ED 181 800   CE 024 347

AUTHOR   McCaslin, N. L.; Adams, Kay Angona
TITLE   Managing and Evaluating Career Education.
INSTITUTION   Ohio State Univ., Columbus. National Center for
                Research in Vocational Education.
SPONS AGENCY   Council of Chief State School Officers, Washington,
                D.C.; Office of Career Education (DHEW/OE),
                Washington, D.C.
BUREAU NO   554AH70070
PUB DATE   78
GRANT   G0077C0064
NOTE   61p.; For related documents see CE 024 346-348, ED
                132 284, and ED 138 786.

EDRS PRICE   MF01/PC03 Plus Postage.
DESCRIPTORS   *Administrator Guides; *Career Education; *Evaluation
                Methods; *Management Development; *Program
                Administration; *Program Evaluation; Program
                Implementation; State Officials; Statewide
                Planning
IDENTIFIERS   Education Amendments 1974

ABSTRACT
                This guide was prepared to assist state
directors/coordinators of career education in becoming more
knowledgeable about management and evaluation. The purposes of the
guide are to define management and identify basic functions, review
characteristics of managers, and identify evaluation techniques
available to help managers do a better job. The information is
divided into seven units: (1) What Is Management and Its Associated
Functions?; (2) What Are the Characteristics of Successful Managers?;
(3) Evaluation Techniques in Planning; (4) Evaluation Techniques in
Organizing; (5) Evaluation Techniques in Directing; (6) Evaluation
Techniques in Staffing; and (7) Evaluation Techniques in Controlling.
Examples are included in all units discussing evaluation techniques.
(BM)

MANAGING AND EVALUATING CAREER EDUCATION

Prepared for

The Council of Chief State School Officers
1201 Sixteenth Street, N.W.
Washington, D.C. 20036

N. L. McCaslin
Kay Angona Adams

The National Center for Research in Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, Ohio 43210

1978

THE NATIONAL CENTER MISSION STATEMENT

The National Center for Research in Vocational Education's mission is to increase the ability of diverse agencies, institutions, and organizations to solve educational problems relating to individual career planning, preparation, and progression. The National Center fulfills its mission by:

- Generating knowledge through research

- Developing educational programs and products

- Evaluating individual program needs and outcomes

- Installing educational programs and products

- Operating information systems and services

- Conducting leadership development and training programs

The material contained in this document is intended for purposes of information and discussion only. It in no way constitutes an endorsement by, or reflects a position of, the Council of Chief State School Officers.

FOREWORD

We are pleased to present this paper to the Council of Chief State School Officers (CCSSO). This paper has been prepared to assist state directors/coordinators of career education in becoming more knowledgeable about management and evaluation. The need for this publication was identified as a result of both the federal guidelines for state plans related to career education and a survey of the staff development needs of the state directors/coordinators conducted by CCSSO.

The National Center is indebted to Dr. David Jesser, CCSSO, and Ms. Grace Watson of the Office of Career Education in the U.S. Office of Education who were especially helpful in reviewing and providing support, materials and advice for this paper. Appreciation is extended to Drs. N. L. McCaslin and Kay Adams, specialists at the National Center for Research in Vocational Education, who prepared this paper. Appreciation is also extended to the state directors/coordinators of career education who reviewed the working copy of the paper at the Staff Development Work Conference in Windsor Locks, Connecticut on April 6 and 7, 1978.

Finally, a special note of thanks is extended to Ms. Marlene Linton for clerical support and Dr. Jerry Walker, Associate Director for Evaluation, whose division was responsible for conducting this activity.

Robert E. Taylor
Executive Director
The National Center for Research
in Vocational Education

TABLE OF CONTENTS

v

6

MANAGING AND EVALUATING CAREER EDUCATION

INTRODUCTION

Pat Lee is the Coordinator of Career Education in the State of Lafayette. Prior to being se-lected as the state coordinator, Pat was a successful teacher in Columbia, a large metropolitan city in Lafayette. As the state coordinator for Career Education, Pat's many responsibilities in Lafayette include:

- conducting inservice institutes for education personnel;

- training local career education coordinators;

- collecting, evaluating, and disseminating career education materials;

- conducting needs assessment and evaluation studies;

- conducting statewide leadership conferences;

- engaging in collaborative relationships with other agencies of state government and with state organizations representing the business-labor-industry-professional community;

- developing and applying certification studies for local career education coordinators; and

- promoting the adaptation of teacher-training curriculum to the concept of career educa-tion by institutions of higher education.

However, in carrying out these responsibilities, Pat is constantly faced with a number of "other" requirements. For example, representing the state superintendent of schools at a regional teachers meeting, serving on accreditation team visits to local schools, writing proposals for federal funding, and serving on a task force on reorganization of the state education agency. In other words, Pat is . . .

<center>busy, . . . busy, . . . busy.</center>

Pat realized, after joining the state education agency, that there were a number of differences between the responsibilities of a teacher and those of a state level administrator.

As a teacher, Pat's responsibilities included:

- budgets in the hundreds of dollars;

- curriculum concerned with a few courses—generally quite closely related (e.g., algebra, geometry, advanced algebra—or—American history, political science—or—accounting, business law, personal finance, etc.);

<center>1</center>

— decisions related to the day-to-day classroom instructions were generally decided directly by Pat with little input from others; and

— administrative procedures were of little concern to Pat and were primarily centralized with the administrative staff.

In contrast, as a state level administrator, Pat's responsibilities include:

— budgets in the thousands of dollars;

— program concerns of a broader base—including all curriculum areas;

— decisions that are often shared with several persons; and

— administrative procedures that are highly structured.

Consequently, the excellent preparation Pat received to be a teacher was not necessarily the best preparation for a role as the state coordinator of career education.

Pat concluded that the career education coordinator's responsibilities were those of management in contrast to those of teaching.

Similarly, you may have realized that the requirements for a state coordinator of career education are those of management. However, a number of questions about management probably still remain unanswered. For example, What is management? What functions do managers perform? What are the characteristics of managers? What evaluation techniques are available to help you do a better job managing?

The purpose of this paper is to: (1) define management and identify basic functions, (2) review characteristics of managers, and (3) identify evaluation techniques available to help you do a better job managing. The remainder of this paper discusses these three items.

WHAT IS MANAGEMENT AND ITS ASSOCIATED FUNCTIONS?

Although the term management is a commonly used term, we often do not have a clear understanding of the term. Levitt (1976) indicated that:

Management consists of the rational assessment of a situation and the systematic selection of goals and purposes (what is to be done?); the systematic development of strategies to achieve these goals; the marshalling of the required resources; the rational design, organization, direction, and control of the activities required to attain the selected purposes; and, finally, the motivating and rewarding of people to do the work.

