This module on evaluation procedures for local programs is one of a set of five on evaluation and research and is part of a larger series of thirty-four modules constituting a core curriculum for use in the professional preparation of vocational educators in the areas of agricultural, business, home economics, and industrial education. Following the module objective and overview and a bibliography of suggested resource materials (readings) for the entire module, four lessons are presented: (1) reviewing California requirements for vocational education programs; (2) verifying California standards in a district; (3) identifying evaluation data; and (4) review of concept development. Each lesson contains the objective, overview, a list of suggested learning activities, and a list of suggested resources (readings). Concluding the module is a pre/posttest and an answer key. (The modules have been field tested in various educational settings, including bachelor and masters degree programs, and are considered adaptable to many instructional styles and student entry levels. CE 018 935-937 contain working papers and other materials used in the development of the module series.) (JH)
Common Core Curriculum for Vocational Education

Module Writer: Ann Bauer, M.A.

Category G: EVALUATION AND RESEARCH

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1978
ABOUT THIS MODULAR CURRICULUM

This module is one of a series of 34 modules intended for use in the professional preparation of vocational educators in the vocational education service areas of agricultural, business, home economics, and industrial education. The curriculum can be adapted to various styles of instruction and to various entry-levels of students.

It is recommended that an instructor planning to use these modules review each category to determine if any modification is needed in the objectives and suggested activities so that they conform with local institutional policies and/or vocational education programs. It is also suggested that resources and activities be identified for the specific entry-level of the student to be served.

The activities listed are suggested. The use of any other activity or reading reference which the instructor believes would help to accomplish the objectives of that lesson is encouraged. The choice of the teacher to use the entire module, either through group reports or individualized assignment, will be related to individual student competency requirements.

Since many modules strongly recommend the use of local administrative personnel and community resources, it is suggested that all site visits and requests for assistance in the community be coordinated by or cleared through the instructor. The instructor may wish to distribute these tasks among the student group and across the community with the class report system being used to disseminate the information gathered.

These modules have been field tested in various settings. They have been used with students working toward a bachelor’s or master’s degree and with students seeking the designated subjects credential in California. Some modules were tested through student independent study, others as part of total class assignment, and still others as an alternate activity. Workshop participants examined the materials in terms of content, activities, and resources. The adaptability of this curriculum is one of its strengths.

The materials could not have been completed without the participation and contribution of many individuals. Chief among these persons were the module writers, workshop participants, field-test instructor, and students. Conference presenters and evaluators also contributed to this project. Proceedings of the workshop are available upon request.

If we can provide you with information or help in using this curriculum, please feel free to contact us.

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COMMON CORE CURRICULUM FOR VOCATIONAL EDUCATION

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Module Objective

Upon satisfactory completion of this module, the vocational education student will be able to (1) collect data on which to compare state requirements, regulations, standards, and district compliance; (2) develop concepts essential to vocational education.

Module Overview

The primary function of education evaluation, according to Sjogren is "to monitor the program and provide data information for decision-making in regard to rationales, content, recruitment, materials, methods, and outcome." These are the essential elements of a comprehensive evaluation design.

It is the primary purpose of this module to develop competencies which will enable the vocational student to provide data information to promote desired change within a given vocational education program.

Since evaluation may bring about change, and change affects the entire system, it is important that anyone working in vocational education should be aware of the comprehensive totality, the cause-and-effect relationships, existing within that system.

Learning experiences permit the vocational pre- and inservice teacher to survey the entire system as it "should be," according to standards set up in compliance with the Vocational Education Act of 1976 (PL 94-582) by the State of California.

In addition to developing an understanding of the interrelatedness of the total program with each of its parts, the vocational education student is provided with opportunities to develop concepts related to any vocational program.

This module is divided into four lessons:

(1) Reviewing California Requirements for Vocational Education Programs

(2) Verifying California Standards in a District
(3) Identifying Evaluation Data

(4) Review of Concept Development: Vocational Education
Resource Materials for Completing the Activities in this Module


Auvil, Mary. (Under the direction of Theodora Pailola and Peter Kneedler) Follow-up Study 1972-73 Vocational Education System Reviews. Office of Virgil S. Hollis, Marin County Superintendent of Schools, Marin County Board of Education. 1974.


