings between state staffs and teacher educators and improved communications between state and local levels. We should identify the resources and strengths within each state and use that identified expertise effectively to reduce duplication of effort within the Region and nationally.

**MICHIGAN**

Improvement of statewide planning can be accomplished by using existing budgeted funds to provide for state meetings of instructional leaders in CBTE and by the use of a consortium of institutional representatives to emphasize development of CBTE.

Michigan participants indicated a need for a review of the institutional structure for communication and the state structure for institutional representation as a means of improving the coordination of vocational teacher education and development.

It was suggested that the most important research and curriculum development needs in Michigan were related to identifying the competencies unique to occupational teachers as contrasted with professional competencies of teachers.

This task force advocated giving more visibility to existing efforts of individual institutions and departments and the establishment of a more unified effort among higher education institutions as a means of improving vocational teacher education and planning in Michigan.

**MINNESOTA**

Discussion centered around the topics (1) roles of the Joint Council of Vocational Teacher Education and (2) in-service activities funded with EPDA funds.

Responsibilities of the Joint Council include: (1) reviewing periodically the provisions of the State Plan for vocational education, especially those which deal with teacher qualifications and certification; (2) establishing policies and procedures for handling appeals of persons whose request for temporary authorization or regular certification have been denied or revoked; (3) establishing procedures and policies for revocation of temporary authorization or regular certification of vocational teachers; (4) identifying, instructing and/or advising the Council designee acting in behalf of the Council in certification; (5) serving in an
advisory capacity to the State Department of Education in matters related to vocational teacher education, and (6) engaging in other activities that the Council chooses which are directed at the maintenance or improvement of vocational teacher education.

In-service activities during the past year included the following. A workshop stressing leadership development for career education was held in mid-1974. A project for regional communication management was held; it was designed to unify distributive education teachers in Minnesota, and to provide increased efficiency and effectiveness of DE programs. A curriculum dissemination project was used to provide in-service to vocational personnel at all educational levels, including teacher educators, and dealt specifically with the purposes and methods for using the expertise and materials at the instructional materials center. Other activities include staff development projects for individualized instruction at post-secondary area vocational centers; performance-based curriculum dissemination for health occupations teachers at secondary and post-secondary levels; aiding all teacher education institutions in providing in-service for vocational teachers; and a national project aimed at coordinating vocational education leadership development for USOE in order to guarantee quality and predict and monitor supply and demand.

OHIO

It was suggested that one way to improve statewide planning would be to structure cooperative meetings between the vocational areas to include teacher education. There is also a need to identify more clearly the guidelines and directions in teacher preparation based on established priorities.

Ohio participants indicated a need for representatives from each institution being involved in the identification of competencies unique to vocational teachers as opposed to general education as a means of coordination of vocational teacher education and development.

Important research and curriculum development needs included (1) curriculum development by task analyses; (2) validation of evaluation instruments; (3) individualized learning packets, and (4) research and validation of effects of instruction on products as the major consideration.

With respect to teacher certification, it was recommended that there be individual teacher plans providing certification by means of in-service training and that a statewide computer system be established which would provide teacher profiles.
Critical inservice needs considered included (1) curriculum development with occupational analyses; (2) implementation and evaluation of curriculum; (3) improved communications at all levels; (4) leadership should be available from state staff level to assist local administrators give inservice help to teachers; and (5) local inservice programs should be conducted by the local administration with support from teacher educators in an effort to develop total staff cooperation in helping students.

Pre-service training should include further developed CBTE programs, the development of mastery tests and intern occupational experiences.

WISCONSIN

Improved statewide planning could include the development of a state directory of vocational teacher educators; state department staff and consultants, and state board personnel for vocational education—to be distributed to each university campus and to Region V. It was also suggested that a statewide conference on CBTE be held to discuss the area of occupational teacher preparation. This conference would be used to identify problems and strategies for their solution; to identify critical staff needs in all vocational areas and strategies for meeting these needs; to analyze trends and discuss the futuristic look at various aspects of society (i.e., the year 2000) using the Delphi technique. This futuristic activity should include input from various societal levels.