Another similar, yet shorter, definition (Haimann, 1962), indicated that "Management is the function of getting things done through people and directing the efforts of individuals toward a common objective." In carrying out the responsibilities of management (Haimann, 1962, p. 22) indicated that five functions are included: Planning, Organizing, Staffing, Directing and Controlling.

Planning is determining in advance what should be done. In relationship to career education, planning consists of selecting objectives, policies, programs, procedures and other ways of reaching your objective.

In the absence of plans, a state coordinator of career education becomes more reactive, responding to immediate requests, often resulting in confusion and chaos. A state coordinator of career education should view planning as a continuous process enabling a career educational program to become more proactive. Planning should help you anticipate problems, analyze them, and decide upon solutions that will alleviate the situation. However, there are some cautions that need to be realized in planning efforts: (1) planned events in the future cannot be predicted completely accurately; (2) career education is a dynamic concept, (3) change in the educational system is often a slow and painful process, (4) creativity can be stifled if we "cast the plans in concrete," (5) planning is an expensive and time consuming venture, (6) emergencies may cause prompt action (e.g., tax levies turned down, weather, strikes, etc.).

Organizing refers to systematically determining and listing the career education activities to be conducted and assigning responsibilities for completing these activities. In assigning responsibilities, it is also important that you delegate the authority for completing the activities. However, most state career education coordinators are not always able to delegate responsibilities and consequently have to rely on rather informal procedures in contrast to those procedures available in larger more tightly controlled and administered projects.

Staffing, In a strict management sense, refers to the recruitment, selection, development, training and compensation of subordinates. As mentioned above, most state career education coordinators do not have large staffs and it is necessary to rely on volunteer workers in carrying out their responsibilities. In selecting persons to work with you, in either formal or informal ways, it is important that enthusiastic and competent individuals be identified. In most cases, these individuals will need to be able to grow and develop as they become more knowledgeable about career education.

Directing refers to the process a career education coordinator follows in guiding, teaching, coaching and supervising colleagues. As mentioned earlier, career education coordinators often need to rely upon volunteers to get their work done. In a sense, career education coordinators need to understand "how to win friends and influence people" in carrying out their responsibilities. In carrying out this function it is essential that the career education coordinator communicates effectively. In other words, assignments should be stated so that they are:

(1) doable,

(2) compatible with objectives,

(3) understandable,

(4). time defined, and

(5) stated in a tactful manner.

Controlling represents the final function of management. This function is concerned with monitoring activities and events seeing to it that they proceed as planned. Therefore, it is essential that there be a plan of action against which you can check. In carrying out this function, the career education coordinator generally has three options available:

3

(1) continue the planned activities,

(2) modify the planned activity, or

(3) stop the planned activity.

Finally, *evaluation*, although not listed as a specific management function, is a component associated with each of these functions. Figure 1 shows how each of the five management functions is related to evaluation. In this paper, we are defining evaluation according to Stufflebeam et al. (1971). "Evaluation is the process of delineating, obtaining and providing information for use in decision making." In a management role it is important to remember that decisions be made that reflect the best use of available information. In some cases, it may be necessary to obtain totally new information. Yet, in other cases you may be able to rely on existing information in making management decisions. The last section of this paper will present different ways of obtaining evaluative information. The next section of this paper will discuss the characteristics of successful managers.

WHAT ARE THE CHARACTERISTICS OF SUCCESSFUL MANAGERS?

If you were to describe a successful manager, what adjectives would you use? How many different adjectives can you name that describe successful managers? Figure 2 lists twenty-four different adjectives that Campbell et al. (1970) reported being used in an attempt to differentiate more successful from less successful executives. Just for fun, indicate (by placing a check under the appropriate heading) those adjectives that are most descriptive of successful career education coordinators and those that are least descriptive of successful career education coordinators in their roles as managers. Figure 3 reports the results of a research effort in which these adjectives were used in describing successful executives. Now, compare your classification with those reported by Campbell. How close was your classification to the research classification reported by Campbell?

A great deal has been written about the development of managers. Early in our history it was thought that the ability to manage was inherited. More recently, management ability is viewed as a more complex trait, but that it can be influenced through experience, education and training. Campbell et al. (1970) has identified a large number of personal qualities that are necessary for managerial effectiveness. These characteristics are presented in Figure 4. Although it is often thought that managers are inhumane and indifferent to differing personal styles, Campbell et al. (1970) stated that successful managers exhibit a number of behaviors that do, in fact, represent a humane approach to management. Figure 5 indicates most of the job behaviors that are indicative of successful managers. You will note that most of these behaviors do represent humane characteristics.

Figure 1.

Relationship of Evaluating to Each of the Management Functions
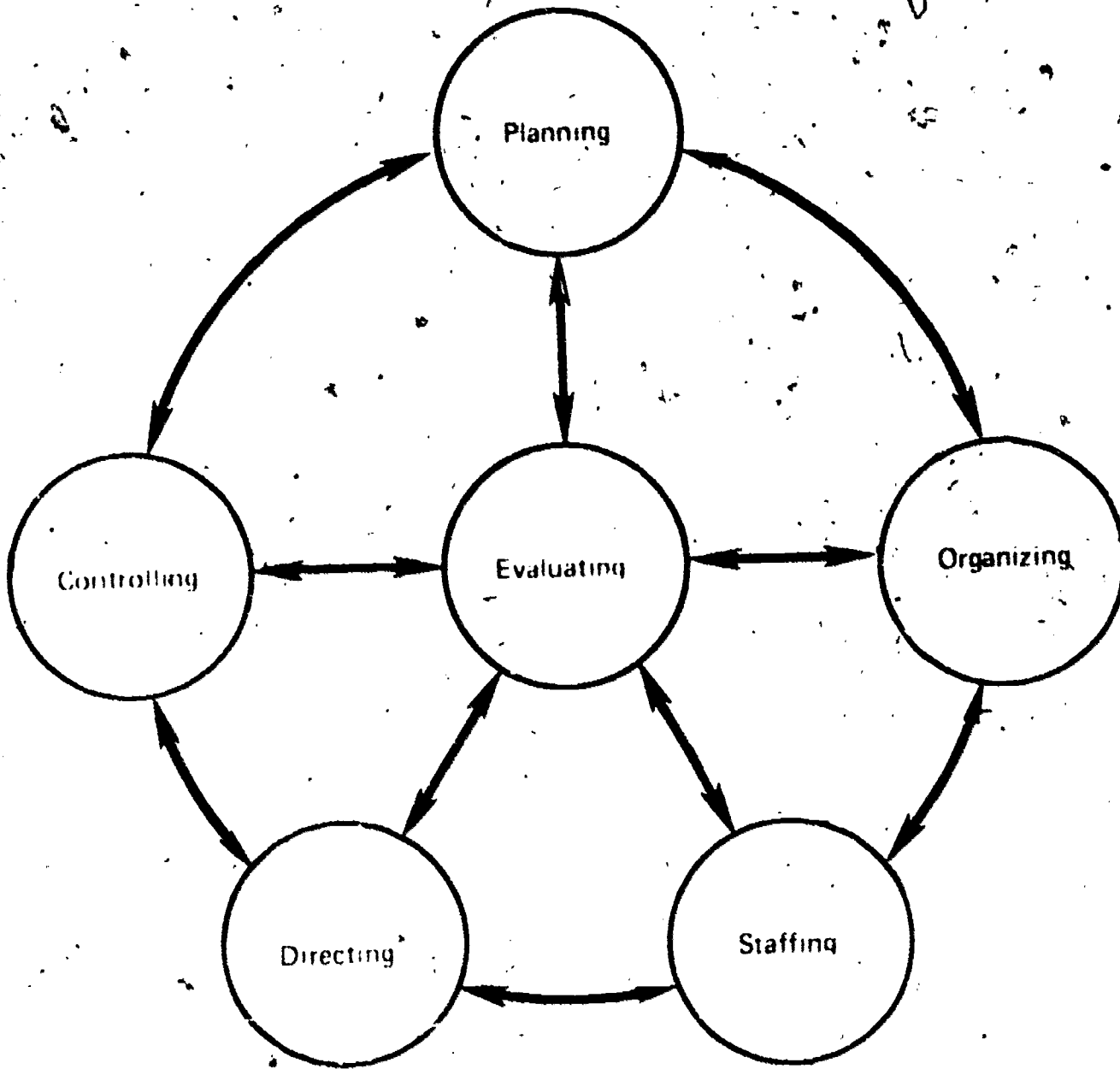
Figure 2.

