

DOCUMENT RESUME

ED 159 383

08

CE 017 441

TITLE Implementing Performance-Based Vocational Education Utilizing V-TECS Catalogs. Module 1. Performance-Based Vocational Education in South Carolina.

INSTITUTION Clemson Univ., S.C. Vocational Education Media Center.; South Carolina State Dept. of Education, Columbia. Office of Vocational Education.

SPONS AGENCY Office of Education (DHEW), Washington, D.C.

PUB DATE 78

GRANT G007702222

NOTE 18p.; For related documents see CE 017 440-449

AVAILABLE FROM Vocational Education Media Center, 10 Tillman Hall, Clemson University, Clemson, South Carolina 29631 (\$7.50)

EDRS PRICE MF-\$0.83 HC-\$1.67 Plus Postage.

DESCRIPTORS Accountability; Administrator Education; Case Studies; *Curriculum Development; Definitions; Individualized Instruction; Inservice Teacher Education; Learning Modules; *Performance Based Education; *Vocational Education

IDENTIFIERS South Carolina; Vocational Technical Education Consortium States

ABSTRACT

This learning module on performance-based vocational education (PBVE) in South Carolina is one of nine developed for use in training administrators, teachers, and prospective teachers in the utilization of Vocational-Technical Education Consortium of States (V-TECS) catalogs of performance objectives, criterion-referenced measures, and performance guides. Readings are provided on the following subject areas: accountability as a tool for improvement; implementing PBVE; the ideal, fully individualized, self-paced approach; and a systematic approach to implementing PBVE in South Carolina. A case study to critique is also included. Examples of module behavioral objectives are these: be able to give two reasons for an interest in performance based education; three major approaches to implementing PBVE; three major concepts involved in PBVE; and two scheduling techniques facilitated by PBVE. A glossary of terms, a glossary self check, and a model critique of the case study are provided. A personal self-check list entitled, "Do you really have a performance based program?" concludes the module. (An instructor's handbook--CE 017 440--for use with all the modules contains the checkout activity which consists of multiple choice, matching, and classifying questions keyed to the behavioral objectives stated at the beginning of the module. The modules are designed for use with individuals or with groups.) (JH)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED15938:

Implementing Performance-Based Vocational Education
Utilizing V-TECS Catalogs

MODULE 1

PERFORMANCE-BASED VOCATIONAL EDUCATION IN SOUTH CAROLINA

State Department of Education
Office of Vocational Education
Columbia, South Carolina 29201

In cooperation with

Vocational Education Media Center
Clemson University
Clemson, South Carolina 29631

1978

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

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

CE 017 441

*These materials have been developed from funds
provided by grant G007702222 under the
Vocational Education Act of 1963 P.L. 88-210 as Amended
Department of Health, Education and Welfare, Office of Education*

INTRODUCTION

The success or failure of any curriculum effort is ultimately dependent on the teacher. As someone once said, "The curriculum is what the teachers do with their students in the classrooms and not what a curriculum specialist or curriculum guide says it is." For the vocational curriculum of this state to make a shift of emphasis toward performance-based vocational education, vocational teachers must understand and accept the major concepts involved. In this module you will learn the major concepts involved in performance-based vocational education as well as the basic changes needed for implementing an educational program which is more nearly performance-based.

DIRECTIONS

Read the OBJECTIVES. If you think you can accomplish these objectives now, turn to the CHECK-OUT ACTIVITY on p. 15, and follow the instructions.

If you feel you are not able to accomplish these objectives now, turn to the LEARNING ACTIVITIES. Begin the learning activities, and as soon as you feel you are ready, turn to the CHECK-OUT ACTIVITY and follow the instructions.

OBJECTIVES

1. Given the instructional materials included in this module, the workshop participant will be able with 100 percent accuracy to select on a multiple choice test:
 - a. two reasons for an interest in performance-based education.
 - b. the definition of performance-based education.
 - c. the three major approaches to implementing performance-based vocational education.
 - d. the three major concepts involved in performance-based vocational education.
 - e. two scheduling techniques facilitated by performance-based vocational education.