Research and curriculum development should focus on studying the causal relationship between teacher performance and student behavior; the identification of commonalities and uniqueness of various vocational areas; developing a system of needs assessment as a means for developing a continuous inservice program; and should articulate studies in health occupations with child development.

One important needed change in preservice teacher training is to shift toward preparing teachers for postsecondary teaching.
REGION V CONFERENCE

COMPETENCY-BASED TEACHER EDUCATION

SURVEY

During March, 1975, a survey was distributed to all participants at the Region V Competency-Based Teacher Education Conference in Chicago. There were 71 surveys returned. The instrument was designed to assess attitudes of participants towards various aspects of competency-based teacher education in the states comprising Region V. A copy of the survey, showing total responses to each item is attached.

THE RESPONDENTS

Representation was greatest in the teacher education area, followed by state department and other areas respectively.

Cluster occupational representation included sixteen respondents in Business, Marketing, and Management occupations; fourteen in Industrial Oriented occupations; fourteen indicating interest in the content of all five clusters; eleven in each of Applied Biological and Agricultural occupations and Personal and Public Service occupations; and six interested in the content of Health occupations.

Major areas of interest in personnel preparation and development were related to teachers by forty-nine respondents; to administrators by ten respondents; and to all areas of personnel preparation and development (administrators, guidance personnel and teachers) by seventeen respondents.

THE RESPONSES

On the following issues, the responses were almost unanimous. The items with which a majority of the respondents agreed with are as follows:

--- Competency-based development of occupational education personnel provides identifiable advantages over the current practice of most typical university preparation programs for such teachers.

--- Teacher training institutions should be held accountable for the performance of occupational teachers which they graduate.

--- Planning and supervising business and industry internships...
to develop or upgrade occupational competencies should become a regular practice for teacher education institutions.

--Occupational teacher education programs should grant credit toward graduation for work experience of occupational teachers in their selected occupational specialty.

--It is possible to design competency-based teacher education programs capable of developing affective qualities of individuals essential to good teaching.

The following issues are those with which a majority of the respondents disagreed.

--Adequate standardized tests of occupational competence exist to measure the occupational performance of students entering occupational teacher education programs at the university level.

--The state vocational education agency holds the primary responsibility for initiating competency-based occupational teacher education programs.

--Competency-based teacher education cannot be designed to account for affective domain developmental needs essential for individuals to become effective teachers.

--There are just too many variables to account for in the development of occupational teachers to adequately design competency-based instruction.

--Competency-based teacher education programs restrict the development of creativity of prospective occupational teachers.

An issue which could not be decided by a majority of the respondents was

--Supervised student teaching is probably the best point at which the competency level of prospective teachers can be assessed.

With regard to the area on the questionnaire dealing with the participants' familiarity and participation in competency-based programs, the following issues received the majority of responses.

A majority of respondents indicated that they were familiar with one or more operating competency-based occupational personnel development programs which were externally funded.

A majority of respondents indicated that they were
involved as a teacher educator, project staff member, or consultant on a competency-based occupational personnel development program; a majority of such programs being in the development stage, followed by a large number being in the field testing stage.

Most respondents indicated the level of interest within their state for competency-based personnel development programs to be moderate to high. This was also true for the individual participant's level of interest.

A majority of the respondents felt that

--the primary initiative for competency-based personnel development within his own state has come from state offices.

--the primary obstacle to development of competency-based programs of personnel development is inadequate financial support and/or mechanical details of implementation.

--the development of competency-based personnel development programs within his own state should be accelerated.

--that basic competency lists for occupational teachers should be established by occupational teacher educators, other occupational teachers, and professional groups or associations.

The participants listed the following as advantages of competency-based teacher education for occupational teachers:

--Identifies the essential competencies, establishes behavioral objectives; determines the level of performance necessary.

--Systematization resulting in better teachers and reduced anxieties of candidates for the occupational teaching profession.

--Eliminates the unnecessary "things" from the personnel development program.

--Individualizes instruction and is more efficient in organization, topic and sequence; better equipping the teacher to perform.