Descriptors of Career Education Coordinators

Most Descriptive of Successful
State Career Education
Coordinators in their Role
as a Manager

Least Descriptive of Successful
State Career Education
Coordinators in their Role
as a Manager

Agreeable
Aggressive
Amiable
Cheerful
Clear-thinking
Conforming
Conservative
Courteous
Creative
Decisive
Determined
Energetic
Enterprising
Formal
Intelligent
Kindly
Mannerly
Modest
Neat
Productive
Reserved
Responsible
Self-starting
Well informed

6

Figure 3.

Most and Least Descriptive Adjectives for Successful Executives

Most Descriptive of Successful Key Executive	Least Descriptive of Successful Key Executive
Decisive	Amiable
Aggressive	Conforming
Self-starting	Neat
Productive	Reserved
Well-informed	Agreeable
Determined	Conservative
Energetic	Kindly
Creative	Mannerly
Intelligent	Cheerful
Responsible	Formal
Enterprising	Courteous
Clear thinking	Modest

7

3

Figure 4.

PERSONAL QUALITIES NECESSARY
FOR MANAGERIAL EFFECTIVENESS

Able to sustain defeat

Alert

Ambitious—achievement-oriented

Assertive

Capable of good judgment

Competitive

Concrete

Creative

Decisive

Dedicated

Dynamic

Emotionally stable

Energetic

Extraverted

Fearful of failure

Group-oriented

Honest

Intelligent

Mentally healthy

Optimistic and confident (as a cover-up for
    fear of failure)

Pragmatic

Predictable

Reality-oriented

Self-controlled but defensive

Tolerant of frustration

8

Figure 5.

SUCCESSFUL MANAGERS ARE SAID TO SHOW MOST OF THE FOLLOWING JOB BEHAVIORS:

They manage work instead of people.

They plan and organize effectively.

They set goals realistically.

They derive decisions by group consensus
but accept responsibility for them.

They delegate frequently and effectively.

They rely on others for help in solving problems.

They communicate effectively.

They are a stimulus to action.

They coordinate effectively.

They cooperate with others.

They show consistent and dependable behavior.

They win gracefully.

They express hostility tactfully.

EVALUATION TECHNIQUES USEFUL
IN PLANNING

NEEDS ASSESSMENT

Background

The career education legislation (Section 402 and 406 of the Education Amendments of 1974) requires that a needs assessment be conducted prior to developing the state plan for career education. Furthermore, the zero based budgeting concept being promoted by the Carter administration inlcudes defining educational needs as the initial step.

Definition

Needs assessment in career education refers to the process for determining the difference between "what is" and "what should be" occurring and for placing priorities among them.

Example

A number of different techniques can be used in assessing needs. For purposes of this paper, the process used by Florida in assessing career education needs is used. (Adams, Kay Angona, *Florida Assessment of Needs in Career Education*, Columbus, Ohio: The Center for Vocational Education, The Ohio State University, 1977.)

References/Resources

1. Kaufman, Roger A. *Educational Systems Planning*, Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1972.

2. McCaslin, N. L. and Lave, Janice. *Needs Assessment and Career Education: An Approach for States*, Columbus, Ohio: The Center for Vocational Education, The Ohio State University, 1976.

3. Witkin, Ruth Belle. *An Analysis of Needs Assessment Techniques for Educational Planning at State, Intermediate, and District Levels*, Hayward, California: Alemeda County, Superintendent of Schools, 1975.

Actual Attainment

Rea stically estimate the percent of students in your district or school who have *attained* minimal competency in each of the following goals by the time they leave high school

0-9%	10-24%	25-49%	50-74%	75-89%	90-100%

Desired Priority

Rate the relative priority of meeting each your district or school.

Lower 1	2	Medium 3	4	H

Work Values

10. Students understand how careers contribute to society.

11. Students recognize the social and economic benefits of working and understanding the consequences of not working.

12. Students view career roles independent of sex stereotypes.

13. Students view career roles independent of racial stereotypes.

Decision-Making and Job Hunting Skills

14. Students are able to relate their goals to the process of making career decisions.

15. Students are able to identify, gather, and apply information toward career decisions.

16. Students are able to identify and consider alternatives when making career related decisions.

17. Students know how to hunt for jobs.

18. Students can describe the personal qualities that employers consider most important when hiring employees.

18

ACHIEVEMENT TEST SCORES

Background

There is increasing emphasis being placed upon the achievement level of students. A furor has seemingly emerged over the apparently declining scores on standardized tests administered on a national basis such as the Scholastic Aptitude Test. Additionally, a number of states are enacting legislation aimed at establishing minimum competencies that students receiving diplomas must achieve.

Definition

Achievement tests scores are the results obtained from taking an examination. If faith is to be placed in these scores, the examinations should have sufficient development effort so that reasonable estimates of reliability and validity can be made.