Lesson One: Reviewing California Requirements for Vocational Education Programs

Objective

Upon satisfactory completion of this lesson, the vocational education student will be able to (1) correctly list goals and constraints; (2) name and relate standards to the 12 major functions of vocational education, as established by the State of California; and (3) identify school/community members essential to provide community needs input.

Overview

This lesson is based on the assumption that it is important to provide an overview of the California Five-Year State Plan for Vocational Education Programs, in order to compare state goals and functions to a given district operation.

In this lesson, vocational students are provided a means to view the totality, the functioning elements, within a given district vocational program and to see how these elements relate to and affect one another in meeting both State vocational education program requirements and the vocational needs of a school/community.

The lesson provides an experience to the vocational student in determining whether the 12 required elements of a vocational education program are present in a district and if these elements function to provide formative and summative evaluation input.

Suggested Activities

(1) Read and/or review:

   c. The 12 Functions of a Vocational Education Delivery System.

(2) Using the form, "Students for Vocational Education Programs," pages 3, 4, and 5, or one you developed:
a. State the goals and constraints presented as standards for California vocational education programs.

b. Relate the standards to the 12 functions essential to a California vocational education system (see "Directions to Students" on form provided).

c. Identify the school/community members who would provide input when developing, implementing, and/or evaluating a vocational education system.

(3) Working with other class members, compare and discuss your form.
As a group, develop and hand in answers to the following questions:

a. Are there logical reasons why the 12 functions do not subsume all standards? List reasons why; or, provide what you decide is the thinking behind choosing the 12 functions as essential to a District Vocational Education Program.

b. In providing a data base for evaluating a vocational education system, is it essential to consider all standards provided? Defend your answer.

(4) Develop a question concerning this framework for evaluating a program.
Turn in signed answer sheet, question, and filled forms.

Upon successful completion of assigned activities, proceed to Lesson 2.
STANDARDS FOR VOCATIONAL EDUCATION PROGRAMS

Directions to Students:

Using the form provided or developing and using your own, identify and list the goals and constraints provided as standards for vocational education programs.

List general program standards; special program standards; and work experience standards.

Relate these standards to the 12 functions, or "characteristic activities," described as relevant to the requirements and objectives of vocational education, by writing in the name of the function opposite the standard under which it is subsumed. (NOTE: All standards will not be subsumed under the 12 functions.)

Identify the people who, working together, should share in planning, implementing, and assessing a district vocational program. (Write the number of the individuals/groups listed below in the appropriate rectangle on the form.)

Ask for instructor conference; discuss form; make changes if needed.

1. District administrator
2. County coordinator of vocational education
3. Vocational coordinator
4. School board members
5. Representatives of community groups
6. Representatives of EDD
7. Advisory committee members
8. Supervisors
9. Media representatives
10. Audiovisual personnel
11. Resource center personnel
12. Department chairperson
13. Director of Guidance
14. Counselors
15. Teachers and students, vocational program
16. Teachers and students, non-vocational program
17. Junior high school counselors/teachers
18. Adult education principal
19. Community college counselors/instructors
20. Private employers
21. Maintenance staff

Lesson 2

Given a written district review of a vocational education program, identify standards, functions, and qualified members of the school/community who appropriately participated in planning, implementing, and assessing a district vocational program. On the form provided, or using your own, check to indicate "standards" present (on the form, check if present, under column marked "S"). In a similar way, indicate "functions" which are ongoing ("F" column on form provided); and school/community members' input ("Q" column on form provided) using a plus sign (+) for complete input; a minus sign (−) when input is lacking or incomplete; and a question mark (?) if unable to identify.

In the last column on the form, check to indicate evidence of on-going and terminal evaluation provided within the district program.

Plan conference with instructor concerning completed form. After discussion, make any changes agreed upon.
STANDARDS FOR VOCATIONAL EDUCATION PROGRAMS*
(Funded under Subpart 2 of Public Law 94-482)

Please read "Directions to Students" before filling out this form.