--Provides efficiency and quality in personnel development.

--Provides a framework for performing essential skills by direct application of learning.
--Trains personnel in relevant areas of content resulting in their becoming better teachers.

--Improves accountability of occupational teachers.

--Provides a framework for establishing relationship between various aspects of the total educational program.

The participants listed the following as disadvantages of competency-based teacher education for occupational teachers:

--Validation of conditions and of criteria in behavioral objectives; conflicts related to affective domain and the aspect that might be called the "artistry in teaching."

--High costs and the time pressure involved with such a program.

--Resistance to implementation by key personnel at the state level and local level.

--May become too impersonalized and stereotyped and not creative or receptive to new approaches.

--Deciding what is really an acceptable level of competence.

--Identifying the proper competencies and development of valid, reliable assessment instruments and procedures.

--Maintaining and infusing the program into the standard university program.

--Inadequate instruction and the inability of teacher educators to adjust to change and perform as a result of change.

--Emphasis on a few--lack of attention to many important competencies--minimum standard often becomes maximum.

In summarizing the advantages and disadvantages, most respondents were most concerned about the advantages of accountability, individualized instruction, systematization and organization of such a program, and the disadvantages of high costs, time involved, and identifying, measuring, and maintaining a set of competencies (especially those dealing with the affective domain of teaching).

**Survey instrument is found in Appendix B, page 87.**
REGION V CONFERENCE
COMPETENCY BASED TEACHER EDUCATION

Midland Hotel
Chicago, Illinois
March 11-13, 1975

TUESDAY - First Day

10:00 am - 1:00 pm  Registration - Lincoln Parlor

1:00 pm  FIRST GENERAL SESSION - LINCOLN PARLOR

   Chairperson - Sherwood Dees, Director
   Illinois Division of Vocational and Technical Education

   Introduction - William Appelgate, Conference Director

   Competency Based Instruction at the Regional Level -
   Duane Nielson, Chief, Vocation Guidance Personnel Development, USOE,
   William L. Lewis, Director, OAE, USOE, Region V

   Keynote Address - Joan McFadden, Coordinator Home Economics Education
   Purdue University

2:45 pm - 3:00 pm  Break

3:00 pm  SECOND GENERAL SESSION - LINCOLN PARLOR

   Chairperson - Susan Bentz, Assistant Superintendent, Illinois Office of Education

   Competency Based Instruction at the State Level -
   Sherwood Dees, Director, Illinois Division of Vocational and Technical Education
Competency Based Personnel Development:  
One State's Coordinated Effort   
William E. Reynolds, Coordinator,  
Professional and Curriculum Development  
Unit, Illinois Division of Vocational  
and Technical Education  

A State Master Plan for Occupational  
Personnel Development   
William K. Appelgate, Occupational  
Program Coordinator, Southern Illinois  
University at Carbondale  

Preservice Occupational Program   
Franzie Loepp, Project Director, Illinois  
State University  

Group Meeting Orientation   
Daryl Nichols, Program Officer, EPDA,  
OAE, USOE, Region V, Chicago  

5:00 pm  
Adjourn  

7:30 pm  
Group Meetings  
Trade and Industrial (Bridge Room)   
Charles Jaymes, Chairperson  
Agriculture (Lincoln Parlor) - Homer  
Edwards, Chairperson  
Business and Office (Lincoln Parlor) -  
Elmer Schick, Chairperson  
Distributive (Walnut Room) - Daryl  
Nichols, Chairperson  
Home Economics (Lincoln Parlor) - Elmer  
Schick, Chairperson  
Health Occupations (Bridge Room) -  
Charles Jaymes, Chairperson  
EPDA (Teakwood Room) - Daryl Nichols,  
Chairperson  

9:00 pm  
Adjourn
WEDNESDAY - Second Day

8:30 am - 9:45 am
THIRD GENERAL SESSION - LINCOLN PARLOR
Chairperson - Homer Edwards, Program Officer, OAE, USOE, Region V
Mini Session Previews - I, II, III (3 previews with 10 minutes for each)
Considering Competency Based Instruction -
Harry S. Broudy, Professor, Philosophy of Education, University of Illinois, Urbana