2. Given the instructional materials included in this module, the workshop participant will be able with 100% accuracy to:
 - a. match the steps in the plan for implementing performance-based vocational education with a description of each-step
 - b. classify the list of characteristics provided as to non-performance-based vocational education and performance-based vocational education.

LEARNING ACTIVITIES

1. READ the Glossary of Terms for Module One. Check your knowledge of the terms by completing Self-Check I and comparing your responses with those in the module.
2. READ Section I - Accountability as a Tool for Improvement.
3. READ Section II - Implementing Performance-Based Vocational Education.
4. READ Section III - The Ideal Fully Individualized, Self-Paced Approach.
5. READ Section IV - A Systematic Approach to Implementing Performance-Based Vocational Education.
6. READ Section V - A Case Study - Jim and Meg Discuss the Relationship Between Performance-Based Vocational Education and Individualized Instruction in South Carolina.
7. EVALUATE your present program using the PBVE Rating Chart - Do You Really Have a Performance-Based Program?
8. Turn to the CHECK-OUT ACTIVITY, p. 15, and follow the instructions.

GLOSSARY OF TERMS

In this module there are terms used with which you may not be familiar. Read through the glossary. Then, check your knowledge by answering Self-Check 1.

Accountability – the theory that teachers and school systems may be held responsible for actual improvement in pupil achievement and that such improvement is measurable through tests of teacher effectiveness constructed by outside agencies.¹

Independent Study – a form of individualized instruction in which the learners are free to select both objectives and learning activities. Usually, but not always, the learner is given almost complete freedom of time.

Individualized Instruction – that organization of instruction and instructional materials which maximizes student freedom to learn in accordance with his/her own interest and needs.

Mastery – meeting all of the specified minimum requirements for completion of a learning task.³

Mastery Teaching – a form of instruction which emphasizes the learner's total achievement of selected performance standards regardless of the time required.

Open Entry – Open Exit – a provision for the student to enter an instructional program at any time, as well as the opportunity to leave the program at any time with a documented record of the individual's performance.³

Performance-Based Vocational Education – an educational program in which the tasks (or skills) to be acquired and demonstrated by the student as well as the criteria (standards) to be applied in assessing the performance of such tasks (skills) are made explicit, in advance of instruction; the student is held accountable for meeting these criteria; and the instruction is organized around those tasks (skills).

Self-pacing – an arrangement, particularly in programmed instruction, whereby provision is made for the individual student to set his/her own schedule for learning, or rate of achievement and to monitor his/her own progress.⁴

Norm-referenced test – test used to determine how well a student performs a given task relative to other students in a class.

¹ Carter V. Good, ed., *Dictionary of Education* (New York: McGraw-Hill Book Company, 1973), pp. 5-6.

² *Individualizing Instruction for Competency-Based Education*. (Tallahassee, FL: State of Florida, Department of State, 1976), p. 25.

³ *Ibid.* p. 25.

⁴ Carter V. Good, ed., *Dictionary of Education* (New York: McGraw-Hill Book Company, 1973), p. 525.

DO NOT WRITE ON THIS SELF-CHECK!!

SELF-CHECK 1

Directions: On a separate sheet of paper match the following terms with their definitions. Check your answers at the bottom of the page. If you did not score 100%, go back and review the GLOSSARY.

DEFINITIONS

1. - an educational program in which the tasks (or skills) to be acquired and demonstrated by the student as well as the criteria (standards) to be applied in assessing the performance of such tasks (skills) are made explicit, in advance of instruction; the student is held accountable for meeting these criteria; and the instruction is organized around those tasks (skills).
2. - that organization of instruction and instructional materials which maximizes student freedom to learn in accordance with his/her own interest and needs.
3. - an arrangement, particularly in programmed instruction, whereby provision is made for the individual student to set his/her own schedule for learning or rate of achievement and to monitor his/her own progress.
4. - the theory that teachers and school systems may be held responsible for actual improvement in pupil achievement and that such improvement is measurable through tests of teacher effectiveness constructed by outside agencies.
5. - meeting all of the specified minimum requirements for completion of learning task.
6. - a provision for the student to enter an instructional program at any time as well as the opportunity to leave the program at any time with a documented record of the individual's performance.
7. - a form of individualized instruction in which the learners are free to select both objectives and learning activities. Usually, but not always, the learner is given almost complete freedom of time.
8. - a form of instruction which emphasizes the learner's total achievement of selected performance standards regardless of the time required.
9. - test used to determine how well a student performs a given task relative to other students in a class.