GENERAL GOAL(S) OF VOCATIONAL EDUCATION PROGRAMS:

CONSTRAINTS OR LIMITATIONS:

<table>
<thead>
<tr>
<th>GENERAL PROGRAM STANDARDS (S)</th>
<th>12 FUNCTIONS OF VOC. ED. (F)</th>
<th>QUALIFIED PEOPLE INVOLVED IN PLANNING, DEVELOPING, ASSESSING (Q) (Identify by number)</th>
<th>(&quot;4&quot; = &quot;?&quot; ) IDENTIFIED WITHIN A GIVEN DISTRICT PLAN</th>
<th>IDENTIFIED ASSESSMENT FORMATIVE (on going) SUMMATIVE (terminal)</th>
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### General Program Standards (S)

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<th>Functions of VOC, ED. (F)</th>
<th>Qualified People Involved in Planning, Developing, Assessing (Q)</th>
<th>Identified Within A Given District Plan</th>
<th>Identified Assessment</th>
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<td>(Identify by number)</td>
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<td>Formative (on-going)</td>
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<td></td>
<td></td>
<td>Summative (terminal)</td>
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</tbody>
</table>

### Special Program Standards

### Work Experience Education

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<th>S</th>
<th>F</th>
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EVALUATION PROCEDURES FOR LOCAL PROGRAMS

Lesson Two: Verifying California Standards in a District

Objective

Upon satisfactory completion of this lesson, the vocational student will be able to: (1) review a district plan and compare standards, functions, and members of the school community who participated in the review with California vocational education standards; and (2) list ways in which standards of a program contribute to "accountability" in education.

Overview

After establishing a model based on California state requirements, a logical next step is to compare the "copy" to the "model." The model is, of course, the set of standards for a California state vocational education program; the copy is the district plan. State standards establish a basis for vocational education program accountability.

The vocational education student may be questioning the need for involvement in evaluating a total vocational education program, rather than his/her instructional program. Participation in the total evaluation of a program and in the evaluation of an instructional program, meeting Stull Bill requirements for accountability, are equally important.

At the end of this lesson, the vocational student will be able to identify the basic elements present in a given vocational education program and to answer these questions:

1. How completely does the program adhere to the "model"?
2. Have school/community members been used appropriately for input?
3. Does this vocational program meet the requirements of the Stull Bill for accountability?

Suggested Activities

1. Identify (1) standards, (2) functions, and (3) use of appropriate community members for input in developing, implementing, and evaluating vocational programs. Use the instructor/student-corrected form as model. See "Directions to Students," Lesson 2, p. 3.

2. Using the district vocational program, identify and list:
   a. Goal(s) of the district for its vocational instruction program
   b. Measurable objective for each of the 12 functions.
c. Composition of advisory committees

d. Provisions for feedback existing within the functioning of the district vocational program

(3) Develop a graphic representation of a vocational instruction program as meeting diverse human needs, leading to satisfaction in a changing world of work. Present and explain to the class.

(4) Develop a graphic representation which incorporates the place of a vocational education program as an essential part of "accountability." Present and explain to the class.

Suggested Resources


Guide for Reviewing a District Vocational Education System. (Latest edition.)


Upon successful completion of assigned activities, proceed to Lesson 3.
Lesson Three: Identifying Evaluation Data

Objective

Upon satisfactory completion of this lesson, the vocational student will be able to determine whether the district plan data collection provides formative or summative input.

Overview

Any system, whether it is found in industry or in education, is concerned with "process" and "product." The process of vocational education is similar to the works of a clock, with interdependent parts making it possible to tell the time on the face of the clock. In vocational education, the "works" which actualize the system are, by predetermined goals, seeking to provide an output or products of students with particular occupational competencies.

The organization of vocational education standards under the 12 functions of vocational education prepared by the California State Department of Education has provided a working system. This lesson is concerned with the efficacy of a particular system in vocational education in actualizing its program.

The word "evaluation" refers to the gathering of facts and information through graphs, charts, and other visual media, as well as by observation (data) from which to make decisions. In evaluating the process, or actualization, of a vocational program, it is necessary to see whether such a system has provided means to operate as planned. Evaluation is concerned with an on-going monitoring of both process and product (formative evaluation). It is also concerned with an assessment concerning the efficacy of the system at a given point in time (summative evaluation). Supported by gathered data, both formative and summative evaluation form the basis for decision-making.

At the end of this lesson, the vocational education student will be able to answer the following questions:

What essential generalizations may be made about the development and actualization of any school system's educational program?

What facts and information are essential to develop a basis for making decisions regarding efficacy and needed change within a vocational education system?
What kinds of facts and/or information should be collected and what observations made in order to see whether a school or district has provided the means for on-going and periodic decision-making?