Example

One achievement test on which state career education coordinators might have evaluative information would be the National Assessment of Educational Progress-Career and Occupational Development. There are a number of other tests that have been developed with enough sophistication to warrant their use providing the type of information. These would be available from both private companies and public education agencies.

References/Resources

Adkins, D. W. *Test Construction: Development and Interpretation of Achievement Tests*, Columbus, Ohio: Charles Merrill, 1960.

Educational Testing Services. *Selecting an Achievement Test: Principles and Procedures*, Evaluation and Advisement Series, No. 3, Princeton, N.J.: Educational Testing Services, 1958.

B-1

WRITING CLEAR OBJECTIVES

Background

A good manager has to be able to develop clear objectives so you know where you are going and so you can communicate with others. The various terms used to describe objectives can become somewhat confusing. Goals, intended outcomes, expected outcomes, objectives, behavioral objectives, performance objectives, outputs, and products are some frequently used terms. It is useful to distinguish between these words. The term goals, objectives, outcomes (short-range and long-range) and products seem to be the most useful for planning. Objectives should be developed both for administrative and classroom behavior.

Definition

Goals and long-range outcomes go together. They are both more general statements used to describe macro level accomplishments. Objectives and short-range outcomes are more specific. Various authors define goals and outcomes in different ways. We prefer to view goals and objectives as performance statements. The difference between goals/objectives and outcomes is that the former describes what you are going to do—your performance, while the latter describes what you expect to occur as a result of your performance. A product is the vehicle for delivering your performance to a target so outcomes can occur. Some specific definitions follow.

Goal. General statements of what activities will be conducted.

Long-range outcome. General statements of the results anticipated—may be stated in terms of students, programs or both.

Objective. Specific statements of what is to be accomplished or what students will be asked to do.

Short-range outcome. Specific statements of results anticipated—may be stated in terms of students, programs or both.

Product. Statements of output which describe a tangible item to be produced.

Example

A good way to communicate your objectives and expected outcomes to others is to use a tabular format. An example of a *Program Objectives and Outcomes* format is provided.

PROGRAM OBJECTIVES AND OUTCOMES

Objectives	Products	Outcomes (Expected Results)
1. To identify, validate, and rank local career ed director competencies via a state needs assessment.	A list of validated and prioritized competencies needed by local career ed directors. A description of in-service materials currently available.	A sound research upon which high-priority competency-based in-service training materials can be developed.
2. To develop competency-based in-service training materials and user guide(s).	A set of prototype competency-based instructional materials and user guide(s) for the in-service education of local career ed directors.	Local career ed directors who are better planners, managers, curriculum designers and evaluators. Better administrators will result in programs that are more effective and more efficient in meeting the needs of students.
3. To test the prototype in-service training materials and user guide(s).	A detailed plan for testing the in-service materials, including instrumentation and data on materials effectiveness and revision suggestions.	In-service training materials will prove effective in delivering the competencies involved and user guide(s) will help ensure transportability of the materials.
4. To revise the prototype in-service materials and user guide(s) using field test feedback data.	Revised in-service training materials and user guide(s).	Improved in-service training materials and user guide(s) for local career ed directors.
5. To publicize and disseminate in-service materials and user guide(s).	Camera-ready copy of all materials. Promotional materials announcing the availability of materials. Fifty sets of the materials distributed to early adopters.	Increased in-service training options for local career ed directors due to availability of competency-based materials on priority competencies.

References/Resources

When developing program goals and objectives for career education programs, you should review existing sets of objectives. Some source of goals and objectives for career education programs are:

Ten Learner Outcomes for Career Education (OCE, 1976)

Developmental Program Goals for the Comprehensive Career Education Model (The Center for Vocational Education, 1976)

Career Education: An Introduction (The Career Education Center, Florida State University, 1975)

Career Development Goals and Performance Indicators (Michigan Department of Education, 1974)

Basic Learner Outcomes for Career Education (Texas Education Agency, 1973)

EVALUATION TECHNIQUES USEFUL
IN ORGANIZING

WORK BREAKDOWN STRUCTURE

Background

There is a lot of hard work between penning objectives and coming up with some credible evidence that your outcomes have been achieved. The stuff in between is what work breakdown structures are made of—basically activities and tasks. It is essential to carefully think through what steps are needed to accomplish your objectives.

Definition

A Work Breakdown Structure (WBS) is a useful tool for thinking through an activity. It is a technique for dividing work into doable chunks. We prefer a three level breakdown although finer breakdowns are sometimes used. These three levels are: Objective, Activity, and Task. The major concept employed is systems analysis and takes the form of hierarchical ordering of differing magnitudes of work effort, tasks being the most specific. Preparing a WBS is similar to outlining a term paper. A useful technique is to ask the question: "What has to be done in order to accomplish this?"

Example

On the following page, a partial work breakdown structure has been prepared for a career education project designed to develop training materials for local career education coordinators and administrators.

References/Resources

Cook, Desmond, *Educational Project Management*. Columbus, Ohio: Charles E. Merrill, 1971.

Objective	Activity	Tasks
1. Conduct needs assessment.	a. Identify needed competencies.	(1) Conduct literature search. (2) Review pertinent literature. (3) Prepare initial list of competencies.
	b. Identify existing in-service materials.	(1) Conduct materials search. (2) Acquire and evaluate materials in terms of competencies covered. (3) Prepare descriptions of materials.
	c. Consult with advisory committee.	(1) Select committee members. (2) Convene committee to review initial list of competencies and existing in-service materials. (3) Revise list of competencies and description of materials. (4) Obtain critique of proposed validation instruments. (5) Revise instrument. (6) Obtain committee recommendations on type and form of in-service materials needed.
	d. Validate and rank administrator competencies	(1) Select stratified sample of administrators. (2) Administer instrument to sample. (3) Prepare data for analysis. (4) Analyze data. (5) Interpret data to determine competency priorities.

WORK FLOW CHART

Background

An essential ingredient in accomplishing a task is time. The work flow is the accomplishment of tasks over time to accomplish objectives.

Definition

A work flow chart is a way to depict tasks and their interrelationships over time. It can take several forms.

Time-phased Network. A network which illustrates activities over time. The interrelationships and constraints among the activities and objectives can be shown.

Gantt Chart. A bar chart which illustrates activities over time. This type of chart does not show the interrelationships among the activities and objectives.

In addition to the flow of tasks, several other items can be illustrated on networks and Gantt charts. These include products and decision points.

Products. Tangible products.

Milestones. A decision event or "milestone" in the life of a program is a pivotal point that requires a review because several decision alternatives are possible. These decision alternatives are usually of three types: (1) to proceed without changes, (2) to make minor changes, or (3) to make major changes.

Events. Culmination or beginning of an activity.