9:45 am - 11:00 am and
11:15 am - 12:30 pm
Concurrent Mini Sessions (Participants to select two)
I - Phyllis Lowe (Indiana) Oak Room
II - Neil Pritchard (Wisconsin) University Room
III - Wayne Asche (Ohio) Lincoln Parlor

12:30 pm - 1:30 pm
Lunch (Individually Planned)

1:30 pm - 2:00 pm
FOURTH GENERAL SESSION - LINCOLN PARLOR
Chairperson - Daryl Nichols, Program Officer, EPDA, OAE, USOE, Region V
Mini Session Previews - IV, V, VI (3 previews with 10 minutes for each)

2:00 pm - 3:15 pm and
3:30 pm - 4:45 pm
Concurrent Mini Sessions (Participants to select two)
IV - Rita Richey (Michigan) Oak Room
V - Roland Peterson (Minnesota) University Room
VI - Charles Edwards and Wes Habley (Illinois) Lincoln Parlor

4:45 pm
Adjourn

THURSDAY - Third Day

8:30 am - 8:45 am
FIFTH GENERAL SESSION - LINCOLN PARLOR
Chairperson - William Reynolds, Conference Project Director
8:45 am - 9:45 am Concurrent Task Force Session by Group
State Directors (Suite 1201)
State Staff (Lincoln Parlor)
Teacher Educators (University Room)
EPDA Coordinators (Oak Room)

9:45 am - 11:00 am Concurrent Task Force Sessions by States
Wisconsin (University Room)
Ohio (University Room)
Minnesota (Oak Room)
Michigan (Oak Room)
Indiana (Lincoln Parlor)
Illinois (Lincoln Parlor)

11:00 am - 12:30 pm SIXTH GENERAL SESSION - LINCOLN PARLOR
Chairperson - Daryl Nichols, Program Officer, EPDA, OAE, USOE, Region V
Report of States (10 minute presentation by each state)
Reimbursement Instructions
Conference Evaluation

12:30 pm Adjourn
COMPETENCY BASED TEACHER EDUCATION

CONFERENCE PARTICIPANT SURVEY

Part I

Basic Information

Please indicate with an "X" in the appropriate blank, the one response which most accurately describes you.

1. At the Region V Conference, I will be representing

   ___ State Department
   ___ Teacher Education
   ___ Other

2. My major area of content interest in vocational education is

   ___ Applied Biological and Agricultural Occupations
   ___ Business, Marketing, and Management Occupations
   ___ Health Occupations
   ___ Industrial Oriented Occupations
   ___ Personal and Public Service Occupations
   ___ All of the Above

3. My major area of interest in personnel preparation and development is related to

   ___ Administrators
   ___ Guidance Personnel
   ___ Teachers
   ___ All of the Above
Attitudes Toward Occupational Teacher Education Programs

Please place an "X" in the appropriate blank to the right of each statement which best indicates your attitude toward each of the following statements.

4. Competency-based development of occupational education personnel provides identifiable advantages over the current practice of most typical university preparation programs for such teachers. 
   - Agree
   - Disagree
   - Undecided

5. Courses or programs aimed at developing the professional education competencies of occupational teachers can best be designed by content area (i.e., Agriculture, Distributive Occupations, etc.)
   - Agree
   - Disagree
   - Undecided

6. Courses or programs aimed at developing the professional education abilities of occupational teachers can adequately be designed through a commonalities approach which focuses upon competencies common to two or more of the content areas.
   - Agree
   - Disagree
   - Undecided

7. Substantial credit for work experience in a selected occupational specialty provides an acceptable alternative to the typical "ground-up" preparation characteristic of many university programs for occupational teachers.
   - Agree
   - Disagree
   - Undecided

8. Associate degrees from community college occupational programs should be employed by universities to satisfy both the lower division requirements and occupational competency needs of individuals entering university occupational teacher education programs.
   - Agree
   - Disagree
   - Undecided

9. Teacher training institutions should be held accountable for the performance of occupational teachers which they graduate.
   - Agree
   - Disagree
   - Undecided

10. Planning and supervising business and industry internships to develop or upgrade occupational competencies should become a regular practice for teacher education institutions.
    - Agree
    - Disagree
    - Undecided
11. Occupational teacher education programs should grant credit toward graduation for work experience of occupational teachers in their selected occupational specialty.