TERMS

- a. Accountability
- b. Independent Study
- c. Individualized Instruction
- d. Mastery
- e. Mastery Teaching
- f. Open Entry--Open Exit
- g. Performance-Based Education
- h. Self-pacing
- i. Norm-Referenced Test

Answer Key

1. g, 2. c, 3. h, 4. a, 5. d, 6. f, 7. b, 8. e, 9. i

SECTION I - ACCOUNTABILITY AS A TOOL FOR IMPROVEMENT

The demand for accountability is permeating all areas of life; education is no exception. Vocational education is especially vulnerable. A special task force for the Secretary of Health, Education and Welfare in 1973 stated in their report - *Work in America* - that, "Vocational Education in the high schools has failed to give students useful skills or place them in satisfactory jobs."⁵

Thus the public, and rightly so, is demanding to know whether or not tax dollars allocated to vocational education are being spent wisely.

But neither the government nor the public are as interested in vocational education in this state as are the 2600 vocational teachers who plan programs for, and teach the 146,000 students enrolled in vocational courses in South Carolina.

Vocational teachers would like to see the effectiveness of their programs expressed in quantitative, measurable terms - not just to justify program expenditures, but to serve as feedback to them and their students in order to facilitate effective and efficient student learning.

Improving the effectiveness of the already high quality programs is the major concern of South Carolina's vocational teachers. Although accountability may be used as a means of justifying the expenditure of federal funds, it serves a much more immediate purpose in helping teachers evaluate the effectiveness of their programs.

In order for vocational education programs to be accountable, they must have valid, measurable objectives. Then, and only then, can vocational education answer the call for accountability. This attempt to quantify the effectiveness of vocational education has led to an interest in performance-based vocational education.

⁵Special task force to the Secretary of HEW 1973, cited by J. Robert Warmbrod, *The Liberalization of Vocational Education* (Danville, Illinois: The Interstate Printers and Publishers, 1974), p. 1.

Performance-Based Education

What is performance-based vocational education?

Performance-based vocational education is an educational program in which the tasks (or skills) to be acquired and demonstrated by the student, as well as the criteria (standards) to be applied in assessing the performance of such tasks (skills), are made explicit in advance of instruction; the student is held accountable for meeting these criteria and the instruction is organized around those tasks (skills).

In simpler language, performance-based vocational education says that:

1. Instruction is based on job-relevant tasks.
2. Students are told (in advance) exactly what they will be given, what the task is and how well they will be expected to perform the task. (In other words, objectives are stated in behavioral, measurable or observable terms.)
3. The final test is always the performance or mastery of the task.

There is nothing new or dramatic about these concepts; as a matter of fact, many, if not most, vocational teachers are already using these practices to some degree.

What is new and exciting is that:

1. A statewide effort is being made to provide teachers with a systematic approach for modifying their present curriculum or building new curriculums which reflect (more than ever before) the concepts embodied in performance-based education.
2. Not only will the state provide a systematic approach, but it will also provide assistance to teachers in obtaining validated, job-relevant tasks, performance objectives, and more objective student assessment devices, and (in some cases) teaching materials.

SECTION II IMPLEMENTING PERFORMANCE-BASED EDUCATION

In order that we can implement performance-based vocational education and achieve greater individualization, it is necessary that we, more than ever before,

1. Base our instruction on the tasks that workers do.
2. Tell our students (before they do a task) exactly what they will be given, what the task is, and how well they are expected to do the task.
3. Organize our courses by task.
4. Develop and package teaching materials for each task so that (when desirable) the student can study independently and at his/her own pace until the task is mastered.
5. Tailor instruction for each student (select the tasks more appropriate or useful to each student).
6. Test our students on the mastery of the task, not so much on what facts they know about the task.
7. Certify our students as to whether or not the tasks were completed.
8. Provide students opportunities for self-pacing.

Approaches to Performance-Based Education

The major priority for change is the incorporation of the concept of performance-based vocational education into our current programs through the use of job-relevant tasks and performance objectives generated from these tasks.