Example

Development of a work flow chart requires several steps:

1. Estimating how long each work activity will take

2. Determining the interdependence and constraints between work activities

3. Displaying the tasks and their relationships over time

4. Displaying the timelines for other critical events in the work flow, such as products, milestones and events

Example—Time Phased Network

Legend:
▲ Milestone
○ Event
→ Task
--→ Constraint
1.1.1 Task Identifier
1/17 Due Date

1 Jul   31 Dec

Activities

1. (a) Identify needed competencies
   (b) Identify existing in-service materials
   (c) Consult with advisory committee
   (d) Validate and prioritize administrator competencies

2. (a) Categorize related competencies by content areas
   (b) Select highest priority content areas for development
   (c) Determine training materials format
   (d) Prepare in-service training materials
   (e) Prepare user guide(s) for training materials

3. (a) Develop field test strategy
   (b) Select test sites
   (c) Orient personnel to field test procedures and materials
   (d) Conduct field test
   (e) Analyze field test data

4. (a) Revise training materials using feedback
   (b) Revise user guide(s) using feedback

5. (a) Publish training materials and user guide(s)
   (b) Publicize and disseminate training materials and user guide(s)

6. (a) Develop and submit quarterly progress report
   (b) Develop and submit project final report

1   2   3   4   5   6   7   8   9   10   11   Months

1.   Plan and Organize the Evaluation

[1.1]► [1.2]► [1.3] △(1)

2.   Implement the Evaluation

△(2)
[2.1]► [2.2]► [2.3]

3.   Communicate and Use the Evaluation Results

△(3)
[3.1]──────────────────────────►[3.2]► [3.3]► [3.4]

Evaluation Activities = [   ]

1.   Plan and Organize the Evaluation

   1.1   Determine what information should
      be collected, who will use it, and how
      it will be used.
   1.2   Budget and assign staff for evaluation.
   1.3   Organize for evaluation by developing a
      scope of work, a timeframe, and role
      responsibilities.

2.   Implement the Evaluation

   2.1   Develop/select instrument(s)
      for collecting the information
   2.2   Collect the information.
   2.3   Analyze and interpret the information.

3.   Communicate and Use the Evaluation Results

   3.1   Build acceptance of the evaluation results.
   3.2   Prepare evaluation reports.
   3.3   Disseminate evaluation results.
   3.4   Use evaluation results.

Evaluation Products = △

1.   Evaluation plan
2.   Evaluation instrument(s)
3.   Evaluation report(s)

Decision Points = ◯

1.   The evaluation plan is reviewed prior to
    implementing the evaluation.
2.   The evaluation instrument(s) is reviewed
    prior to collecting the data.
3.   The draft of the evaluation report(s) is
    reviewed prior to dissemination

E-3

EVALUATION TECHNIQUES USEFUL
IN DIRECTING

TO DO LISTS

Background

In carrying out what we have to do it is easy to work on the easy tasks first and leave the more difficult tasks until last. Therefore, when you are faced with a number of tasks, the more difficult tasks tend to be pushed aside, and you never have time for the difficult, and probably the more important tasks.

Definitions

A to do list is a form for listing the tasks to do, a way of indicating when the task is completed, and the priority of the task.

Example

On the following page, we have presented a to do list form. In most instances three levels of priorities will suffice: A--must be done immediately, B--needs to be done, and C--can be done later.

	Things to do TODAY		
	DATE		
		✓	Priority
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
21.			
22.			
23.			
24.			
25.			

F-2

FORCE FIELD

Background

A problem situation exists when there is a difference between the way things are and the way someone wants them to be. Kent Lewin borrowed a technique from the physical sciences and offered it as a way to understand social problem situations. It is called the force field technique. The idea is that any situation is the way it is at a given moment because sets of counterbalancing forces are keeping it that way.

Definition

The force field technique provides a diagrammatic picture of the forces that are maintaining a situation at a given moment.

Both the forces for and against attaining a given goal are enumerated. These forces are then analyzed in order to develop strategies to change the balance and meet the goal.

Example

Diagnosis. In the force field technique, you start by writing a problem statement at the top of a page and drawing a line down the middle. The line represents the way things are now. A dotted line down the right hand side of the page represents how you would like things to be. On the left half of the page, write down all the important forces that help push you toward achieving your goal. On the right half of the page, write down forces pushing against movement toward your goal. A force field diagnosis is illustrated below.

Analysis. The next task is to analyze the forces to determine which are most important and most potent in moving you toward or keeping you away from your goal. This involves three steps:

1. Rank the forces in numerical order as to importance. Importance is defined as significance. How important or significant is a force in yielding the most movement toward the goals?

2. Rate forces as to strength or resistance to change. How easy or hard would it be to change the force? Is it hard, medium, or easy?

3. Rate the forces as to clarity of evidence. What evidence is there that it is a force? How clear is it to me that it is a force?

A force field analysis is illustrated below.

Strategizing. The next task is to plan strategies to work around the strong negative forces and to maximize the strong positive forces. This can be accomplished in four ways:

1. Add a force

2. Eliminate a force

3. Strengthen a force

4. Weaken a force

Force Field Diagnosis

Problem Statement: You set a goal for me to lose five pounds during the next two weeks.

| Opposite of Goal | | Now | | Goal |

| | Forces For | → → → | ← ← ← Forces Against | |

Forces For

I tend to be a light eater.

→ → →

I want to save some money.

→ → →

We are visiting my mother-in-law this weekend and I don't like her cooking.

→ → →

Forces Against

← ← ← I am presently about three pounds underweight.

← ← ← I don't want to accept this goal.

← ← ← My mother-in-law will be unhappy if I don't eat well while visiting her.

(I will weigh ? pounds two weeks from now.)

(I weigh ? pounds today.)

(I will weigh ? pounds two weeks from now.)

G-3

36

Force Field Analysis

Problem Statement: Districts are not sharing their career education infusion strategies with each other which leads to "reinventing the wheel."

	Opposite of Goal → Now → Goal	

Opposite of Goal ↓↓↓ | Now ↓↓↓ | Goal ↓↓↓

(To decrease communication)	Forces For → → →	← ← ← Forces Against	(To increase communication)
	(6)* (C)** The state coordinator wants to see sharing. → → →	(7) (C) (M)*** The state coordinator doesn't want to impose more demands on local coordinators. ← ← ←	
	(1) (PC) Some local coordinators have exciting ideas to share. → → →	(2) (PC) (E) Concern that time spent sharing ideas will be wasted. ← ← ←	
	(3) (PC) Some districts want to know more about other efforts. · · ·	(8) (PC) (M) Local ownership impedes sharing. ← ← ←	
	(8) (U) Increasing demands to be more effective. · · ·	(5) (U) (H) Fear of sharing mistakes. · · ·	
		(4) (C) (M) Fear of insufficient time to meet current demands. ← · ·	

Goal: To increase communication and support for sharing career education infusion strategies across the state.