Suggested Activities

1. Develop generalizations which state the essential functions of any education system.

2. List all quantitative data provided by the district, such as graphs, charts, diagrams, and other visual aids.

3. State in your own words the difference between formative and summative evaluation.

4. Check, on the form provided (see "Directions to Students," Lesson 2), indicating the presence of formative and/or summative data.

   Write a statement defending your reason for assigning the data gathered as either formative or summative, or both.

5. List the information essential to implement the following program components:
   a. Needs and opportunities information
   b. Planning
   c. Student services
   d. Instruction
   e. Educational accountability

Suggested Resources


California State Department of Education. Guidelines for Reviewing a District Vocational Education System. Sacramento: (recent issue).

California State Department of Education. The 12 Functions of Vocational Education. Sacramento: 1975.


Upon successful completion of assigned activities, proceed to Lesson 4.
EVALUATION PROCEDURES FOR LOCAL PROGRAMS

Lesson Four: Review of Concept Development:
Vocational Education

Objective

Upon satisfactory completion of this lesson, the vocational student will be able to (1) develop concepts essential to vocational education; and (2) state generalizations and implications directly related to vocational programs.

Overview

This lesson serves as a review of the module. It is intended to help the vocational education student identify strengths and weaknesses in concept development. It also provides questions which enable the student to identify sources of concept development and to "think through" former learning experiences in this module.

Both individual and group work have been provided in the activities. After answering specific questions, and developing a question thought to be appropriate and relevant to former learning activities and reading, class members will work in small groups to develop and present concepts, generalizations and implications for program evaluation in vocational education.

Suggested Activities

1. Answer the following questions:

   a. Identify the standards not specifically subsumed under the 12 functions for vocational education programs by circling the words referring to standards included under them.

      Advisory committees
      Qualified instructors
      FHA, FFA, HERO, VICA, DECA and other youth organizations
      Planning

      Goals and constraints
      The use of performance objectives
      Counseling and guidance
      Ancillary services

   b. Justify using evidence that standards have been met as a data collection base for evaluation.

   c. Name what you consider as the major function of a vocational education program.
d. Define "educational accountability" and state in your own words how vocational education contributes to both relevance and accountability.

e. Does an identification of all "standards" in an existing vocational education program insure the accountability of that program? Defend your answer in writing.

2. Based on the module's teaching/learning experiences, develop your own question and write out the answer. (Retain for small group presentation—see 3 below.)

3. Working with three other students, discuss each other's questions, adding to and amplifying answers from group input.

4. Within the small group, develop three concepts concerning a school district vocational program, include a generalization and an implication for each concept.

5. As a group, present and defend your concept/generalization/implication development.

6. Each group member will read questions/answers developed in 2, above.

Suggested Resources

All suggested resources, as listed on pages 3 and 4.

Forms identifying and comparing district plans with California vocational education program standards.

The California Pattern: Inservice Education for Homemaking Teachers.

Upon completion of the assigned activities in this module, you should be ready to take the Module Posttest. See your instructor for directions and measurement criteria.
These may be developed in small groups, as suggested in direction No. 4.
EVALUATION PROCEDURES FOR LOCAL PROGRAMS

MODULE PRE/POSTTEST

Student: This pre/posttest is designed to assess your knowledge of evaluation procedures for local programs. Since this module is an individualized and competency-based learning device, you will need to study only those lessons that are presented on the basis of your response to this test.

1. Circle the letter or letters of the statement(s) which most accurately identify the purpose of vocational education:
   a. To prepare youths and adults for gainful employment
   b. To prepare youths and adults for retraining in established and emerging occupations
   c. To establish vocational education for selected youth
   d. To prepare and/or to retrain youths and adults for present and emerging occupations
   e. To prepare individuals for enrollment in advanced vocational training

2. Circle the letter or letters indicating those individuals not eligible for vocational education:
   a. Those of secondary school age or older
   b. Those with physical handicaps
   c. Those who lack academic preparation
   d. Slow learners
   e. Non-English speaking youths and adults
   f. Those of junior high school age
   g. Those who need or can profit from vocational education programs
Pre/posttest (continued)