However, the plan will also suggest a delivery system built around three approaches. These three approaches are essentially three levels of individualization starting with the traditional program, progressing to a more individualized approach and leading to a fully individualized approach. Described in more detail, these three approaches are as follows:

1. The Group Approach

The teacher uses whatever method he/she has been using (sometimes called traditional). The only difference in the instruction is that what is being taught is based on job-relevant tasks which have been converted to performance objectives. Students are told in advance what these objectives are and how well they are expected to perform. The major type (mode) of instruction is group.

2. The Combination Approach

The second approach or level of individualization is called the combination approach in which students are allowed to move at their own rate, but within specific time frames. The use of both the group and self-paced modes allows more flexibility than is possible in the traditional method.

3. Self-Paced Approach

Finally, at the highest level of individualization and with almost complete flexibility of time, is the self-paced mode. This approach allows students to move at their own pace (self-pacing) and theoretically enter or depart the program at different times during the year (open entry—open exit). In practice this is frequently not possible.

While any of these approaches can accommodate the concept of performance-based education, most vocational educators will reject extremes in their instructional methods. Few, if any, believe that tasks can be learned if the student does nothing more than listen, as part of a group, to a lecture. At the other extreme, the self-paced mode has some serious limitations. Interaction among students in a group and the opportunity to exert leadership and develop self-expression in a group are desirable experiences which cannot be fully achieved through individual study. And, sometimes, when students have common interests, needs and learning styles, group instruction may be a very efficient mode (approach).

Even if a fully individualized self-paced approach were considered the most desirable approach, it would be almost impossible to provide the support materials necessary for implementation, to say nothing of the management problems involved.

It may, however, be feasible to use the fully individualized mode for some courses or units within a course. At this time, however, it would seem that the combination approach will be the most feasible and desirable in most vocational courses.

However, because individualized instruction seems to facilitate, or be the key to, several related concepts (mastery teaching, self-pacing, performance testing, etc.) which could make vocational programs more effective, it is felt that vocational teachers should take stock of their present curriculums and, after weighing the advantages and disadvantages of each approach, determine whether or not further individualization would be helpful.

SECTION III THE IDEAL FULLY INDIVIDUALIZED SELF-PACED APPROACH

The ideal fully individualized and self-paced performance-based program was described at the EPDA workshop on competency-based vocational education as follows:⁶ (Note that we will substitute "performance-based vocational education" for "competency-based vocational education")

A fully systematized program that incorporates all the essential concepts of performance-based vocational education might exhibit many of the following characteristics. This program description assumes the removal of all the traditional constraints of course structure, administrative procedures, and instructional clock-hour requirements. Few existing programs incorporate all of these characteristics:

1. The student's technical preparation is completely individualized and personalized. Students must be able to demonstrate occupational competencies, but they do not have to take any prescribed set of learning experiences.
2. Entering students confer with a resource person (or instructor), and together they plan a program based on the student's personal vocational needs, interests, and goals.
3. All students are expected to demonstrate a central core of occupational competencies. Another set of objectives, while recommended, are negotiable and are considered optional competencies.
4. As a student progresses through the performance-based vocational education program, his/her objectives may be re-planned, based on personal development and on needs determined by experience in the program.
5. Resource persons are always available to assist students in working through module learning activities, to suggest additional experiences, to critique student products and performance, and to help solve procedural problems.
6. All instruction is based on individualized learning (probably using modules or packages). Students have the opportunity to design alternative learning experiences in order to acquire necessary competencies.
7. Students are called together as desirable for interaction activities (small-group work, or class discussion of general topics).
8. Skilled practitioners from the occupational area are used as resource persons as needed to help students with special technical problems.
9. Time is not a factor in the student-program of progress; mastery of competency is.
10. Credits are awarded to students on the basis of the number of modules successfully completed or competencies achieved. Each module has an assigned value of a fraction of a semester hour. A student is expected to complete a minimum number of modules each semester.
11. Student letter-grades are replaced by a simple "Pass" - "No Credit" system. Students who meet the criteria of a module are awarded a grade of "Pass" for that module on their official records. Students not meeting the criteria have nothing entered on their official records.
12. Students are granted diplomas or certificates by meeting the school's standards for demonstrated occupational competencies and accumulating the minimum number of credits.
13. Upon completion of the program, students receive a standard certificate and special performance-based vocational education transcript. The transcript, which is furnished to prospective employers, includes (1) a complete record of the occupational competencies demonstrated, and (2) evaluations of the student by resource persons.