Strategy: Get more information from a district you think has some good ideas about exactly what they are doing. Encourage this district to present their strategies in the next state newsletter.

---

* Rank: 1 is highest importance

** Clarity: C - Clear, PC - Partly Clear, U - Unclear

*** Strength: H - Hard, M - Medium, E - Easy

EVALUATION TECHNIQUES USEFUL
IN STAFFING

ADVISORY COMMITTEES

Background

Most coordinators of career education have very limited staffs to work with them. Often, the coordinator will need to work with advisory committees in carrying out a planned sequence of activities. It is not unusual to involve advisory committees in the evaluation of career education.

Definitions

An advisory committee is a group of persons who are appointed to give directions to your career education program. This group of individuals needs to represent business, industry, labor and the professions. Additionally, it should include both males and females and representatives of different races and cultures.

Examples

The Ohio Department of Education has established a Program Review for Improvement, Development and Expansion (PRIDE) for evaluating career education by use of an advisory committee. Their committee is composed of the following individuals: a local career education coordinator, a counselor, an elementary and/or secondary teacher, a vocational teacher, a building administrator, two students, two parents, two lay citizens and two persons from local business or industry. The Summary Review Statements Form is presented on the next page. The complete form is available from the Ohio Department of Education.

References/Resources

Program Review for Career Education, Columbus, Ohio: Ohio State Department of Education, June, 1976.

Summary Review Statements

Directions: Each committee member is requested to make a check regarding opinions of the career education program. For each summary review statement, place a check (✓) in the column which best describes your impressions of the career education program.

	Outstanding 5	Excellent 4	Good 3	Fair 2	Poor 1

I. CAREER EDUCATION STAFF

To what extent is the career education staff adequate
to fulfill its role in achieving the program objectives? [ ] [ ] [ ] [ ] [ ]

II. CAREER EDUCATION FACILITIES AND MATERIALS

A. To what extent is there sufficient space and
materials to provide for a variety of projects
to carry out the objectives of the program? [ ] [ ] [ ] [ ] [ ]

B. To what extent are facilities and materials
utilized in the most efficient manner so as
to realize program objectives? [ ] [ ] [ ] [ ] [ ]

III. CAREER EDUCATION COORDINATION AND ADMINISTRATION

To what extent is coordination and administration
of the career education program facilitating the
meeting of stated program objectives? [ ] [ ] [ ] [ ] [ ]

IV. PERSONNEL AND CURRICULUM DEVELOPMENT

A. To what extent are the developmental areas
infused into the curriculum? [ ] [ ] [ ] [ ] [ ]

B. To what extent are the USOE clusters incor-
porated into the orientation curriculum? [ ] [ ] [ ] [ ] [ ]

C. To what extent does the entire career edu-
cation staff attempt to sensitize itself to the
inservice needs of the teachers in the career
education schools? [ ] [ ] [ ] [ ] [ ]

V. ADMINISTRATION, COUNSELOR, AND TEACHER

To what extent is the administration, counselor, and
teacher participation directed toward meeting the
career education program objectives? [ ] [ ] [ ] [ ] [ ]

NOTE: The average rating should be computed for the report of the career education chairperson.

H-2

CONSULTANTS

Background

Career education coordinators sometimes need the services of specialized help for short periods of time. These short term requirements often are filled by employing consultants.

Definitions

Consultants are individuals who are called upon for professional or technical advice.

Examples

Martha Williams at The Network developed a Program Planning Packet (1976) for project managers which outlines ten tips for consumers of evaluation consultant services. These are:

1. Solicit recommendations for evaluation consultants from other consumers—project directors, school district administrators, state department of education personnel, or a human resource file.

2. Find an educational evaluator, not simply a person with strong statistical or computer background. The consultant should have experience in evaluating educational projects (both process and product evaluation) and be familiar with design constraints and alternatives.

3. When you have identified candidates, ask them for names of other clients they have served. It's wise to talk with a few others who have worked with the consultant to learn about his or her style, expertise, and ability to work within a schedule.

4. Choose a consultant easily accessible to the project. A consultant who is geographically close to the project site can be available for meetings, on-site data collection and reporting, and other aspects of the formative evaluation process. Also, keeping travel costs down helps to make the evaluation cost effective.

5. Determine the cost of evaluation in advance, based on what is budgeted or what can be transferred to an evaluation line item. A good rule of thumb established the cost of evaluation between three and eight percent of the total project budget.

6. Negotiate with the consultant for frequent on-site visits to discuss procedures, interim results, and problems which arise.

7. Contract carefully with the consultant. When formulating a contract with an outside evaluation consultant, the following things should be considered: (a) who has title to

the data—make certain that the project, not the evaluator, has that title; (b) the exact terms of the evaluation—what is expected of whom, when; (c) the number of days on-site; (d) the itemized budget for the evaluation; and (e) a cancellation clause allowing 30-day notice for cancellation of the contract for both the project and the evaluator. The contract should be in writing, signed by both client and consultant.

8. Be sure the consultant is introduced to and accepted by key individuals involved in the evaluation. If the consultant meets resistance in obtaining data, the evaluation will be weakened.

9. Consider having the consultant conduct inservice sessions for project staff and teachers to acquaint them with the purposes and procedures of evaluation. Be sure staff understand the way in which the results of the evaluation will be used.

10. Establish the evaluation design as a cooperative effort involving the project director, the project staff, and the evaluator. This involvement will increase the usefulness of the study and results, take into account reality factors and limitations, and ensure that the consultant's interests and orientations do not overly influence the design.

EVALUATION TECHNIQUES USEFUL
IN CONTROLLING

DECISION EVENT REVIEWS

Background

Decision event reviews provide an excellent opportunity to have external reviewers review outputs developed by in-house staff. As a device to lend credibility and objectivity to an effort, the involvement of external reviewers is excellent.

Definition

Important points in the life of a program should be identified as likely decision events in a state level career education effort. These points would be:

After drafting a plan but prior to implementing it

— After drafting an evaluation instrument but prior to collecting the data

— After drafting a manual or report but prior to disseminating it

Each of these decision events is an important future-oriented step in an effort that could benefit from a reappraisal.

Example

A decision event should include:

1. Claims or criteria for the product (e.g., plan, instrument, report) being reviewed

2. Information that supports these criteria

3. Decision alternatives (e.g., no changes, minor changes, major changes)

4. Opportunity for specific comments and recommendations of the reviewers

5. A review process (e.g., mailing out the product to reviewers, bringing in consultants for the day, etc.), a time for review, and persons to conduct the review.