3. Circle the letter or letters of all schools, which, under public supervision and control, may offer programs of vocational instruction under P.L. 94-182.
   a. Intermediate schools  d. Four-year colleges
   b. Secondary schools    e. Universities.
   c. Community colleges

4. One of the standards listed below is frequently not found as "an integral part of the vocational instruction program." Circle the frequently missing or inactive component:
   a. Use of behavioral objectives d. Youth organizations
   b. Advisory committees       e. Adequate facilities and supplies
   c. Listed job competencies   f. Planned and logical educational instruction sequence

5. Circle the letters of those individuals who most appropriately provide input in establishing educational accountability:
   a. District administrator   d. Counselors  g. School board members
   b. Director of Guidance    e. Students    h. Vocational coordinator
   c. Advisory committee members f. Teachers  i. Private employers

6. Define the following terms:
   a. Educational accountability
   b. Vocational education
   c. Career education
   d. Formative evaluation
   e. Summative evaluation
Instructor: Do not reproduce this page in students' booklets. You must retain it for grading and prescriptive purposes. Answers will vary with individuals. A preferred response might be similar to the answer presented.

1. d. To prepare and/or to retrain youths and adults for present and emerging occupations
   e. To prepare individuals for enrollment in advanced vocational training

2. f. Those of intermediate school age
   (L1)

3. b. Secondary schools
   c. Community colleges
   (L1)

4. d. Youth organizations
   (L2, L3)

5. c. Advisory committee members
   g. School board members
   e. Students
   h. Vocational coordinator
   f. Counselors
   i. Private employers
   (L4)

6. Define the following terms:
   (L4)

   Educational accountability: That educational program which is answerable to its clientele, is relevant to all manner of students, to taxpayers and their evolving definition of the American lifestyle and to employers, and which provides the continuing education necessary in an evolving technological economy.

   Vocational education: That important and integral component of career education dealing with the preparation and/or retraining of youth and adults in present or emerging occupations, including preparation for advanced vocational training.
Pre/posttest Answer Key (continued)

Career education: Educational programs at many different levels designed to help individuals become oriented to select, prepare for, enter, become established, and advance in an individually satisfying and productive career.

Formative evaluation: Evaluations procedures used to diagnose student and/or instructional program improvement needs.

Summative evaluation: Describes the effects of the instructional program and the development of student competencies toward a previously determined end.
Category A: Introduction to Vocational Education
   A-1 History, Philosophy, and Trends in Vocational Education
   A-2 Scope, Function, and Organization in Vocational Education
   A-3 Vocational Legislation
   A-4 Assessing the Job Market and Employment Trends

Category B: Cooperative Relationship
   B-1 Rationale for Cooperative Relationships
   B-2 Advisory Councils
   B-3 Cooperative and Work Experience Programs

Category C: Vocational Students
   C-1 Promoting Vocational Education and Recruiting Eligible Students for Vocational Education
   C-2 Assessing Students' Personal Characteristics
   C-3 Guidance and Counseling
   C-4 Assisting Students with Special Needs in Vocational Education Programs
   C-5 Assessing the Needs of the Disadvantaged Student
   C-6 Developing Student Leadership Qualities in Vocational Education Programs
   C-7 Student Organizations

Category D: Administration and Supervision
   D-1 Fiscal Management of a Vocational Education Program
   D-2 Writing a Vocational Education Project/Budget
   D-3 Record Keeping in Vocational Programs
   D-4 Conference Leadership
   D-5 Selection, Supervision, and Evaluation of Personnel
   D-6 School Law and Its Relationship to Vocational Education
   D-7 Staff Development
   D-8 Implementation of Change

Category E: Curriculum Design in Vocational Education
   E-1 Developing a Curriculum Design in Vocational Education
   E-2 Applying Learning Theory to Vocational Education
   E-3 Instructional Strategies

Category F: Stages and Structure of Curriculum Development
   F-1 Theories in Curriculum Development
   F-2 Building a Curriculum for Vocational Education
   F-3 Applying Curriculum Specifics to Vocational Education
   F-4 Safety

Category G: Evaluation and Research
   G-1 Evaluation Models
   G-2 Evaluation Procedures for Local Programs
   G-3 Introduction to Research Procedures in Vocational Education
   G-4 Research Design in Vocational Education
   G-5 Development of a Research Proposal in Vocational Education