⁶ EPDA Regional Workshop, "Competency-Based Vocational Education: Principles, Prospects and Problems" (unpublished paper, Lexington, KY, April 1976), pp. 10-12.

The idealized program just described attempts to incorporate all of the intended advantages of performance-based vocational education when the fully individualized approach is used, and to maximize its impact. Such a total replacement of the existing structure and traditions of vocational education programs may be, however, a difficult experience for the faculty and students. All the problems of change and adjustment come at once and must be resolved rapidly or expediently. Most schools will find it easier to develop the new performance-based vocational education program gradually, proceeding with the development plan as problems are solved and as resources allow.

CHARACTERISTICS OF PERFORMANCE BASED VERSUS TRADITIONAL VOCATIONAL PROGRAMS

A comparison of performance based programs with our present programs may be helpful. The following comparison provided by the EPDA workshop on competency based Vocational Education, although deterministic, is representative of the contrasting contrasts.

Characteristics of PBVE Programs	Characteristics of Traditional Vocational Program
1. The main indicator of the student's achievement is his/her ability to effectively and efficiently do the job for which he/she is preparing.	1. The main indicators of the student's achievement are his/her knowledge of the subject and ability to tell how the job for which he/she is preparing may be done effectively and efficiently.
2. Once a student has demonstrated ability to do the job for which he/she is preparing, he/she may do it after having completed the preparation. Time is not a factor. The student may finish earlier than others, or take more time than usual if needed.	2. The student operates within a specified time frame such as an academic year or semester. Requirements of clock-hours of instruction are generally adhered to.
3. The criterion of success is demonstrating one's ability to do the job. Mastery criteria are used to determine how well the student performs. Students must satisfy these criteria if they are to be considered competent.	3. The criteria of success are school letter grades which indicate the extent to which the student knows the required subject matter.
4. There is a minimum of concern for entrance requirements. Students are accepted at their level and instruction tailored accordingly.	4. Entrance requirements are important concerns. Students not meeting requirements are not admitted.
5. Flexible scheduling of learning activities is essential to provide for individual differences among students. This allows for year-round educational opportunities and frequent enrollment periods.	5. Students are scheduled for instruction into fairly rigid blocks of time. Confinement to the academic year and limited registration dates are standard practices.
6. There are no fixed rules to how, when or where learning is to be accomplished.	6. On campus classroom teaching is the most common approach to instruction. Lengthy on-campus required attendance is standard.
7. Opportunities are provided to acquire competencies on the job or in practical field experiences.	7. Practical field experiences are limited.

⁷ Ibid. EPDA Regional Workshop, p. 8.

SECTION IV - A SYSTEMATIC APPROACH TO IMPLEMENTING PERFORMANCE-BASED VOCATIONAL EDUCATION IN SOUTH CAROLINA

The major elements of the total system of performance-based vocational education are as follows:

First, course needs assessment

This involves conducting a needs assessment which includes a consideration of job opportunities, manpower needs, and placement after training.

Second, task identification

This involves a search of literature for existing task lists, and/or selecting a random sample of workers and surveying these workers to determine tasks performed.

Third, the development of performance objectives, criterion-referenced measures and performance guides

This involves preparing a performance objective based on each task, developing a criterion test for each performance objective and preparing a list of procedural steps for performing each task.

Fourth, classroom delivery package

This involves deleting performance objectives inappropriate for secondary level courses, determining supplemental objectives relating to basic theory (for example, the principles of the 4-cycle engine) and sequencing and clustering the objectives.

This step also involves

- selecting a teaching strategy or approach (it is at this point that the degree of individualization will be determined)
- developing the instructional content for each of the performance objectives
- selecting and/or developing instructional materials
- and finally, determining the procedures for administering the criterion-referenced measures

Fifth, the management plan

The management plan involves analyzing what the teacher needs to do as well as what the student needs to do. It also involves developing a record keeping system and planning instructional materials storage.