A sample decision event review form for a career education evaluation instrument is presented.

References/Resources

A source list of criteria for decision event reviews is attached.

SAMPLE DECISION EVENT REVIEW FORM
FOR AN EVALUATION INSTRUMENT

Claim	Evidence	Decision*	Comments/Recommendations of Reviewers
Congruence. The items are logically derived from the program objectives and activities.	See instrument. See program objectives.	B	The items on job hunting emphasize different skills than the original objectives in this area.
Comprehensiveness. The items cover all significant aspects of the program.	See instrument. A test blueprint was used in developing the items.	C	Additional items should be developed to measure affective outcomes, e.g., attitudes toward learning, desire to work, self confidence, maturity, self-understanding, and interpersonal skills.
Importance. The items measure significant as opposed to trivial learnings.	See instrument. An advisory panel of teachers and students reviewed the instrument.	B	The items on decision-making skills are trivial.
Clarity. Instructions are clear, items are straight-forward and unambiguous.	See instrument. The instrument was pilot tested with a group of students.	A	Instructions are excellent. Items are clear and simply stated.

*Decision Alternatives
A — Adequate, no change
B — Minor changes
C — Major changes

SOURCE LIST OF EVALUATION CRITERIA
FOR CAREER EDUCATION PROGRAMS AND PRODUCTS

Desirability

- Priority of need
- Relevance
- Size of affected population
- Fit with ongoing program/activities
- Uniqueness
- Marketability

Intrinsic Quality

- Social fairness
- Accuracy
- Consistency
- Clarity, editing, printing, physical quality
- Instructional quality
- Readability
- Scope, selection, and balance
- Attractiveness/aesthetics
- Completeness
- Evidence of R&D process in development (e.g., literature reviews, pilot tests, field tests, etc.)

Utility

- Practicality
- Political viability
- Leverage
- Timeliness
- Credibility
- Audience accommodation
- Flexibility
- Pervasiveness
- Durability
- Amount of training/prep required for use
- Visability of effort during development

Direct Effectiveness

- How well output meets objectives judged to be important
- Long term effects
- Number of effects
- Scope of effects
- Comparative effectiveness
- Efficiency in attaining effects
- Credibility of evidence for effectiveness (reliability, validity, generalizability)
- Cost effectiveness

Indirect Effectiveness

- Model for other work
- Contribution to knowledge
- Adaptions
- References
- Spinoffs
- Policy changes

BUDGET REPORT

Background

Information related to how you are actually spending against a planned budget is an important controlling function. If you are to make the most efficient use of funds, you will need to be able to compare actual vs. planned expenditures every month.

Definitions

Budget reports are graphic and numeric representations of planned and actual project expenditures. These reports are generally prepared on a monthly basis.

Example

The following presents a sample of how a budget report could be prepared. The report allows you to plot planned expenditures and, on the same chart, actual expenditures.

References/Resources

Cook, Desmond, *Educational Project Management.* Columbus, Ohio: Charles E. Merrill, 1971.

BUDGET REPORT

Program Code _____   Title _____

Budget Account _____   Contract No. _____

Funding Period: _____ to _____ , _____ Months

Funding Source _____   Amount _____

Percent of Total Funding Expended

Budget Data:

1. **Budgeted To-Date** _____   Spent To-Date _____

2. Unencumbered Balance _____

3. Months Remaining in Program _____

4. Average Costs per Month to Spend-Out (2 + 3) _____

    Remarks: _____

    _____

K-2

49

PROGRAM ASSESSMENT

Background

In conducting career education activities, it is helpful to be able to determine what it is that needs to be done and your related progress. Unless you develop and keep track of the long term plan you may not get to where you are headed.

Definitions

A program assessment is a list of career education program indicators and a rating scale for reporting your progress. This form is intended to be completed by the career education coordinator and his/her steering committee.

Example

The following page presents a sample from the career education program assessment form developed by the Michigan Department of Education.

CAREER EDUCATION PROGRAM ASSESSMENT

	Program Indicators	Has Been Completed (include date)	Making Progress	Not Begun	Not Applicable	Comments
Step I: Getting Organized	1. LEA Career Education Coordinator has been appointed by the Superintendent.	☐ _____	☐	☐	☐	
	2. LEA Career Education Coordinator has identified his/her role and function.	☐ _____	☐	☐	☐	
	3. LEA Steering Committee has been appointed and has the approval of the Superintendent and, if necessary, the Board of Education.	☐ _____	☐	☐	☐	
	4. LEA Steering Committee has met and has determined its role and function. (See Supplements A and B)	☐ _____	☐	☐	☐	
	−Selects chairperson (i.e., Principal)	☐ _____	☐	☐	☐	
	−Establishes goals for committee	☐ _____	☐	☐	☐	
	−Forms various sub-committees	☐ _____	☐	☐	☐	
	−Determines procedure for arriving at decisions and recommendations and how these will be communicated.	☐ _____	☐	☐	☐	
	5. Advisory Committee has been established and has determined its role and function	_____		51		
	6. The LEA Career Education Steering Committee has developed a written definition of the concept of career education.	☐ _____	☐	☐	☐	

PROGRESS REPORT

Background

A brief report is often needed that gives a project monitor an update on planned activities. This information is generally reported on a one or two page form. By reviewing this form, an individual can get a general overview of the project's progress.

Definitions

A progress report generally summarizes the major activities conducted during a month, identified present and anticipated problems, and lists the dates of project milestones, decision events, and product due dates.

Example

The progress report on the following page represents one such progress report. Several different modifications in this report are possible.

References/Resources

Cook, Desmond, *Educational Project Management.* Columbus, Ohio: Charles E. Merrill, 1971.

Project Monthly Status Report

Month of _____

Project Title _____

Project Director _____

....

1. Estimate overall schedule status of the project as of the end of the month (making reference to specific activities if necessary):

    _____ on schedule

    _____ days early

    _____ days late

2. Summarize the major activities and accomplishments of the project during the month.

3. Describe any critical events or problematic situations affecting the project, including changes in scope-of-work, schedule, and/or budget.

    Present:

    Anticipated.

M-2

USER FEEDBACK

Background

Consumers of career education can often provide the most useful feedback about its effectiveness. Consumers can include local coordinators who read a newsletter, teachers who participate in inservice, as well as students who participate in career education activities. There are a variety of techniques to elicit user feedback.

Definition

User feedback can be focused on collecting candid perceptions of the use, quality, efficiency or effectiveness of a career education experience from its participants.

Example

Examples of user feedback forms for a conference, for a seminar, for a newsletter, and for a product are illustrated on the following pages.