12. Adequate standardized tests of occupational competence exist to measure the occupational performance of students entering occupational teacher education programs at the university level.

13. The state vocational education agency holds the primary responsibility for initiating competency-based occupational teacher education programs.

14. Individual teacher training institutions hold the primary responsibility for initiating competency-based occupational teacher education programs.

15. Competency-based teacher education cannot be designed to account for affective domain developmental needs essential for individuals to become effective teachers.

16. There are just too many variables to account for in the development of occupational teachers to adequately design competency-based instruction.

17. Competency-based teacher education programs restrict the development of creativity of prospective occupational teachers.

18. Supervised student teaching is probably the best point at which the competency level of prospective teachers can be assessed.
19. It is possible to design competency-based teacher education programs capable of developing affective qualities of individuals essential to good teaching.  
   Agree  
   Disagree  
   Undecided

Part III
Familiarity and Participation in Competency-Based Programs

Place an "X" in the blank which best indicates your response to the given statement.

20. I am familiar with one or more operating competency-based occupational personnel development programs.  
   Yes  
   No

21. If YES, the program with which I am most familiar is primarily supported by  
   External Funding  
   Internal Funding  
   Uncertain

22. I am currently involved as a teacher educator, project staff member, or consultant on a competency-based occupational personnel development program.  
   Yes  
   No

23. If YES, the competency-based program with which I am most involved is at what stage of development  
   Planning  
   Development  
   Field Testing  
   Full Operation

Please identify the competency-based personnel development program with which you are most familiar or involved.

Title______________________________________________
Program Director________________________________________
Location______________________________________________

24. How would you describe the level of interest within your state for competency-based personnel development programs.  
   High  
   Moderate  
   Low  
   None
25. How would you describe your own level of interest in competency-based personnel development
   ___ High
   ___ Moderate
   ___ Low
   ___ None

26. The primary initiative for competency-based personnel development within my state has come from
   ___ State offices
   ___ Universities
   ___ Individuals

27. The primary obstacle to development of competency-based programs of personnel development is
   ___ Inadequate Financial Support
   ___ Underlying Concepts
   ___ Mechanical Details of Implementation
   ___ Resistance from Key Personnel

28. Development of competency-based personnel development programs within my state should
   ___ Be accelerated
   ___ Proceed at Current Rate
   ___ Proceed more Deliberately

29. Who should establish basic competency lists for occupational teachers (Select one or more)
   ___ Local Administrators
   ___ Other occupational teachers
   ___ Occupational teacher educators
   ___ State education agency
   ___ Professional groups or associations

Part IV
Advantages and Disadvantages

What is, in your opinion, the greatest advantage of competency-based teacher education for occupational teachers.

What is, in your opinion, the greatest disadvantage of competency-based teacher education for occupational teachers.
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<td>William K. Appelgate</td>
<td>Occupational Coordinator</td>
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<td>Southern Illinois University</td>
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<td>Wayne Asche</td>
<td>Vocational-Technical Education</td>
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<td>Robert Babcock</td>
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<tr>
<td>James Bartholomew</td>
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<td>Room 914 - Ohio Departments Bldg.</td>
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<td>65 South Front Street</td>
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<td>Columbus, OH 43215</td>
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<tr>
<td>Haron Battle</td>
<td>Assistant Superintendent</td>
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<td>620 East 10th Street</td>
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<td>Albert Belskus</td>
<td>College of Business</td>
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<td>Susan K. Bentz</td>
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TE = Teacher Educator  
SD = State Department  
ADM = Administrator
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<tr>
<td>Paula Blevel</td>
<td>SD</td>
<td>Office of Education - VTE</td>
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<td>300 South Wacker Drive</td>
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<td>Don Bright</td>
<td>TE</td>
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