The management plan also involves planning instructor performance as he/she attempts to transfer knowledge, direct the acquisition of knowledge, demonstrate and guide learning activities, and evaluate student performance.

Sixth, field test

This involves field testing recommended materials and proposed teaching strategies.

Seventh, classroom implementation

This involves producing new materials, conducting teacher workshops, distributing materials and developing an individual management plan.

Eighth, continuing review

This will involve obtaining criticisms and suggestions for changes needed in all elements of the system.

Again, this plan involves nothing that many vocational teachers are not now doing, to some degree, in a less formal way. But, never before have teachers had the help and support now offered through V-TECS and the state.

It would probably be impossible for each teacher to perform a thorough search of literature, conduct a thorough task analysis and write performance objectives, criterion-referenced measures and performance guides. There just isn't that much time available when the instructor is teaching a normal schedule. There is little time available for selecting, sequencing and clustering objectives; no is there adequate time available in the normal teaching schedule for the instructor to develop instructional materials.

Fortunately, for the first time in the history of vocational education, the Vocational Education Consortium of States (V-TECS) is providing member states with catalogs of performance objectives, criterion-referenced measures and performance guides generated from validated job-relevant tasks. Although this does not relieve the teacher from all responsibility for generating such task lists, it does provide an exceptionally comprehensive and valid source.

Help will also be provided through the teacher committees (or writing teams) who will supplement, cluster and sequence performance objectives into a general curriculum. And finally, these writing teams will, in some cases, prepare modules to be used mainly in helping attain greater individualization through self-instructional materials which allow for self-pacing. Teaching materials for group instruction may also be developed,

In summary, the implementation of performance-based vocational education would be almost impossible were it not for the availability of catalogs through V-TECS and help from teacher writing teams in each vocational program area. Fortunately, through these efforts, steps one through four of the system have, to a large degree, already been accomplished.

In summary, it is hoped that with the help of:

1. the V-TECS consortium in providing catalogs of performance objectives, criterion-reference measures, and performance guides,
2. the Office of Vocational Education in providing the overall supervision of the system to include conducting needs assessments, designating priorities, allocating funds, and establishing guidelines and policies,
3. and the Vocational Education Media Center in providing assistance in developing curriculum and curriculum materials,

the educational effectiveness of South Carolina's vocational education program can be improved by a move toward a more nearly performance-based instructional program.

SECTION V – A CASE STUDY – JIM AND MEG DISCUSS THE RELATIONSHIP BETWEEN PERFORMANCE-BASED VOCATIONAL EDUCATION AND INDIVIDUALIZED INSTRUCTION

The following case study describes how a vocational teacher explained performance-based vocational education to a fellow instructor. Keep in mind the performance-based vocational education points presented in this module.

Over a cup of coffee in the area vocational center teacher's lounge, Meg Martin continues her discussion of PBVE with Jim Johnson.

Meg asks, "PBVE says nothing about individualized instruction. Please tell me how in the world you manage to bring in the concept of individualized instruction every time we discuss PBVE?"

Jim sips his coffee before answering Meg. She certainly feels she has a valid point. Jim wonders how he can answer this question so that he communicates his position clearly and distinctly.

"Meg, you and I agree that PBVE is an educational program in which tasks (or skills) to be acquired and demonstrated by the student as well as the criteria (standards) to be applied in assessing the performance of such tasks (skills) are made explicit and in which the student is held accountable for meeting these criteria," offers Jim.

Meg agrees, "So far, we are in complete agreement. So how do you get off on this individualized instruction concept?"

Jim interrupts, "Look, Meg, let's break our definition down in simpler language. What we are saying is that PBVE is first of all based on job-relevant tasks; secondly, students are told in advance exactly what they will be given, what the task is and how well they will be expected to perform the task. I believe our point of difference comes in the delivery system for implementing PBVE. You recall that our plan for implementing PBVE suggests three approaches."

"O.K., Jim, I realize that but you still haven't explained how individualized instruction is mixed in," retorts Meg.

"Meg, the three approaches are essentially three levels of individualization starting with the group approach, moving to a combination approach, and ending with a fully self-paced approach," Jim replies.