References/Resources

The "Use of Career Education Newsletters" and "Use of Career Education Handbook" are from Newton, Mark and McCaslin, N. L., *An Evaluation of Three Communication Mechanisms Utilized by the Cashmere Career Education Program*, The Center for Vocational Education, 1977.

The "Model Daily Feedback for Conferences" and the "Model Seminar Follow-up Questionnaire" are from Adams, Kay Angona, *A Ten Year Perspective on Conducting and Evaluating Leadership Development in Vocational Education*, The National Center for Research in Vocational Education, 1978.

Use of Career Education Newsletters

1. As part of this project, newsletters were sent to rural school districts throughout the United States. A copy of the logo used on these newsletters is printed at the top of the first page of this questionnaire. Have you seen one or more of these newsletters? (please check one)

    [ ] Yes, I have seen some newsletters (please go to question two).

    [ ] No, I have not seen any newsletters (please go to next section).

2. How did you review the newsletters? (please check as many as apply)

    [ ] I did not look at them.

    [ ] I scanned the newsletters rapidly.

    [ ] I read selected portions of the newsletters.

    [ ] I read the newsletters thoroughly.

    [ ] Other (please specify): _____

    _____

3. Which portion(s) of the newsletter did you usually read? (please check as many as apply)

    [ ] Feature story on front page

    [ ] Articles describing teaching practices

    [ ] Articles describing career education materials that are available

    Articles describing meetings and conferences

    [ ] Articles describing management practices in career education (e.g., how to organize a program, how to evaluate, etc.)

4. What did you do with your copy of the newsletter(s) when you finished with it (them)? (please check as many as apply)

    [ ] I kept them for my personal use.

    [ ] I circulated them among other school staff in our district.

    [ ] I sent them to colleagues outside our district.

    [ ] I placed them in a library or reading room.

    [ ] I announced the existence of the newsletters in our own newsletter or similar notice.

[ ] I don't remember what I did.

[ ] Other (please specify): _____

_____

5. Which of the following uses have you made of the information in the newsletters? (please check as many as apply)

[ ] I have told others in my district about specific items that I read.

[ ] I have sent to get materials described in the newsletters.

[ ] I have written for more information (other than materials) from people mentioned in the newsletters.

[ ] I have visited programs or activities described.

[ ] I have talked to people mentioned to get more information (other than those I ta'ked to on visits).

[ ] I have used the information to design a career education program or activity for students.

[ ] I have used the information to improve a career education program or activity for students.

[ ] I have used techniques described in the newsletters in working with the community.

[ ] I have used information to evaluate a career education program or activity.

[ ] I have used the information to design or conduct inservice training for staff.

[ ] I have not used any of the information to date.

[ ] Other (please specify) _____

_____

Use of Career Education Handbook

1. Another aspect of this project was to develop a handbook for use by rural educators in implementing career education in their settings. Have you seen this handbook? (check one)

   [ ]   Yes (please go to question two)

   [ ]   No (please go to next section)

2. How did you review the handbook? (please check as many as apply)

   [ ]   I did not look at the handbook.

   [ ]   I scanned the handbook rapidly.

   [ ]   I read selected portions of the handbook.

   [ ]   I read the handbook thoroughly.

   [ ]   Other (please specify) _____

   _____

3. Which section(s) of the handbook did you review? (please check all choices that apply)

   [ ]   I reviewed the entire handbook.

   [ ]   I reviewed only the following section(s):

      [ ]   Introduction

      [ ]   Why Career Education

      [ ]   Career Education in Rural Settings

      [ ]   Creating Career Education Curriculum

      [ ]   Involving the Community

      [ ]   Evaluating Your Program

      [ ]   Bibliography

4. What did you do with your copy of the handbook when you were finished with it? (please check as many as apply)

   [ ]   I kept it for personal use.

   [ ]   I circulated it among other school staff in our district.

5

[ ] I sent it to colleagues outside our district.

[ ] I placed it in a library or reading room.

[ ] I announced the existence of the handbook in our own newsletter or similar notice.

[ ] I don't remember what I did.

[ ] Other (please specify) _____

_____

5. .Which of the following uses have you made of the information in the handbook? (please check as many as apply)

[ ] I have told others in my district about specific items that I read.

[ ] I have sent to get materials described in the handbook.

[ ] I have written for more information (other than materials) from people mentioned in the handbook.

[ ] I have visited programs or activities described.

[ ] I have talked to people mentioned to get more information (other than those I talked to on visits).

[ ] I have used information to design a career education program or activity for students.

[ ] I have used the information to improve an on-going career education program or activity for students.

[ ] I have used the techniques described in the handbook in working with the community.

[ ] I have used the information to evaluate a career education program or activity.

[ ] I have used the information to design or conduct inservice training for staff.

[ ] I have not used any of the information to date.

[ ] Other (please specify): _____

_____

Model Daily Feedback for Conferences

Date _____

Instructions. Place a check in the most appropriate box in both the left and right columns for each presentation. In the space for comments, provide specific commendations and recommendations for improving each presentation.

Usefulness of the Information					Topic	Effectiveness of the Presentation				
Low				High		Low				High
1	2	3	4	5		1	2	3	4	5
[]	[]	[]	[]	[]	"Setting the World on Fire" Jane Jones	[]	[]	[]	[]	[]

Comments: _____

_____

_____

[]	[	[]	[]	[]	"An In-depth Review of Everything" Michael Smith	[]	[]	[]	[]	[]

Comments: _____

_____

_____

[]	[]	[]	[]	[]	"Our Great Contributions to Mankind" John and Mary Doe	[]	[]	[]	[]	[]

Comments: _____

_____

_____

1. What was of *most value* to you in today's sessions? Why?

2. What was of *least value* to you in today's sessions? Why?

3. What are your recommendations to the conference planners for improving today's activities?

N-7

Model Seminar Follow-up Questionnaire

Instructions: For questions 1 through 3, circle the number which most accurately represents your response. Consider the numbers to be on a continuum from high to low.

		Frequently				High

1. How often have you used the skills learned at the
   _____ session attended 🔴 _____,
   19_____?

   Frequently   1   2   3   4   5   High

   Positive Direction   1   2   3   4   5   Negative Direction

2. Has your attitude about the role of the session
   attempted to prepare you for changes?

   Many Times   1   2   3   4   5   Never

3. Do you find the new information you have
   learned from the session applicable to your
   organizational setting?

4. Please rank the skills listed below in terms of their usefulness since completion of the session. If any of the skills have *not* proven useful, please rank them "0."

Rank	Skill	Rank	Skill
_____ 1.		_____ 6.	
_____ 2.		_____ 7.	
_____ 3.		_____ 8.	
_____ 4.		_____ 9.	
_____ 5.		_____ 10.	