Meg says, "Jim, that sounds very academic, but can you explain what you mean by individualization in our traditional approach?"

After careful thought Jim replies, "What I mean is that you as a teacher may continue to use whatever method you have been using. The only difference is that your instruction is based on task lists which have been converted to performance objectives. Students are told in advance what these objectives are and how well they are expected to perform. A move toward individualization is achieved for at least two reasons. First, the student knows how well he/she must perform the task. In other words, he/she knows the minimum level of proficiency required for mastery. The student is, therefore, tested on mastery, not on how well he/she performs in relation to other students. Secondly, the student is not tested on how long it takes him/her to master the task; time will vary from one student to another. When time becomes a factor which is variable rather than fixed, a move toward the more individualized approach is accomplished.

"Let's carry this a step farther and look at the combination approach to individualization. Again, performance objectives are the bases of instruction and the group approach will still be used, but self-pacing with various materials and methods are introduced.

"Finally, the fully individualized program with performance-based objectives as a base introduces the concepts of independent study, variable time, self-pacing, mastery and open entry—open exit."

Meg gets up from her chair and says, "Jim, your answer to my question, 'How does

individualized instruction fit into PBVE?" sounds fairly straightforward, but I won't really be convinced until I have time to think about it more."

They return to their classes but not before making plans to meet for coffee the next day.

Review the case study.

Do you think Meg has a legitimate question?

Did Jim support his idea with valid information?

Make your comments on a separate sheet of paper.

Read the model critique and see if you covered the same points.

MODEL CRITIQUE

Meg was absolutely right in stating that PBVE says nothing about individualization. True, in the definition the three elements of performance-based education presented are:

1. the student is told in advance,
2. the task he/she is to perform, and
3. the standard or degree of proficiency he/she is to master.

Jim went beyond this definition of PBVE to help Meg understand that PBVE and individualized instruction are considered a part of one system. What Jim also said was that individualized instruction is one

approach to a delivery system for PBVE. Furthermore, individualized instruction is enhanced by PBVE. In addition to basing instructions on performance objectives, the five concepts he introduced relative to individualized learning were:

- Independent study
- Self-pacing
- Open entry—open exit
- Mastery of task
- Variable time

A PERSONAL SELF-CHECK

Do You Really Have A Performance-Based Program?⁶

Directions: Please record "Yes" or "No" to the following questions on a separate sheet of paper.

1. Do I have information on employment opportunities?
2. Is this information current (less than two years old)?
3. Do I have information on future employment opportunities for my students?
4. Does my student placement record support need for continued training?
5. Do I have specific job title(s) identified for my program?
6. Have the specific tasks and competencies for these job title(s) been identified?
7. Do I have specific lists of tools, equipment and supplies needed to prepare students for these job titles?
8. Do I know if the tasks I teach my students are still performed on the job?
9. Do I know which tasks consume the most and least amount of worker's time and all in between?
10. Do I know which tasks are most difficult, least difficult and all in between?
11. Do I know which of these tasks are performed by entry level workers (first 12-24 months on job)?
12. Do I consider these factors (questions 8-11) as I establish relative importance of the tasks I teach my students to perform?
13. Do I have a specific performance objective and a job-based measure for success for each task my students are to perform?
14. Do the materials I use "talk about," "show examples," and provide "learning practice"?
15. Do I collect information on student performance which indicates the probable cause of failure of any materials/media to bring students to the job-based measure of success?
16. Do I develop new materials and media if my students have difficulty meeting the job-based measure of success?
17. Do I have a means of keeping my task analysis up-to-date with changes in the jobs for which my students are preparing?

Record other questions you may want to jot down for your own self-evaluation and use on a separate sheet of paper.

Note: (All answers should be "Yes" if you want a good performance-based program).

⁶Ben A. Hirst, "The Components of Competency-Based Vocational Education," *American Vocational Journal*, Volume S2, No. 8, (November 1977), p. 34.

CHECK-OUT ACTIVITIES

Inform your instructor that you are ready to be tested. You will be provided with a copy of a multiple choice/matching test and an answer sheet. Record your answers on the answer sheet and return both the test and the answer sheet to the instructor.

13

15